E-posters abstract book

HEAD AND NECK
A validated individualized clinical model compared to UICC staging for p16 negative and to ICON staging for p16 positive patients

J. Rasmussen*(1)

(1) Department of Otorhinolaryngology, Head & Neck Surgery and Audiology, Rigshospitalet, Copenhagen, Denmark

Purpose

Disease recurrence is an important clinical endpoint in head and neck cancer and we therefore validated a prognostic model on this endpoint with p16- and p16+ head and neck squamous cell carcinoma (HNSCC). In addition, we compared the performance of the validated model with the proposed ICON-S staging for patients with p16+ oropharyngeal SCC (OPSCC) and with UICC staging for other HNSCC.

Material/methods

Consecutive patients with HNSCC and a pre-treatment FDG-PET/CT treated with radiotherapy at a single institution from 2005–2012 were included. The cohort was divided into three:

1.) Training cohort including patients treated from 2005–October 2009 and originally used to train a previously published prognostic model excluding p16+OPSCC patients.
2.) Validation cohort including patients treated from October 2009–2012 excluding p16+OPSCC patients.
3.) p16+OPSCC cohort including all patients with p16+OPSCC.

We have previously developed and published a prognostic model including four significant variables (treatment with Cisplatin, smoking, FDG uptake and tumor size; the latter two as continuous variables) in the training cohort. The prognostic model was used to generate four risk groups based on the predicted risk of disease recurrence after 2 years (Intervals 0-10%; 10-30%; 30-60%; and >60%).

Here, we test the prognostic model on the two cohorts. The performance of the original model was compared with the UICC staging for the validation cohort and with ICON-S staging for p16+OPSCC cohort. The performance was assessed with AUC; where AUC=1 corresponds to ideal prognostication and AUC=0.5 corresponds to a coin toss.

Results

The training cohort included 168 patients, validation cohort included 224 patients and the p16+OPSCC cohort included 183 patients.

Kaplan-Meier curves with disease recurrence and survival as event will be presented. The validation cohort is stratified by UICC and the risk groups from the validated model. The p16+OPSCC cohort is stratified by ICON-S and the risk groups from the validated model.

The prognostic model performs significantly better than UICC in validation cohort; AUC=0.63 for UICC and AUC=0.74 for the risk groups (p=0.002). In the p16+ OPSCC AUC=0.62 for ICON-S and AUC=0.72 for the prognostic model (p=0.057). Moreover, calibration plot will be presented.

Conclusion

This is a validation of a previously suggested prognostic model. The validated model provides a better prognostication of risk of disease recurrence than UICC stage in non-OPSCC and p16-OPSCC patients, and it seems to be equivalent to the staging proposed by ICON-S in p16+OPSCC patients.
JH. Rasmussen; K. Håkansson; I. R. Vogelius; J. Friborg; B. M. Fischer; L. Specht

1. Department of Otorhinolaryngology, Head & Neck Surgery, Rigshospitalet
2. Department of Oncology, Section Radiotherapy, Rigshospitalet
3. Department Nucl. Med. & PET, PET, Rigshospitalet
Cancer of the parotid: a retrospective study of 30 cases

K.Hafidi*(1), I.Toumir(2), K.Loukili(3), T.Bouhafa(3), A.Elmaazghi(3), K.Hassouni(3)

(1)University Hospital of Hassan II, Fez, Morocco, (2)University Hospital Hassan II, Fez, Morocco, (3)University Hospital Hassan II, Fez, Morocco

Cancer of the parotid: a retrospective study of 30 cases

Introduction:
Cancers of the parotid gland are relatively rare and cause both diagnostic and therapeutic problems.

Purpose of the study
To analyze the epidemiological, clinical, therapeutic and evolutive aspects of cancers of the parotid

Materials and Methods:
Through a retrospective study, we present 30 cases of cancer of the parotid gland, collected at otorhinolaryngology and Neck Surgery and Radiotherapy Departments of Hassan II University Hospital (CHU) Fez between 2009 and 2015.

Results:
The median age of the patients was 56 years, and the male dominance was clear (sex ratio M / F by 2). The clinical symptomatology was dominated by parotid swelling found in all patients, cervical adenopathy in height patients (27%), Pain and facial paralysis in six patients (20%).

Ultrasoundography was the most requested diagnostic testing to assess the size and the echogenicity of the lesion (66%). MRI performed in an effort to better orient the lesion nature and subsequently confirmed by the anatomopathological examination. The main histological type was the muco-epidermoid carcinoma (30%). The treatment included a complete parotidectomy in 70% of cases associated with lymph node dissection in 53% of patients and radiotherapy in 73% of cases.

The facial paralysis was the most common postoperative complication. The evolution was marked by a local occurrence in four patients and metastases in two.

Conclusion:
Cancers of the parotid gland constitute an inhomogeneous entity on which the impact of the treatment is difficult to evaluate.
Circulating Tumor Cells in inoperable and/or metastatic Head and Neck squamous cell cancer, Results of the CIRCUTEC project

R.Garrel*(1), C.Panabieres*(2), D.Cupissol(3)

(1)HOPITAL GUI DE CHAULIAC, Montpellier, France, (2)LCCRH, Institut Universitaire de Recherche Clinique, France, (3)Institute of Cancer of Montpellier, France

Context: Since 2008, inoperable and/or metastatic Head and Neck Squamous Cell Cancer (HNSCC) are treated following the Extrem protocol, based platinum and Erbitux more or less 5 FU with significant benefit regarding median progression-free survival (PFS) and overall survival rate. However, no biological objective criteria of response, nor predictive factor are known, leaving bad responding patients under unnecessary treatment, and delaying alternative treatments and controlled trials. Based on knowledges in other solid tumors such as breast, prostate and colorectal cancer we hypothesized a possible prognostic role of CTC in HNSCC and studied the role of CTC as predictive factor of response as well as early criteria of response. Assays were performed in triplicate using, EPISPOT, Cell Search, and Flow cytometry. Objectives: Main objective was to evaluate the prognostic value of the early evaluation of viable Circulating Tumor Cells (CTCs) measured by the EPISPOT technique at D0 and D7 regarding PFS. Secondary endpoints were to assess the prognostic value of CTCs detected with Cell Search and Flow Cytometry and to compare results.

Materials and method: 80 patients were included in this prospective study. Ten teams participated in the project (GORTEC study group). The probability of survival was evaluated on 65 patients by the method of Kaplan Meier. Results: PFS at 12 Months was 0.08 [0.03-0.16] and at 24 Months was 0.03 [0.006-0.10], which corresponds to the data from study of Extreme Protocol. CTC were identified at D0 in 49/65 patients with EPISPOT in 45 patients, CellSearch in 12 an Flowcytometry in 7 patients and at D7 in 41/55 patients with EPISPOT in 38 patients, CellSearch in 7 an Flowcytometry in 4. The prognostic value of the CTCs at D0 identified by the EPISPOT-CK19 / EGFR was significant: p = 0.0518. The decay of CTCs at D7 identified by EPISPOT-EGFR J0-J7 has a significant prognostic value of p = 0.0103. The detection of CTCs by EPISPOT or CellSearch D7 was prognostic: p = 0.0311. The detection of CTCs by EPISPOT or Cytometry D7 was prognostic: p = 0.0480. The detection of CTCs by CellSearch or Cytometry D7 was prognostic: p = 0.0005. Conclusion: This study establish CTC as early biological criteria of response as well as predictive factor of response to Extrem protocol in inoperable and/or metastatic HNSCC.
Clinical and histological predictive factors of induction chemotherapy response in head and neck squamous cell carcinoma.

J.Giroult*(1)

(1)CHU St Etienne, , France

Introduction: Induction chemotherapy associating Docetaxel, Cisplatin and 5-FU (TPF) is commonly used in advanced head and neck squamous cell carcinoma (SCC). This protocol is used mainly for organ preservation, but predictive factors haven't been defined yet.

Aim of the study: Highlighting predictive clinical, biological and histological factors of induction chemotherapy response.

Methods: 81 patients with an untreated head and neck SCC conducted TPF induction chemotherapy. We monitored clinical parameters such as alcohol and tobacco intoxication, performance status, tumor site, TNM staging, weight loss, and comorbidity through medical history records, and pre-treatment blood analysis. Biopsies before treatment underwent histologic and immuno-histochemical analysis, Brandwein-Gensler (BG) histological risk assessment, and P16 et P53 expression research. These factors were analyzed according to the response to chemotherapy.

Results: 61.7% of patients were good responders. The predictive clinical factors of good response to the induction chemotherapy were pharyngolaryngeal localization and tumor size. Among biological parameters, a hemoglobin concentration of at least 12.5 g/dL and a low pre-treatment platelets / blood lymphocytes ratio (PLR) were predictors of good response. Significant lymphocyte response of the host, which meant a low BG score, was a predictive histological factor of good response. On multivariate analysis, only tumor location and histological score of BG were significant variables. The response to induction chemotherapy was not prognosis-correlated (whether on Global Survival or Survival without relapse).

Conclusion: The pharyngolaryngeal location, tumor stage T2 / T3, an hemoglobin rate over 12.5 g/dL, a PLR low ratio and a low BG score are predictors of response to induction chemotherapy.
Comparing outcomes in anaplastic thyroid carcinoma According to the therapeutic approach.

A.Belazzouz*(1), F.Moussa(2), B.Mbarek(2), M.Safia(2)

(1)centre de pierre et marie curie, , Algeria, (2)CPMC, , Algeria

Purpose: Anaplastic thyroid carcinoma (ATC) is one of the most virulent and aggressive malignancies. The mean survival time of the patients is approximated at 6 months in spite of aggressive treatment as patients usually have locally advanced disease (stage 4B) or distant metastasis at the time of the initial presentation (stage 4C). The aim of this study is to evaluate factors influencing survival of patients with metastasis.

Materials and Methods: The data was analyzed retrospectively for 17 patients with ATC diagnosed between 2008 and 2016 at Pierre Marie Curie Center. This study evaluated the influence of therapeutic modality only on those with stage 4C. The patients have been subdivided into two groups: P1 combined therapy where at least two therapeutic weapons out of the three were utilized and P2 uncombined therapy where one maximum therapeutic weapon was used.

One patient was excluded because he has received only small dose of chemotherapy (Adriamycin).

Kaplan-Meier survival analysis and log-rank analyses were performed to evaluate the influence of radio-chemotherapy factor on median survival of ATC stage 4C.

Results: The median age of all patients was 63.47 years., They were made of 21,% stage 4A, 10.5% stage 4B and 68.5% stage 4C. The median age of patients with stage 4C of ATC was 63 years. Four patients within ATC with stage 4C had received combined treatment: surgery, radiotherapy and chemotherapy (Aadriamycin, Cisplatin and Doxorubicin). 7 patients with stage 4C ATC were followed without treatment.

The one year survival rates were: 42.8 % in all patients and 45.45% for stage 4C respectively. There is no significant difference in the median survival between patient receiving surgery, radiotherapy or chemotherapy in metastatic ATC (p: 0.083). The one year overall survival rates were 75 % and 25 % respectively in the group with combined surgery with radio-chemotherapy and the group with uncombined treatment.

Conclusion: Combined therapy, could not improve the survival in stage 4C of ATC. This result is inconsistent with literature data and can partially be explained by the small size of our series. Several mechanisms have been proposed to show the benefit of the combined treatment especially chemotherapy such as controlling the small metastatic sites around the main primary tumor, reducing the tumor dissemination, increasing the tumor resection rate by shrinking the tumor, and improving the effect of radiotherapy.
Correlations between patient-reported dysphagia and penetration-aspiration scores in head and neck cancer patients post-oncological treatment

J. Hedström*(1)

(1) Department of Otorhinolaryngology, Head and Neck surgery; Institute of Clinical Sciences; Sahlgrenska Academy at the University of Gothenburg; Sahlgrenska University Hospital, Gothenburg, Sweden, , Sweden

Purpose: Dysphagia is a common and severe toxicity after oncological treatment of head and neck cancer (HNC). The study aim was to investigate relationships between patient-reported dysphagia and objectively measured swallowing function in HNC after modern curative radiotherapy with or without chemotherapy.

Materials and methods: Patients with tumours of the tonsil, base of tongue, hypopharynx, and larynx treated in 2007-2015 were assessed for dysphagia post-treatment by telephone interview and videofluoroscopy (VFS). A study-specific categorized symptom score was used to determine patient-reported dysphagia (DESdC=presence of drinking, eating, swallowing difficulties, coughing when eating/drinking (any combination); scores between 0-4 with 0=no symptom); the penetration-aspiration scale (PAS) to determine swallowing function by VFS. Swallowing difficulties were defined as DESdC≥1 and PAS≥2. Relationships between clinically relevant cut-offs for DESdC and PAS were determined by Pearson’s correlation coefficient (Pr).

Results: Swallowing difficulties according to DESdC was reported by 91% of the patients and according to PAS by 61% at a median of seven months post-treatment. Averaged correlations between DESdC grade 1/2/3/4 and PAS were 0.16/0.10/0.27/0.18. Every second patient with DESdC-grade 3 had severe swallowing difficulties according to PAS. Correlations between individual DESdC:s were highest for swallowing and eating (Pr=0.53) and lowest for swallowing and coughing (Pr=0.11).

Conclusions: Our data suggest that if a patient reports having swallowing difficulties, it is likely that he or she also has eating difficulties but not necessarily coughing problems when eating. However, if all these three symptoms are reported, it is likely that the patient will present with moderate or severe impaired swallowing function according to PAS and thus should be referred for further evaluation and treatment.

Key words: head and neck cancer (HNC); dysphagia; swallowing difficulties; penetration-aspiration scale (PAS); patient-reported outcomes (PRO); radiotherapy; chemoradiotherapy

Johanna Hedström M.D.1, Lisa Tuomi SLP, Ph.D1, Caterina Finizia M.D. Ph.D.1, and Caroline Olsson Ph.D.2,3

1 Department of Otorhinolaryngology, Head and Neck surgery; 2 Department of Radiation Physics. Institute of Clinical Sciences, the Sahlgrenska Academy at the University of Gothenburg, Sweden; 3 Regional Cancer Center West, the Western Sweden Healthcare region, Gothenburg, Sweden
CURRENT STATUS ON LARYNGEAL CARCINOMA SURGERY. LASER OR OPEN, PRIMARY OR SALVAGE SURGERY.

M.Stankovic*(1)

(1) Clinic of ORL, Medical faculty Nis, Serbia, Nis, Serbia

Purpose: Organ preservation for laryngeal carcinoma has many challenges and unsolved issues. The aim of this presentation is to give current state of the art directions for surgical treatment of laryngeal carcinoma.

Methods: Clinical experience in surgical treatment of 1000 laryngeal carcinoma, performed in one institution during the period 1995-2015 will be presented. Reference data will be analysed and compared to our results in order to give up-todate treatment strategy.

Results: Transoral laser surgery (TOLS) for early laryngeal carcinoma gave excellent oncology and functional result, and it should be the treatment of choice. For advanced laryngeal carcinoma there are some limitations of TOLS. Indications for open surgery are presented. Salvage total laryngectomy (STL) after previous radiotherapy (STL-pRT), and after chemoradiotherapy (STL-pCTRT) caused more frequent local complications than primary total laryngectomy (PTL). Five-year disease-free survival (DFS) rate was significantly influenced by TNM stage and localization of the primary laryngeal tumor, and it was: 61.3% for PTL, 54.1% for STL-pCTRT, and 47.6% for STL-pRT. Incomplete responders to initial treatment had low survival rate.

Conclusion: TOLS is indicated for all early laryngeal cancers, and for some of advanced cases. PTL still offers the best survival rate with low complications for advanced laryngeal squamous cell carcinoma. STL causes more frequent local complications, especially after chemoradiotherapy. Addition of chemotherapy to radiotherapy increases the survival rate. Five-year DFS rate depends on TNM stage and localization of the primary tumor.
Determinants of long-term survival of head and neck cancer patients in Scotland: a population cohort study

C. Douglas*(1), K. Ingarfield(2), A. McMahon(2), D. Conway(2), S. Savage(3), K. Mackenzie(4)

(1) Queen Elizabeth University Hospital, Glasgow, United Kingdom, (2) Community Oral Health Department, University of Glasgow Dental School, University of Glasgow, Glasgow, United Kingdom, (3) Emergency Care and Medicine Directorate, Victoria Hospital, Kirkcaldy, United Kingdom, (4) Department of Otolaryngology – Head and Neck Surgery, Glasgow Royal Infirmary, Glasgow, United Kingdom

Background: The long-term prognosis for head and neck cancer patients is rarely described and the determinants that are associated with long-term survival are not well understood.

Methods: Patients were followed-up from the Scottish Audit of Head and Neck Cancer; a national clinical cohort of head and neck cancer patients in Scotland between 1999 and 2001. In September 2013, this cohort was linked to national mortality data. Overall survival was calculated using the Kaplan-Meier method, and age- and stage-adjusted Cox proportional hazard models were used to determine hazard ratios. A forward stepwise multivariate Cox proportional hazards model was used to determine the independent risk factors of survival, and a logistic regression model was used to determine the strength of the model.

Results: 1910 patients were recruited, and following 15 exclusions 1895 patients were included in the analysis. Five-year and twelve-year survival was 45.0% (42.7%, 47.2%) and 25.5% (23.5%, 27.5%), respectively. Several patient, tumour and treatment factors were independently associated with survival; age, stage, treatment modality, WHO Performance Status, alcohol consumption, smoking behaviour, and anatomical site. A logistic regression model including the variables from the multivariate Cox proportional hazards model produced a high c-index of 0.84.

Conclusion: 25.5% of patients were alive 12 years after diagnosis. The key determinants of long-term survival were; age, stage, treatment modality, WHO Performance Status, alcohol consumption, smoking behaviour, and anatomical site. These outcomes should be considered when advising patients of long-term prognosis.
Early skin reaction as prognosis indicator of effectiveness of electrochemotherapy in cutaneous metastases of melanoma and head and neck cancer.

M. Caballero*(1)

(1) HOSPITAL CLÍNIC OF BARCELONA, Spain

Purpose: Electrochemotherapy (ECT) is an effective local therapy of cutaneous and subcutaneous metastases of various types of cancers which are refractory to standard therapies. The aim of this study is to evaluate the efficacy, the tolerance, the recurrence rate and associated morbidity according to the skin reaction (healing with ulcer or scar) after ETC.

Methods: Retrospective observational study of 56 consecutive patients with cutaneous and subcutaneous metastases of malignant melanoma or head and neck cancer. Patients were treated by electrochemotherapy using a single intravenous dose of bleomycin followed by the application of electrical pulses into the tumor/s. Local response was evaluated according to RECIST criteria. Kaplan–Meier curves were performed. The statistical significance was evaluated using log-rank test. P-value of less than 0.05 was considered as significant.

Results: Overall clinical response was observed in 47 patients (84%). Local side effects were mild in all the patients; 86.5% of symptoms were resolved in the first 48h after the procedure. Higher overall survival was observed in patients with malignant melanoma (p=0.026), in patients that reached a complete or a partial clinical response (p=0.003; p=0.002) and in patients who developed a dry scar in the contiguous skin during the healing process (p>0.001).

Conclusions: A higher clinical response rate in patients who develop a dry scar after an ECT session was observed. The reasons for this better outcome in these patients are unknown. A dry scar might be a predictor factor for systemic response and we suggest that may be a prognostic factor to consider in patients treated with ECT.
Effects of Radiotherapy on Salivary Secretion and Biochemical Parameters in Patients with Head and Neck Cancer

S.Saxena*(1)

(1)JIPMER, Pondicherry, India

Purpose: Xerostomia or oral dryness leading to mucositis and other complications is the most frequent complaint among patients who undergo radiotherapy for head and neck cancer. This study observes the changes brought by radiotherapy in salivary gland function after 6 weeks of treatment. Hence the purpose of the study was to study the changes induced by radiation on saliva in head and neck cancer patients and to identify the independent factors associated with the effect on salivary flow rate, amylase activity and pH in patients with head and neck cancer who are receiving radiotherapy.

Materials and Methods: 94 patients were observed during the study period of two years. 87 patients underwent conventional RT and 7 patients received Intensity Modulated Radiotherapy. Salivary samples were collected by spitting method before & 6 weeks after radiotherapy and salivary flow rate, pH and amylase activity were measured. Changes in salivary flow rate, pH and amylase were observed.

Results: The majority of patients in study population were of age group 50 to 70 years of age and there was a male preponderance in the study population. Salivary flow rate and pH showed a gradual decrease as age advances whereas amylase activity showed a non-significant increase. There was no sex predilection associated with baseline SFR, pH and amylase activity. A significant decrease in salivary flow rate (P<0.001), pH (P<0.001) and amylase (P<0.001) was observed following 6 weeks of conventional radiotherapy. A non-significant change in SFR (P<0.078) and significant reduction in pH (P<0.03) and amylase (P=0.001) was observed following 6 weeks of IMRT.

Conclusion: Radiotherapy induced statistically significant reduction in salivary flow rate, pH, and amylase was observed after conventional radiotherapy. Intensity modulated radiotherapy however caused significantly less reductions in salivary flow rate, pH and amylase thereby providing a favourable outcome for the patient in terms of masticatory and gustatory functions. The use of newer modalities of radiotherapy along with the use of chemoprotective agents and immunomodulators could be recommended for all the patients undergoing radiotherapy to prevent xerostomia.

Author and affiliation:
Dr Sunil Kumar Saxena,
Professor and Head,
Department of Otolaryngology, Head and neck Surgery,
Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER),
Pondicherry,
India- 605006.
Mobile: +91 9442527018
E-mail: saxenasunil.jipmer@gmail.com
Efficacy and Feasibility of Multidisciplinary Management of Patients with Oropharyngeal Cancer

M. Karakitsiou*(1), P. Pondorfer(1), S. Vasicek(1), T. Weiland(3), A. Wolf(1), M. Graupp(1), D. Thurnher(2)

(1) ENT Graz University Hospital, Graz, Austria, (2) ENT Garz University Hospital, Graz, Austria, (3) ENT Graz University Hospital, Graz, Austria

Purpose: A multidisciplinary treatment approach influences and improves the planning of treatment of patients with oropharyngeal cancer. In this study we would like to evaluate the efficacy and feasibility of an interdisciplinary tumor-board council of a single center. Furthermore, we will quantify changes in therapy, that was initially recommended by the tumor board council, such as additions, subtractions or overall changes in therapy.

Methods: A retrospective study was undertaken and included 64 patients (f n=14 21.9%; m n=50 78.1%) with oropharyngeal cancer diagnosed between 01/2015-12/2015. Data were extracted from the medical records and tumor-board council’s sessions. Patients were classified according to changes in treatment modality regarding surgery, chemotherapy, radiotherapy or immunotherapy, as well as changes in tumor stage and grade.

Results: A set of 33 patients (51.5%) showed changes in their treatment plan, compared to the initial recommended treatment by the tumor board council. Moreover, 29.7% of patients show a tumor progression, 26.6% show a tumor regression while 29.6% were declared as tumor free after 1st restaging. Side effects were observed in 68.8% patients, like mucositis (46.9%), dry mouth (48.4%), changes in taste (34.4%), dysphagia (45.3%) and skin changes (37.5%). Patients receiving no radiotherapy showed a significantly higher rate in change of therapy (p=0.047). Patients undergoing neck dissection showed a significantly lower rate in change of therapy (p=0.01). Two patients have shown incompliance with the decision of the tumor-board council.

Conclusion: A multidisciplinary tumor-board provides quality assurance for patients’ outcomes. Nevertheless, evaluation of decision of the tumor board councils has shown that radiotherapy and surgery significantly impact changes in therapy, that were initially recommended by the tumor board council in a single center. Side effects like mucositis, dry mouth, dysphagia or skin reactions did not significantly correlate with changes in therapy.
Electrochemotherapy evaluation in the treatment of head and neck permeation nodules in 7 patients with no further therapeutic option

Y. Gobel*(1), G. Valette(2), G. Augowet(3), J. Leclere(2), R. Marianowski(4)

(1) Service Orl CHU Brest, Brest, France, (2) CHRU BREST, France, (3) HIA Clermont Tonnerre Brest, France, (4) C, France

Head and neck permeation nodules result from the local and regional evolution of head and neck cancers. Their treatment is difficult as they affect mostly patients who already had usual treatments as surgery, radiotherapy and chemotherapy.

Head and neck permeation nodules cause pain, bleeding, local infections, esthetic and functional disorders affecting the quality of life especially when they are located on the face.

Electrochemotherapy is a combination of a chemotherapy and a skin electroporation which is effective in the treatment of skin cancer.

We evaluated the results of electrochimiotherapy using bleomycin 15mg/m2 IV and an electroporation (CliniporatorTM IGEA, Carpi) in 7 patients with head and neck permeation nodules with no further therapeutic options. 6 patients had a locally advanced squamous cell carcinoma. 1 patient had a leiomyosarcoma.

All the patients had a general anaesthetic for the electrochemotherapy, and then had a regular follow-up.

Electrochemotherapy was effective on tumoral volume, bleeding, pain, and esthetic aspect of head and neck permeation nodules.

Les nodules de perméation cervico-faciaux sont une conséquence de l’évolution locale et régionale des cancers de la tête et du cou. Leur traitement est complexe, ceux-ci survenant le plus fréquemment chez des patients atteints d’un cancer en poursuite évolutive, qui ont déjà bénéficié de plusieurs traitements associant chirurgie, radiothérapie externe et chimiothérapie.

Les nodules de perméation sont à l’origine de douleurs, de saignements, d’infections locales, de troubles esthétiques et fonctionnels à l’origine d’une altération majeure de la qualité de vie, en particulier lorsqu’ils sont situés sur le visage.

L’électrochimiothérapie est une thérapie associant une injection de chimiothérapie et une electroporation cutanée qui est efficace dans le traitement des lésions cutanées.

Nous avons évalué l’efficacité du traitement par électrochimiothérapie associant une injection de bléomycine 15mg/m2 IV et une électroporation (CliniporatorTM IGEA, Carpi) chez 7 patients présentant des nodules de perméation de la tête et du cou en échec thérapeutique. Concernant le type histologique des lésions, il s’agissait d’un carcinome épidermoïde chez 6 patients et d’un lésiomyosarcome chez une patiente. Chaque patient a eu ce traitement sous anesthésie générale puis a bénéficié d’une évaluation clinique régulière.

L’électrochimiothérapie a montré une efficacité sur le volume tumoral, le saignement, la douleur et l’aspect des nodules de perméation de la tête et du cou.
Electrochemotherapy in the treatment of head and neck cancers: a single institution report
A.Groselj*(1)

(1)Department of Otorhinolaryngology and Cervicofacial Surgery, University Medical Centre Ljubljana, Ljubljana, Slovenia

PURPOSE: Electrochemotherapy is a novel ablative treatment based on the use of application of defined electric pulses to the tumor with the aim to enhance permeability of cell membrane (electroporation). Consequently, cellular uptake of the antineoplastic drugs, such as bleomycin or cisplatin, delivered simultaneously by intravenous or intratumoral route, by the tumor cells is significantly increased. The aim of the study was to evaluate the effectiveness of electrochemotherapy in the group of patients with head and neck cancer.

METHODS: Electrochemotherapy with bleomycin was used in 24 patients (11 males, 13 females; median age 78 years, range 65-89) on 47 tumor nodules in the head and neck region. 17 patients had 37 skin lesions of either basal or squamous cell carcinoma histology. Four patients had deep-seated neck metastases, two of them had squamous cell carcinoma metastases, one patient had breast cancer metastasis and one patient had neuroendocrine carcinoma metastases. Two patients had recurrent oropharyngeal tumor, and one patient had a primary tumor of the oral cavity; in all cases histology was squamous cell carcinoma. The tumor dimension ranged from 6 to 100 mm; median 19 mm in the longest diameter. Response to treatment was evaluated according to the RECIST criteria 1.1 three months after electrochemotherapy.

RESULTS: Overall, 46 (97.8 %) of 47 tumors responded to the treatment after single electrochemotherapy procedure, with complete and partial response observed in 83% (39/47) and 14.9% (7/47), respectively. In only one tumor no objective response was observed. No serious adverse effects were detected in either of treated patients.

CONCLUSION: Electrochemotherapy is safe and effective local treatment option for skin cancers in the head and neck region and feasible alternative in selected patients with mucosal tumors in the oropharynx and oral cavity. It should also be considered as a palliative treatment option in patients with neck metastases.
Evaluation of FDG-PET versus High-resolution Chest CT for Distant Staging in Patients with Locally Advanced Head and Neck Cancer

C.Larose*(1), F.Nguyen(2), H.Bahig(2)

(1)University of Montreal, Canada, (2)University of Montreal, Montreal, Canada

Purpose
To assess the added value of FDG-PET vs. high-resolution chest CT for distant staging in patients with locally advanced head and neck cancer (LAHNC).

Method
We conducted a retrospective analysis of patients with LAHNC evaluated for curative radiotherapy +/- chemotherapy and at risk for distant metastasis that underwent both FDG-TEP and high-resolution chest CT scan as part of their pre-treatment workup from January 2015 to August 2016. FDG-TEP and chest CT results were reviewed. Presence of distant malignancy (metastatic or primary) was confirmed with histopathologically or by subsequent follow-up imaging.

Results
This study included 121 patients. Primary tumor sites were oropharynx (77%), hypopharynx (8%), larynx (7%), oral cavity (5%), salivary gland (2%) and sinonasal (1 patient). Overall stage before distant work-up was III, IVA and IVB in 10%, 75% and 15% of patients, respectively; 53% of patients had HPV-positive disease. Distant malignant lesions were confirmed in 18 (15%) patients, including 17 malignant lung lesions (primary or metastatic) and 1 bone metastasis. Whereas the bone metastasis was detected in FDG-PET and missed on chest CT, chest CT detected all malignant lung lesions. For detection of distant malignant lesion, chest CT had a sensitivity of 94% (95% CI 71-100%), specificity of 90% (95% CI 83-95%) and accuracy of 91% whereas FDG-TEP had a sensitivity of 82% (95% CI 57-96%), specificity of 90% (95% CI 83-95%) and accuracy of 89%. Chest CT had a positive predictive value (PPV) of 58% [39-76] and a negative predictive value (NPV) of 99% [93-100%] whereas TEP with had a PPV of 62% [44-77] and an NPV of 97% [91-99%].

Conclusion
This retrospective study suggests that FDG-PET does not add significant value to the distant workup of LAHNC and that using high-resolution chest CT is probably a better and more cost effective option to work up this population. Confirmatory studies are warranted.
Evaluation of the theranostic properties of Gadolinium-based nanoparticles for the treatment of head and neck cancer

R. Quatre*(1), S. Dufort(2), J. Coll(3), C. Righini(1), I. Attalah(1)

(1) CHU GRENOBLE, La tronche, France, (2) Université Joseph Fourier, Grenoble, France, (3) Institut Albert bonniot, Grenoble, France

Background: Head and neck cancer is the sixth most common cancer worldwide and improving both diagnosis and therapy is necessary. Gadolinium-based nanoparticles AGuIX were developed as radiosensitizing and multimodal imaging agents. The aim of the study was to evaluate the benefits of the combination of AGuIX nanoparticles and radiotherapy on the recurrence free survival after removal surgery on an orthotopic head and neck mouse model.

Methods: Head and neck CAL33-Luc orthotopic tumors were implanted in female NMRI nude mice. The biodistribution of the nanoparticles was studied by fluorescence imaging. Tumor removal surgery was performed 19 days after tumor implantation. Radiotherapy was performed 23 days after tumor removal surgery at a single dose of 10 Grays, 1h after AGuIX intravenous injection (200 µL, [AGuIX]=50 g/L).

Results: After systemic administration, the nanoparticles were rapidly excreted by the kidney and passively accumulated in the orthotopic CAL33 tumors. These results were confirmed in another head and neck SQ20B orthotopic tumor model and by histological analysis of the tumors. Moreover after tumor surgery the combination of AGuIX with radiotherapy significantly improved the recurrence free survival, as well as the median survival time (196 days) compared to the median survival time of irradiated only mice (75 days) or control mice (54 days).

Conclusion: This study demonstrated the selective accumulation of AGuIX nanoparticles in the tumors, as well as the recurrence free survival and overall survival benefits of combining AGuIX with radiotherapy after removal surgery, suggesting a potential benefit above the current standard of care of head and neck cancer patients.
From translational research to precision medicine in laryngeal squamous cell carcinoma: the role of HER family members overexpression.

D. Mele* (1)

(1) Institute of Otorhinolaryngology, Università Cattolica del Sacro Cuore, Rome, Italy, Italy

Background: Eventhough many reports nowadays describe the potential role of molecular markers in the treatment of laryngeal cancer, none of them guide the current clinical decision-making process. EGFR, the type 1 member of HER family, appears to be the most important negative prognostic marker, since its overexpression in laryngeal squamous cell carcinoma is correlated with more advanced tumors and histopatological grading (Scambja et al., 1991), with a shorter survival (Maurizi et al., 1992; Maurizi et al., 1996) and with an higher risk of lymphnodal metastasis (Almadori et al., 1999). The HER1 expression is also correlated with cyclin D1 gene amplification, HPV DNA infection and cox-2 expression. Data about the other members of the HER family (HER2, HER3, HER4) are less definite; we described in a previous article the protective role of HER3 and HER4 overexpression in laryngeal SCCs in association with a longer metastasis-free time and overall survival (Almadori et al., 2010). Many studies in vitro have shown that the sinergic application of Cetuximab and radioterapy could cause a greater reduction of cells proliferation instead of radio treatment on its own.

Recent research: It has recently been discovered that HER 1 activation, in human cancer cells, enhances mini-chromosome maintenance protein 7 (MCM7) phosphorilation and DNA replication through Lyn protein phosphorilation, configuring mcm7 as a downstream marker of HER signalling. Furthermore, geminin protein, as a negative regulator of the MCM loading factor Cdt1, might be a potential tumor suppressor gene. Our study demonstrates that MCM7-geminin status is a reliable prognostic marker of the clinical outcome in laryngeal SCC patients and that it is independent from the expression levels of HER1, so that its quantification could help us to identify a subgroup of patients with different local response to radiotherapy and biotherapy.

Personalized treatment: Finally MCM7-geminin status, which is a downstream marker of the EGFR patway, might reveal to be very useful for this purpose in clinical practice to select patients to submit to concurrent treatment with C225 and/or other anti-EGFR drugs in a combined therapy, instead of using the cisplatin that is at this time the standard drug for concomitant use of chemio/radiotherapy in laryngeal SCC.

Giovanni Almadori.

Institute of Otolaryngology Head & Neck Surgery, Catholic University of the Sacred Heart, Agostino Gemelli University Hospital Foundation, Rome-Italy.
Hyperglycemia crisis in head and neck cancer patients with platinum-based chemotherapy

C.Huang*(1), Y.Lin(2), Y.Liu(2), S.Lin(3), B.Kang(2), Y.Lin(4)

(1)Kaohsiung Veteran General Hospital, Kaohsiung city, China, Republic of (Taiwan), (2)Department of Otorhinolaryngology - Head and Neck Surgery, Kaohsiung Veterans General Hospital, Kaohsiung city, China, Republic of (Taiwan), (3)Department of Otorhinolaryngology - Head and Neck Surgery, Kaohsiung Veterans General Hospital, , China, Republic of (Taiwan), (4)Department of Otolaryngology, National Cheng kung University Hospital, , China, Republic of (Taiwan)

Purpose of the study

Hyperglycemic crisis developed in cisplatin treated head and neck patients were rare. However, the condition could be life-threatening and delaying treatment course of chemoradiotherapy and worth exploring for pursing better cancer treatment quality and survival.

Materials and methods

All cases of head and neck cancer from 2014 to 2015 who had received cisplatin as main chemotherapy regimen were reviewed. There were 3 cases without history of diabetes recorded to develop hyperglycemia after cisplatin-based chemotherapy.

Results

1st Case: The 47 y/o male patient without underlying disease is newly diagnosed with nasopharyngeal carcinoma, cT3N1M0, stage III. 1st and 2nd course of induction chemotherapy with cisplatin (80mg/m2) plus 5-flurouracil was arranged. However, 5 days after the 2nd chemotherapy, dyspnea, nausea/vomiting, polydipsia with blurred vision was noted and the patient’s blood glucose 608mg/dl was noted with arterial blood gas pH 7.314, pCO2:16.8mmhg, HCO3−:8.3mmol/L and serum ketone 2+. Thus diabetic ketoacidosis was diagnosed and the patient was treated with insulin therapy and became insulin dependent till 2 years post 1st hyperglycemia crisis event.

2nd Case: The 57y/o male had history of alcoholic hepatitis is newly diagnosed with squamous cell carcinoma of uvula, cT2N1M0, stage III. After wide excision of the tumor, concurrent chemoradiotherapy was initiated with weekly cisplatin (40mg/m2). Before the 4th chemotherapy, the patient started nausea/vomiting with general fatigue. On evaluation, serum glucose level up to 689mg/dL was noted. Blood gas revealed pH 7.379, pCO2:23.1, HCO3−:13.3 with serum osmolality 326mOsm/L and serum ketone 2+ with ketouria. Thus, diabetic ketoacidosis was diagnosed and treated accordingly.

3rd case: The 57 y/o male patient had newly diagnosed nasopharyngeal carcinoma, cT3N2M0, stage III and received induction chemotherapy with cisplatin (80mg/m2) plus 5-flurouracil. After the 1st course of induction chemotherapy, severe weight loss, disturbed conscious and general malaise were noted. On examination, blood glucose level up to 1475mg/dl was noted with blood gas analysis showing pH 7.36, HCO3−:13.2mmol/L and pCO2: 23.9mmhg. Serum ketone was negative compatible with diagnosis of hyperosmolar hyperglycemia status. Emergent insulin pump therapy with resuscitation was initiated and the patient’s condition improved. The patient became insulin dependent up to 3 year post event follow up.

Conclusion
These case reports signify hyperglycemia crisis by cisplatin may be underestimated and lead to life-threatening condition which were mostly observed within 2 week post last cisplatin infusion and serum glucose level should be monitored 1st week after cisplatin infusion.
Identification of a gene expression based radioresistant score in order to predict the benefit of the radiotherapy in HPV-negative squamous cell carcinomas of the head and neck


Purpose of the study: Radiotherapy for head and neck squamous cell carcinomas (HNSCC) is associated with a substantial morbidity and inconsistent efficacy. Although human papillomavirus (HPV)-positive status is recognized as a marker of increased radiosensitivity, prediction of radiosensitivity in HPV-negative HNSCC is poorly described. Our goal was to identify molecular markers associated with benefit to radiotherapy in patients with HPV-negative disease.

Material and Methods used: Gene expression profiles from public repositories were downloaded for data mining. Training sets included 421 HPV-negative HNSCC tumors from The Cancer Genome Atlas (TCGA) and 32 HNSCC cell lines with available radiosensitivity data (GSE79368). A radioresistance (RadR) score was computed using the single sample Gene Set Enrichment Analysis tool. The RadR score was validated in two panels of cell lines (NCI-60 and GSE21644) as well in HPV-negative HNSCC tumor datasets including 44 (GSE6631), 82 (GSE39366) and 179 (GSE65858) patients, respectively. We finally tested the association of the radioresistance (RadR) score with known recurrent genomic alterations in HNSCC, patterns of protein expression in HNSCC tumors, biological hallmarks and patterns of drug sensitivity using TCGA and the E-TABM-3610 dataset (167 pancancer cell lines, 142 drugs).

Results: The RadR score was computed using 13 genes we found differentially expressed between cancer and normal mucosa and that were associated with radioresistance in vitro and with recurrent disease in patients with HNSCC treated with surgery and radiotherapy. We found a significant association of the RadR score with recurrence in patients treated with surgery and adjuvant radiotherapy but not with surgery alone. Among HPV-negative HNSCC, the RadR score was significantly different between the four molecular subtypes previously described and especially, was significantly lower in the “atypical” molecular subtype. No association with HNSCC known recurrent genomic alterations was found. Finally, the RadR score was significantly correlated with enriched expression of the “unfolded protein response” (UPR) hallmark and increased sensitivity to bortezomib, which targets this pathway. Of note, the 14-3-3-zeta protein, included in the UPR hallmark gene set, was associated with in vitro radioresistance and poor disease free-survival.

Conclusions: We identified a 13-gene based RadR score predictive of the benefit of radiotherapy in patients resected for HPV-negative HNSCC. Its association with non-atypical molecular subtypes, unfolded protein response hallmark and drug sensitivity patterns may help tailoring radiotherapy in this population.
Introduction:
Salvage surgery is the only option for radiotherapy failure in LSCC, but is associated with high morbidity. There is a need to identify biomarkers of radioresistance, to inform treatment decisions. Epidermal growth factor receptor (EGFR) associates with radioresistance in head and neck cancer (HNSCC), and type 1 insulin-like growth factor receptor (IGF-1R) correlates with radioresistance in other tumour types. We recently reported that IGF-1R associates with advanced T-stage, HPV negativity and adverse survival in HNSCC. Here, we evaluated IGF-1R and EGFR in predicting radiotherapy failure in LSCC.

Methods:
We scored membrane, cytoplasmic and total (membrane plus cytoplasmic) EGFR and IGF-1R using immunohistochemistry on biopsies and salvage laryngectomies from 63 LSCC patients, including 41 treated with radiotherapy (23 long-term remission, 18 local recurrences) and 22 with primary laryngectomy.

Results:
IGF-1R scores were higher in the biopsies of the radiotherapy failure group, with scores in the membrane of 3.07 vs 1.0 (p=0.004), cytoplasm 3.36 vs 2.17 (p=0.18) and total IGF-1R 6.43 vs 3.17 (p=0.01) compared with those achieving long-term remission. IGF-1R expression was positively associated with tumour size and EGFR expression and was unchanged following radiotherapy. EGFR scores did not correlate with radiotherapy outcomes. Patients undergoing primary laryngectomy had higher T and N stage (p<0.05) and higher tumour IGF-1R (8.3 vs. 3.17, p=0.02) than those achieving long-term post-radiotherapy remission.

Conclusions:
These results suggest that IGF-1R associates with radiotherapy resistance in LSCC. Treatments accounting for IGF-1R status, or molecular therapies targeting this receptor, may have merit in patients whose tumours overexpress IGF-1R.
Induction chemotherapy using TPF regimen

Takuma Matoba 1), Kei Ijichi 1), Kayoko Kabaya 1), Shintaro Beppu 1), Junichi Torii 1), Shingo Murakami 1)

1) Department of Oto-rhino-laryngology and Head and Neck Surgery, Nagoya City University Hospital, Japan

Purpose of the study

It is controversial what regimen is appropriate for patients with head and neck cancer as induction chemotherapy according to anti-tumor effectiveness, side effect, organ preservation, and so on. In Nagoya City University Hospital, induction chemotherapy using docetaxel, cisplatin, 5-fluorouracil (TPF regimen) has been applied to many patients over a decade. Analyzing the outcomes of the patients received induction chemotherapy using TPF regimen, we intended to develop a policy for the regimen of induction chemotherapy.

Materials and methods used

We retrospectively investigated 65 patients with head and neck cancer who received induction chemotherapy using TPF regimen in Nagoya City University Hospital from December 2003 and January 2016. Patients with unresectable tumor were excluded from the present study. After 1-3 cycles of TPF regimen, patients underwent radiotherapy (with or without chemotherapy) or surgery according to the response to induction chemotherapy.

Results

The mean age was 64.9 years (ranged 40 to 77 years), and the majority of patients (58 of 65) was male. The primary tumor site was oropharynx in 22 patients, hypopharynx in 31 patients, and larynx in 12 patients. Response rate to induction chemotherapy was 87.7% (complete response in 2 patients and partial response in 55 patients). The initial treatment to primary tumor was radiotherapy in 60 patients, and surgery in 5 patients. The rate of the patients who completed the induction chemotherapy and definitive radiotherapy was 92.3 % and 100 %, respectively. The 3-yr overall and disease-free survival rate for whole patients was 87.2 % and 63.4 %, respectively. The 3-yr overall survival for patients who underwent radiotherapy and surgery was 88.4 % and 75.0 %, respectively (p=0.30). The 3-yr larynx dysfunction-free survival for patients with hypopharyngeal cancer and laryngeal cancer was 73.1 % and 66.7 %, respectively.

Conclusion

The survival rates in the present study were relatively higher than those of previous studies. Furthermore, not only the larynx preservation rate but also functional larynx preservation rate were excellent. Our treatment policy was suitable to each patients. Especially, the selection of treatment modality according to the response to induction chemotherapy was appropriate.
Intraarterial chemotherapy of non epithelial malignant tumours of maxilla and paranasal sinus

R.Bekmirzaev*(1), A.Khasanov(2)

(1)National Cancer Research Centre, Tashkent, Uzbekistan, (2)National Cancer Research Centre of Uzbekistan, Tashkent, Uzbekistan

Objective: Studying the role of long intra-arterial chemotherapy in treatment of patients with the non epithelial malignant tumors of maxilla and paranasal sinuses.

Methods: while in the remaining 48 patients histological had malignant non-epithelial tumors that were treated in 2000-2008 and in 2013-2015. In the period of 2000-2008 and 2014-2015 y. 48 treated oneself patients with the non epithelial malignant tumors of maxilla and paranasal sinuses. At (31%) patients osteosarkoma is educed. Sick depending on a method treatments were divided into 4 groups: 1) intraarterial chemotherapy with local UHF-hyperthermia and radial therapy (10 patients) 2) intraarterial chemotherapy and radial therapy (14 patients), 3) system polichemotherapy and radial therapy (12 patients) 4) radiotherapy with a subsequent operation (12-sick). We used more frequently the following scheme: Cisplatin total dose 100 mg, Doxorubicin total dose 60 mg and Ciclofasfan total dose 1000 mg only intramuscular.

Patients of 1 and 2 groups received intraarterial chemotherapy with ligation and catheterization of external carotid artery. Chemical toxicity degree was identified by scale CTC NCIC WHO. To estimate preoperative therapy pathomorphosis tumor degree was determined.

Results: Here with, in 1 group of 10 patients in 1(10%) was total effect, in 8(80%)–partial and in 1(10%) – stabilization. At this time, objective (total + partial) effect to therapy in this group was noted in 9(90%) patients. In second group of 14 patients in 2 (14.3%) patients was total effect, in 10 (71.4%)–partial, in 2 (14.3%) – stabilization. Objective effect was 12(85.7%). In 3 group of 12 patients in 1 (8.3%) patients was total effect, in 5 (41.6%) - partial, in 4 (33.3%) - stabilization and 2 (16.6%) - progressing. Objective effect to therapy in this group had 6(49.9%) patients. When studied the toxicity degree toxicity was followed most of all in 3 group of patients compared with 1 and 2 groups of patients. Therefore in 1 and 2 groups of patients compared with 3 group of patients we obtained the high frequency of local side effects in the form of stomatitis of II-III degree. General toxicity was characterized with nausea, vomiting, leucopenia by character and severity and was marked more in 3 groups.

When studied pathomorphosis tumor of III-IV degree was noted more in 1 group than in 3 and 4 groups.

Conclusion: For the patients of getting neoadjuvant regional intra arterial chemotherapy a direct effect from treatment is marked more than at getting a system chemotherapy.
Lip Commissurotomy for Accessing Oral and Oropharyngeal Tumors.

N.Steffen*(1)

(1)SCHOOL OF MEDICINE PONTIFICAL CATHOLIC UNIVERSITY OF RIO GRANDE DO SUL, Porto alegre, Brazil

Nédio Steffen, Luciane Mazzini Steffen.

School of Medicine – PUCRS – Porto Alegre - Brazil

Introduction and objective: This study aims to present a series of cases of patients with oropharyngeal and oral cavity tumors who underwent surgical treatment. The procedure was performed under a labial commissurotomy access. It intends to demonstrate the aesthetic and functional quality that this path provides, with a good exposure of the primary and secondary lesions.

Methods: A retrospective series cases study, which evaluated patients with oral cavity or oropharyngeal neoplasia, submitted, between 1999 and 2015 to neck dissection and excision of the primary tumor with access through a labial commissurotomy, Demographic data, lesions site, staging, surgical margins, presence of paralysis of the mandibular branch of the facial nerve and the degree of aesthetic satisfaction by the patient (satisfied / not satisfied), are presented.

The procedure begins with a labial commissure incision, extending diagonally lower by the chin on the expression line located in this region. The mandibular branch of the facial nerve is preserved. The jugal mucosa is incised in the inferior buccal gengival sulcus, separating the upper from the lower lip. The incision’s line follows below the angle of the mandible for neck dissection.

Results: Forty three patients were included. Twenty-six patients had primary tongue tumor, 9 oropharynx, 4 floor of the mouth, 3 from gingival and 1 jugal mucosa. All cases with pathological negative surgical margins. Two patients presented paralysis of the mandibular branch of the facial nerve. There was 88% of esthetic satisfaction. Discussion: Established techniques for accessing tumors of the oropharyngeal and oral cavity, as a medial inferior lip incision can lead to obvious stigmatizing scars. We describe an incision that presents a high degree of aesthetic satisfaction and maintains effectiveness of the classic techniques. Conclusion: Lip commissurotomy is an alternative approach for tumors of the oral cavity and oropharynx. This technique provides good tumor exposure and offers a plastic-functional gain.
LOW GRADE FIBROMYXOID SARCOMA OF THE NECK : A CASE REPORT.

Tatari MM, Abada R, Anajar S, Rouadi S, Rouabal M, Mahtar M.

Low-grade fibromyxoid sarcoma (LGFMS) is a deceptively bland malignancy with potential for late recurrence and metastasis. It is a rare tumor but probably under-diagnosed because it is often confused with other entities. It is mainly localized in the deep soft tissues of proximal regions of the limbs and trunk. That makes this study very interesting for the neck localisation. So we describe the case of 70 years old women who came to our department with a big mass in the neck, painless, evolving for 17 months, progressively increasing in volume. Histological exam showed a fibro-adipose tissue, dissociated by a malignant mesenchymal tumor proliferation of spindle and globular cells with moderate eosinophilic cytoplasm.

Nuclei were hyperchrom and irregular with many atypical figures and mitosis.

Immunohistochemistry exam was positive for cytokeratin, MUC4 and CD34. It was negative for smooth muscle lactin, desmine and PS100. Low-Grade Fibromyxoid Sarcoma of the neck was retained.

Because of his localisation, she does not resection of the mass. Palliative chemotherapy was decided, but she is died few months later.

Its diagnosis is not always easy. The progress in immunohistochemistry and molecular biology may help to diagnose this deceptively bland malignancy tumor.
Markers of the collagen metabolism in patients with malignant head and neck cancer treated by radiotherapy

J.Markowski(1), K.Mazurek(2), W.Likus(3), K.Siemianowicz(4), E.Pierzchała(2), D.Włodzimierz(5)

(1)Silesian Medical University, Laryngology Department, Katowice, Poland, Katowice, Poland, (2)Department of Aesthetic Medicine, Chair of Cosmetology, School of Pharmacy with the Division of Laboratory Medicine in Sosnowiec, Medical University of Silesia in Katowice, Poland., Sosnowiec, Poland, (3)Department of Anatomy School of Health Science in Katowice, Silesian Medical University, Katowice, Poland, (4)Department of Biochemistry School of Medicine Medical University of Silesia, Katowice, Poland, (5)The Chronic Pain Clinic, Sosnowiec, Poland

Radiotherapy is one of the most effective methods of treating head and neck cancers. Despite the use of highly specialized radiotherapy techniques, it is impossible to effectively eliminate cancer cells with absolute lack of damage to normal cells located in the therapeutic field. The epithelium and connective tissue, conditioning the homeostasis of the human body, are structures that undergo destruction each time, regardless of the type of applied radiotherapy, histopathological weave or tumor location. Collagen, which is an essential structural protein of the extracellular matrix of connective tissue, constitutes nearly one-third of the protein weight of the human body. Materials and methods. The study group consisted of 36 patients with histopathologically confirmed head and neck cancer, and who have had radiotherapy as a form of radical or palliative treatment. Materials consisted of blood samples of patients collected at three time points: before radiotherapy, immediately after, and three months after completion of treatment. After collecting the required biological material, the concentrations of two selected parameters of connective tissue metabolism were marked: PIIINP (procollagen III aminoterminal propeptide) and ICTP (carboxyterminal telopeptide of type I collagen). The analysis of changes in the value of particular parameters was performed separately for the group of patients with radical care and palliative care. The analysis took into account results from patients from whom a set of test material was obtained. Results. Statistically significant changes in the marker level of the III collagen synthesis peptides were observed in both groups. The PIIINP level determined in the serum of patients treated with both radical radiotherapy and palliative care significantly decreased as a result of the treatment. The values obtained immediately after the completion of therapy, and 3 months after the completion were significantly lower than the values indicated prior to treatment. Then, in the samples collected three months after radiotherapy, its significant reduction was noted compared to values obtained three months earlier. In patients qualified for radical radiotherapy as well as in the group for palliative care, there was no significant difference in the marker level of the degradation of type I collagen (ICTP). In both groups, an increased remodeling of collagen type III was registered. Conclusions. The selected markers of connective tissue remodeling, in addition to their use in the assessment of cancer disease progression, may also constitute helpful indicators of post-radiation connective tissue lesions in patients treated with radiotherapy.
Minichromosome maintenance protein 7 and geminin expression: Prognostic value in laryngeal squamous cell carcinoma in patients treated with radiotherapy and cetuximab.

D.Mele*(1)

(1)Institute of Otorhinolaryngology, Università Cattolica del Sacro Cuore, Rome, Italy, , , Italy

BACKGROUND: Minichromosome maintenance protein 7 (MCM7) is a downstream of human epidermal growth receptor (HER1) signaling. We examined MCM7, geminin, and HER1 expression in patients with laryngeal squamous cell carcinoma (SCC) treated with radiotherapy and cetuximab.

METHODS: MCM7, geminin, and HER1 were evaluated by immunohistochemistry on 61 patients with laryngeal SCC. The follow-up (median, 32.1 months; range, 2-139 months) went from the beginning of therapy to tumor progression-free survival (PFS) and death (overall survival [OS]).

RESULTS: MCM7, but not geminin, was associated only with HER1 expression, whereas no association was found with other clinicopathological characteristics. Patients with MCM7 high - geminin high and MCM7 high - geminin low tumor status had a risk of progression 3.1 times and 17.7 times greater, respectively, than patients with MCM7 low - geminin high tumor status. Tumor site, MCM7, and geminin were independent determinants of PFS, whereas MCM7 was an independent prognostic marker of OS.

CONCLUSION: At present there is no clear evidence that HER1 expression correlate with sensitivity to cetuximab. MCM7-geminin tumor status, as a prognostic marker independent from HER1 expression, may provide information to identify subgroups of patients with different local response to cetuximab and radiotherapy.

Giovanni Almadori, Francesco Bussu, Libero Lauriola*, Vincenzo Valentini**, Tiziana Di Cesare, Gaetano Paludetti, Thomas E. Carey*, Franco O. Ranelletti**. Institutes of Otolaryngology Head & Neck Surgery, of Pathology*, of Radiotherapy**, and of Histology, Catholic University of the Sacred Heart, A. Gemelli University Hospital Foundation, Rome-Italy. Laboratory of Head and Neck Center Biology, Department of Otolaryngology Head & Neck Surgery, the University of Michigan, Ann Arbor, Michigan-USA
Nutritional factors correlated with enteral nutrition dependency after concomitant chemoradiotherapy for oropharyngeal and hypopharyngeal cancers

R.Ishii*(1), K.Kato(2), Y.Katori(2), T.Ogawa(2)

(1)Tohoku University Graduate School of Medicine, Sendai, Japan, (2)Tohoku Graduate School of Medicine, Sendai, Japan

[Purpose]
To clarify the factors which are correlated with enteral nutrition (EN) dependency after the concomitant chemoradiotherapy (CCRT) for oropharyngeal and hypopharyngeal cancer.

[Method(s)]
We examined the physical, dietary, and nutritional state and treatment-related factors, using medical record in our institute. In this retrospective, single-center, case-control study, we evaluated the effect of several nutritional factors on EN-dependency at 6 months after the completion of CCRT.

[Result]
A total of 26 patients who received CCRT for oropharyngeal or hypopharyngeal cancer from September 2013 to December 2015, were eligible for this study. The proportion of EN-independent patients (who was not using enteral nutrition) at the 6 months after the treatment was 76.9% (20/26). We divided the patients into this EN-independent group (N=20) and EN-dependent (N=6) group. As a result, the period of cessation of oral intake (COI) was significantly shorter in EN-dependent group patients (25.1 days; 95% confidence interval [CI], 42.5 to 61.0, P=0.0057 by Student’s t-test) than in EN-dependent group patients (51.7 days; 95% CI, 17.2-33.1). Besides, continuous COI was also significantly shorter in EN-dependent group (11.5 days vs. 53.0 days; P=0.0044 by Mann-Whitney U test). Body weight decrement, length of hospital stay, duration of Grade 3 mucositis were not significantly correlated with EN dependency. Next we evaluated the duration of using EN after the treatment by several cutoff value of continuous COI. We found the most significant difference in duration of EN when we set the cutoff value to 14 days (P=0.0041 by log-rank test).

[Conclusion]
This study suggests that minimizing the cessation of oral intake during CCRT is important to avoid falling into EN dependency long after the treatment. Continuous 14 days of COI during the treatment might be the threshold for probable EN dependency.
Pain-Fear avoidance and its impact on nonadherence to prophylactic swallowing exercises in Head and Neck Cancer patients

G. Carnaby*(1)

(1) University of Central Florida, Orlando, United States

Purpose: Preventative swallowing exercise during HNC treatment improves functional swallowing and maintains muscle structure. Despite benefits, patient adherence to exercise programs is not optimal for all. One factor proposed for lower exercise adherence is avoidance due to pain/movement-related fear. This study sought to identify behavioral reactions to pain (and anticipated pain) during HNC treatment and the impact of Pain-fear avoidance on swallowing exercise adherence.

Methods: 130 HNC subjects enrolled in a trial of swallowing intervention, completed Pain Disability Index (PDI), Pain-Interference visual analogue (VAS) and pain related-swallowing quality of life scales(SWALQOL) at baseline, post radiotherapy, 3-months following treatment. Repeated measures ANOVA explored relationships between psychosocial pain/avoidance factors and swallowing exercise adherence.

Results: Data was available on 127 subjects. Swallowing function was normal across subjects at baseline. No difference between group baseline scores for PDI, VAS or SWALQOL scores was observed. A strong relationship between pain intensity (VAS) and deterioration in swallowing ability at 6 weeks (post treatment) and 3 months (p<.0008) was identified. Withdrawal from dysphagia intervention was significantly associated with higher fear at baseline and fear related-pain across time points (p<.002). Fear of swallowing/choking reported at baseline was linearly related to amount of swallowing exercise performed during CRT (F (4, 83) =3.26, p<.016), and to pain/disability ratings post treatment F (4,105) =4.69, P<.002) and 3months following CRT (F (4, 74) =3.03, P<.023)

Conclusion: Findings suggest the pain experience and emotional reactions to anticipated pain interact to influence and maintain swallowing avoidant behavior, reducing adherence to prophylactic swallowing exercise. Significant implications for treatment are associated with managing the pain-fear trajectory.
Persistent tracheostomy after organ-preservation protocol in patients treated for larynx and hypopharynx cancer.

C.Chiesa estomba*(1), F.Betances reinoso(2), A.Osorio velasquez(2), M.Gonzalez cortés(2), C.Santidrian hidalgo(3)

(1)Hospital Universitario Donostia, San Sebastian, Spain, (2)Complejo Hospitalario Universitario de Vigo, Vigo, Spain, (3)Complejo Hospitalario de Vigo, Vigo, Spain

Purpose of the study: Squamous cell carcinoma of larynx is currently the second most common malignancy of the airway after lung cancer and hypopharyngeal cancer accounts for fewer than 5% of head and neck cancers. Nonsurgical options in those patients are related to significant long-term toxicities and need for persistent tracheostomy which adversely affects the quality of life of these patients.

Materials and Methods used: retrospective analysis of patients diagnosed of laryngeal carcinoma including all stages, treated by chemoradiotherapy, how precise a tracheostomy.

Results: 28 patients were evaluated, 13 patients required a tracheotomy (46.4%) during the treatment protocol, 12 (44.4%) men and 1 (100%) women. According to subsite 5/7 patient with glottis cancer (p = <0.001), 5/12 patients with supra glottis cancer and 3/9 patients with hypopharyngeal cancer. During follow up, just in 1 patient was possible to close the tracheostomy.

Conclusion: Persistent tracheostomy dependence after primary chemoradiation increases significantly the morbidity and decrease the quality of life in those patients. Patients with glottis cancer are prone to need a tracheostomy, but no statistical difference according to oncological stage and the need of tracheostomy are detected. Better patient selections are needed to improve the quality of life and reduce permanent tracheostomy dependence.
Presenting symptoms and survival in Head and Neck cancer.

C. Douglas*(1), K. Ingarfield(2), A. McMahon(3), S. Savage(4), D. Conway(2), K. Mackenzie(5)

(1) Queen Elizabeth University Hospital, Glasgow, United Kingdom, (2) Community Oral Health Department, Dental School, University of Glasgow, Glasgow, United Kingdom, (3) Community Oral Health Department, Dental School, University of Glasgow, Glasgow, United Kingdom, (4) Victoria Hospital, Kirkcaldy, United Kingdom, (5) Department of Otolaryngology – Head and Neck Surgery, Glasgow Royal Infirmary, Glasgow, United Kingdom


1 Department of Otolaryngology – Head and Neck Surgery, Queen Elizabeth University Hospital, Glasgow, UK
2 Department of Otolaryngology – Head and Neck Surgery, Glasgow Royal Infirmary, Glasgow, UK
3 Community Oral Health Department, Dental School, University of Glasgow, Glasgow, UK
4 Victoria Hospital, Kirkcaldy, UK

Objectives;
To assess how type and number of symptoms are related to survival in head and neck cancer patients.

Design: Patients were followed-up from the Scottish Audit of Head and Neck Cancer; (national cohort of head and neck cancer patients in Scotland 1999 – 2001). In September 2013, this cohort was linked to national mortality data. First, second and third presenting symptoms were recorded at diagnosis.

Setting: National Audit

Participants: A subset of 1589 patients, from the original cohort of 1895, who had cancer arising from one of the four main subsites; larynx, oropharynx, oral cavity and hypopharynx.

Main outcome measures; Median survival in relation to patients’ presenting symptoms.

Results: 1146 (72%) males and 443 (28%) females, mean age 64 (13 – 95). Disease specific survival at 5 years was 61.4% (58.8, 63.9). Disease specific survival at 12 years was 54.1% (51.3, 56.9). There was a significant difference in survival in relation to the number of the patient’s presenting symptoms; one symptom had a median survival of 5.3 years compared with 1.1 years for three symptoms. Patients who presented with weight loss had a median survival of 0.8 years, compared to 4.2 years if they did not (p<0.001). Patients who presented with hoarseness had a median survival of 5.9 years compared to 2.6 years without (p<0.001). No significant difference in long term survival for patients who presented with an ulcer, compared to those that did not (p=0.105). Disease specific survival

Conclusions.
This study highlights the importance of patients’ presenting symptoms, giving valuable information in highlighting appropriate “red flag” symptoms and subsequent treatment planning and prognosis.
Pre-therapeutic nutritional assessment for predicting severe adverse events in patients with head and neck cancer treated by radiotherapy

T.Kono*(1), S.Shinden(2), K.Ogawa(3), K.Sakamoto(2)

(1)Keio University School of Medicine, Tokyo, Japan, (2)Division of Otolaryngology and Head and Neck Surgery, Saiseikai Utsunomiya Hospital, Japan, (3)Department of Otolaryngology and Head and Neck Surgery, Keio University School of Medicine, Japan

Purpose of the study: Patients with head and neck squamous cell carcinoma (HNSCC) are often malnourished at the time of diagnosis, owing to dysphagia, anorexia, odynophagia, and mechanical obstruction. It may be related to severe adverse toxicity as a result of radiotherapy. The aim was to investigate nutritional screening factors for severe adverse events.

Materials and methods used: A retrospective chart review of 101 patients who underwent radiotherapy from 2009 to 2013 was performed. The relationships among severe adverse events and pretreatment nutritional parameters, including static variables (serum albumin, total protein, total lymphocyte counts, body mass index), dynamic variables (retinol-binding protein, transferrin, pre-albumin), and nutritional screening tools (Onodera’s Prognostic Nutrition Index [O-PNI]; Nutrition Risk Index; Controlling Nutritional Status [CONUT] score; Nutritional Risk Screening 2002) were evaluated in addition to patient and treatment factors.

Results: According to the static parameters, approximately 30% of patients were malnourished before treatment. Twenty-four patients exhibited severe adverse events. On univariate analysis, combined chemotherapy, advanced staging, O-PNI <40, and CONUT score ≥5 were significant predictors of severe adverse events. Multivariate analysis revealed that O-PNI <40 and combined chemotherapy independently predict severe adverse events.

Conclusions: O-PNI is considered a useful nutritional factor for predicting severe adverse events in HNSCC patients undergoing chemoradiotherapy and facilitates the planning of aggressive nutritional interventions prior to treatment.
PRIMARY NEUROENDOCRINE TUMOR OF LARYNX: CASE REPORT


(1) Pontificia Universidade Católica de São Paulo, Sorocaba, Brazil, (2) Faculdade São Leopoldo Mandic, Campinas, Brazil, (3) Pontificia Universidade Católica de Campinas, Campinas, Brazil, (4) Faculdade São Leopoldo Mandic, Campinas, Brazil, (5) Universidade São Francisco, Bragança Paulista, Brazil

Objectives: To report the case of the patient with small cell primary neuroendocrine carcinoma of the larynx, to reinforce the need for further studies regarding the diagnosis and treatment of this infrequent tumor and the importance of conducting specific diagnostic tests to exclude their differential diagnoses.

Methodology: The information contained in this study was obtained through the analysis of medical records and literature review.

Results: A 74-year-old male patient sought our service with complaints of coughing, dysphonia, odynophagia, globus pharyngise, and episodes of coughing with blood lately two months. Nasopharyngoscopy revealed a vegetative and ulcerated lesion on the right piriform, preventing the visualization of the ipsilateral vocal fold with a probable degree of paralysis. Neck CT detected solid mass in the right piriform sinus with invasion of perilaryngeal structures. There were also hypodense lymph node enlargements at levels IIB, III and V on the right. Laryngoscopy biopsy showed proliferation and infiltration of the submucosa by small and intermediate cells with hyperchromatic, pleomorphic nuclei, scarce cytoplasm and predominantly solid aspect, areas of tumor necrosis and increased nucleus/cytoplasm ratio. Immunohistochemistry showed strongly positive expression for "keratin pool" AE1AE3 (1:200), Sinaptophysin (1:100) and Chromogranin (1:2000), confirming the diagnosis of poorly differentiated neuroendocrine carcinoma. In January 2016, the patient with stage IVa started chemotherapy with Carboplatin 360mg and Etoposide 160mg and radiotherapy. Currently, eight months after diagnosis, the patient is undergoing an outpatient, tracheostomy, with partial acceptance of the oral diet and small edema in Glottic region visualized by nasofibroscopy. The last clinical-tomographic evaluation denied any evidence of locoregional relapse or lymph node involvement.

Conclusion: Neuroendocrine carcinoma of small cells has similar clinical and macroscopic findings to other laryngeal epithelial tumors and its correct histological identification aided by immunohistochemical examination is extremely important in the therapeutic decision. Due to the fact that this type of neoplasm presents high metastatic and mortality rates in five years, especially in advanced cases, radiotherapy and chemotherapy show significantly positive results in relation to treatment and morbidity and mortality, so that surgery can be considered only in cases of Locoregional residual relapse or lesion.
Primary Thyroid Lymphoma: Two Case Reports in Thammasart University Hospital.

N.Sattaratpaijit*(1)

(1)Thammasart university hospital, Bangkok, Thailand

Phakdeedindan Wilaporn M.D., Arayangkun Chantima M.D., Sattaratpaijit Nithita M.D.

Department of otorhinolaryngology, Thammasart University Hospital, Thanmasart University, Pathumthani, Thailand

Primary thyroid lymphoma is an unusual presentation of thyroid neoplasms, comprising less than 5% of all thyroid malignancies. Patients usually present with rapidly growing thyroid mass which causes local compressive symptoms, such as dyspnea, dysphagia and hoarseness.

We present two cases of primary thyroid lymphoma without previous history of Hashimoto’s thyroiditis. First patient, 60-year-old woman with a thyroid swelling over 10 years admitted to our hospital because of progressive dyspnea with rapidly enlarging thyroid mass since past 2 months. On physical examination, she had an immobile and firm anterior neck mass sized about 9x8 cm descending to the anterior chest wall with right true vocal cord paralysis. Fine needle aspiration of thyroid showed lymphocytic cells. Neck and chest computed tomography demonstrated large hypoenhacing mass occupying lower pole of thyroid and superior mediastinum, encase upper trachea with severe luminal narrowing and evidence of acute pulmonary embolism. She complained of recent aggravation of dyspnea and clinical diagnosis of upper airway obstruction was made. After that she underwent tracheostomy and open biopsy with debulking of tumor.

Second Patient, 68-year-old man presented with a rapidly growing thyroid mass for 1 month. He had some progressive breathing difficulty especially on lying down. He denied any previous thyroid disorder. Physical examination revealed enlarged and firm thyroid mass sized about 8x6 cm, which extended posterior to the sternum. Neck and chest computed tomography showed large enhancing mass involving lower portion of both thyroid lobe and isthmus 7.5x10x12.8 cm extended to superior mediastinum. Fine needle aspiration of thyroid revealed lymphoproliferative lesion, which led to open surgical biopsy for making the diagnosis. Final histopathological report of our two cases revealed non-Hodgkin diffuse large B-cell lymphoma. They received combination chemotherapy, which produced dramatically shrink the tumor and briefly resolve the compressive symptoms.

Thyroid lymphoma is a great diagnostic and therapeutic challenge. Both of our cases were diagnosed by open surgical biopsy because fine needle aspiration could not distinguished lymphoma from thyroiditis. The rapid and accurate diagnosis is important, which decrease morbidity associated with extensive surgery.
Radiation-induced nasosinusal sarcomas

M. Muñoz cordero*(1)

(1) Central University Hospital Of Asturias, Oviedo, Spain

Introduction: Radiation-induced sarcomas (RIS) are a rare complication of treatment with radiotherapy. Its incidence is increasing due to the improvement of tumor survival after treatment with radiotherapy. RIS include different histological subtypes and the mean latency time between radiotherapy and RIS development is 10 years. RIS are a therapeutic challenge since, in the case of the nasosinusal region, the specific characteristics of the anatomical region are added to the controversies existing in relation to its treatment. A large tumor size and the presence of positive resection margins after surgery are responsible for the high rates of local recurrence and poor prognosis.

Material and methods: We present two cases of ethmoidal adenocarcinomas treated with radiotherapy that subsequently evolved to nasosinusal RIS.

Results: Case number 1: a 69-year-old man who was diagnosed with ethmoid adenocarcinoma and was treated with adjuvant surgery and radiochemotherapy. 21 years later, he developed an undifferentiated pleomorphic sarcoma, which was treated by complete tumor resection and reirradiation of the area with intensity-modulated radiotherapy. The patient presented a local recurrence at 8 months, dying one year after the diagnosis by local progression. Case number 2: a 70-year-old man diagnosed with atypical epithelioid hemangioendothelioma-like RIS in the posterior third of the left nostril. The patient had been treated 9 years before an ethmoid adenocarcinoma by surgery and adjuvant radiotherapy. After being surgically operated and reirradiado with volumetrically modulated bowel therapy, 1 year later the patient is free of disease.

Conclusions: Radical surgery is the first therapeutic option in the case of nasosinusal RIS and skull base. Although previous radiotherapy limits the doses that can be administered in the case of reirradiation, postoperative precision radiotherapy would be indicated to try to improve the local control of the disease.


* Department of Otorhinolaryngology–Head and Neck Surgery. Central University Hospital of Asturias, Oviedo

** Department of Pathological Anatomy. Central University Hospital of Asturias, Oviedo

*** Institute of Oncology and Molecular Medicine of the Princedom of Asturias, Oviedo
Retrospective evaluation of concomitant cetuximab and radiotherapy tolerance for locoregional advanced head and neck squamous-cell carcinoma treatment in patients unfit for platinum-based chemotherapy.

A. Rambeau*(1)

(1) Centre Francois Baclesse, Caen, France

Background: Radiotherapy associated with cetuximab (Cet-RT) is an alternative treatment to platinum-based chemo-radiotherapy in locally advanced head and neck carcinoma (LAHNC). Retrospective reviews suggest that the use of Cetuximab is associated with poorer tolerance in patients unfit for chemotherapy than in pivotal trial. We aim to describe Cet-RT tolerance in this population.

Methods: We retrospectively studied patients first treated by Cet-RT for LAHNC presenting contraindications to chemo-radiotherapy. Primary objectives were description of treated population and acute tolerance. Secondary objectives included progression free survival (PFS), overall survival (OS), 3-months clinical response. Treatment schedule included radiotherapy (70 Gy in 35 fractions in invaded cervical areas) and 8 weekly Cetuximab infusions.

Results: Eighty-eight patient were included. Treatment was completed without delay for 43 patients. Grade 3-4 acute toxicity was described in 44.3%: mucositis (n=20), in-field dermatitis (n=25) and out-field folliculitis (n=10). Six anaphylactic reactions led to cetuximab interruption. Fourteen patients died during treatment. Median PFS and OS were 6.3 and 18.7 months. Laryngeal primary site was associated with more grade 3-4 toxicity (p=0.041).

Conclusion: We confirm that Cet-RT tolerance in unfit patients is poorest than in trials. Survival data illustrates patients’ frailty and suggests that balanced use of Cet-RT is required in this population.
Survival improvement in anaplastic thyroid carcinoma treated by chemoradiation postoperative a comparative study of our single institution with main series of literature.

A. Belazzouz*(1), B. Hanane(2), F. Dalila(2), M. Safia(2)

(1) centre de pierre et marie curie, , Algeria, (2) CPMC, , Algeria

Introduction: Anaplastic thyroid carcinoma (ATC) represents 1-2% of all thyroid cancer and 14-39% of thyroid cancer mortality. Many studies have investigated the role of radiation therapy in the adjuvant setting. The combination of chemotherapy and radiation therapy following complete resection may provide prolonged survival.

Method: We retrospectively reviewed 17 patients treated between 2008 and 2016 at Pierre and Marie Curie Center, Algiers, Algeria. These results were compared with the main series about postoperative radio-chemotherapy reported in literature between 2000 and 2012. The aim of our study was to show the level of evidence for chemo-radiation efficacy in ATC.

Kaplan-Meier survival analysis and log-rank analyses were performed to evaluate the influence of chemo-radiation factor on median survival.

Results: We note that the rate of metastases in our study is the most frequent among all series reported. In our group, there were 2 patients who received chemo-radiation postoperatively (cycles of chemotherapy were delivered before and after radiation) and one other received only radiation post-operatively. The remaining, 13 patients were not operated upon. We observe that survival at 1 year is greater in our study (36.8%) than the Bathia study (29%) despite the fact that the number of patients who received radio-chemotherapy is larger in Bathia series. Meanwhile, survival is less than the series of De Crevoisier (46%).

This can be explained by the number of unresectable ATC existing in Bathia study and heterogeneity of the management method in ours. The superiority of De Crevoisier study is explained by the larger number of patients who received chemo-radiation postoperative compared to our study.

Conclusion: Chemo-radiation has a key role in the treatment of ATC. In cases where the tumour isn’t unresectable, whatever surgery only given the eight month median survival of ATC. Neoadjuvant chemotherapy followed by chemo-radiation may be compelling in the treatment regime for rapidly growing tumors.

This illustrates the importance of customizing the management of ATC on a case-by-case basis, taking into account the age, stage and evolutionary potential of the disease.
Ten-year outcome with chemotherapy alone in patients with N0 squamous cell carcinoma of the larynx and pharynx complete clinical responders after platin-based induction chemotherapy.

O.Laccourreye*(1), F.Scotte(2), M.Menard(3), H.Laccourreyeye(4), P.Bonfils(5), F.Rubin(6)


Ten-year outcome with chemotherapy alone in patients with N0 squamous cell carcinoma of the larynx and pharynx complete clinical responders after platin-based induction chemotherapy.

Résultats à 10 ans de la chimiothérapie exclusive chez les patients avec un cancer épidermoide N0 du larynx ou du pharynx en réponse clinique complète après chimiothérapie d'induction à base de sels de platine.

Purpose: To document the 10-year oncologic outcomes after chemotherapy alone for cure in N0 squamous cell carcinoma (SCC) of the larynx and pharynx complete clinical responders after platin-based induction chemotherapy. Materials and Methods: Retrospective non randomized analysis of an inception cohort of 196 patients with N0 SCC of the larynx and pharynx staged T1(65), T2(79), T3(41) and T4(11) complete clinical responders after induction chemotherapy consecutively managed with chemotherapy alone during the years 1981-2005 within three French university teaching hospitals and followed for a minimum duration of 10 years or until death. Site of origin of SCC was glottic larynx(87), non glottic larynx(41), epilarynx(14), hypopharynx(20) and oropharynx(34). Platin and 5 Fluotroucaril were used in all patients. The mean number of chemotherapy courses delivered was 6 (extremes: 1-17). Kaplan-Meier product-limit method analysis was used to document survival, local recurrence, nodal recurrence, distant metastasis and metachronous second primaries estimate. Causes of death, ultimate local control and organ preservation rates, benefit (cure without any other treatment) and loss (treatment or loco-regional recurrence leading to death or to non organ preservation) from using chemotherapy alone for cure and univariate analysis of local recurrence is presented. Results: The 1-, 3-, 5-, and 10year actuarial survival - local control - nodal control - distant metastasis - metachonous second primary estimates were 96.4%, 87%, 72.9% and 57.2% - 79.1%, 61%, 55.4% and 53.5% - 97.4%, 91.4%, 90.6% and 89.8% - 1.5%, 3.2%, 4.5% and 5.3% - 0.5%, 6.7%, 15.5% and 33%, respectively. Causes of death were metachonous second primary(38), intercurent disease(30), unknown without evidence of disease(12), local recurrence(8) distant metastasis(7) and nodal recurrence(1). Salvage treatment resulted in a 95.4% ultimate local control and 93.4 % organ preservation. Chemotherapy alone was considered beneficial and detrimental in 56.6% and 11.2% of cases, respectively. Conclusions: This unique experience confirms the potential for cure related to chemotherapy alone in complete clinical responders after platin-based induction chemotherapy as well as clues for potential clinical use and future research.
The impact of therapeutic modalities on survival of patients with anaplastic thyroid carcinoma.

A.Belazzouz*(1), F.Moussa(2), B.Mbarek(2), M.Safia(2)

(1)centre de pierre et marie curie, , Algeria, (2)CPMC, , Algeria

Purpose: Optimal managements for anaplastic thyroid carcinoma (ATC) have not been sufficiently clarified. The aim of our study is to find whether modalities of treatment such as: radiation, chemotherapy and surgery have an impact on survival outcomes in ATC whilst taking into account their UICC stage.

Materials and Methods: A retrospective analysis was conducted on patients with ATC who had been treated from the period 2008 to 2016 in Pierre Marie Curie Center. The outcome measures included survival analysis and causes of death within three separate anaplastic thyroid cancer groups. The first group comprised ATC operated with or without receiving radio-chemotherapy postoperatively. The second group consisted of those with isolated radio-chemotherapy and the third group had left ATC untreated. One patient who had undergone a biopsy was not included in the ATC operated group.

Kaplan-Meier survival analysis and log-rank analyses were performed to evaluate the influence of therapeutic modality factor on median survival.

Results: A total of 17 patients with ATC were identified. The first group constituted 3 patients (2 total thyroidectomy) with one of them received radiation postoperative and the remaining patients receiving radio-chemotherapy postoperatively and another Iodine 131 respectively. (4C was dominant in this group at 75%). The second group comprised of 4 patients has received only radio-chemotherapy (4B in 50%, 4C in 50%) and the third group consisted of 10 patients who were only followed without treatment (4C in 80%). The median survival duration of the first group was 12,67 months and death was in correlation with local compression in 75%. In the second group: median survival duration was 18 months, and the principal cause of death was local due to tumor compression. In, the third group: median survival time was 7,6 months and the cause of death was local in half of the patients.

Patients who had received combined therapy (groups 1 and 2) had a better median survival than the group without combined treatment (p: 0,035).

Conclusion: The modality of treatment has a significant impact on median survival. The primary aim of therapy is to prevent death from suffocation. This can be ensured by surgery which enhancing the local control of tumor and secondarily through the prolongation of survival by combined radio-chemotherapy while always customizing treatment on a case-by-case basis.
The optimization of the dose of intra-arterial cisplatin to treat hypopharyngeal cancer

H.Hotate*(1), T.Kumai(2), K.Nomura(1), M.Takahara(1), T.Hayashi(3), Y.Harabuchi(1)

(1)Department of Otolaryngology-Head & Neck Surgery, Asahikawa Medical University, , Japan, (2)Asahikawa Medical University, , Japan, (3)Department of Innovative Head & Neck Cancer Research and Treatment, Asahikawa Medical University, , Japan

To preserve voice and the swallowing function, we treated advanced hypopharyngeal cancer patients with super-selective intra-arterial infusion of cisplatin with concomitant radiotherapy (RADPLAT). The advantage of RADPLAT is that the simultaneous infusions of thiosulfate neutralize the toxicity of cisplatin. We previously reported that the 3-year disease-specific survival (DSS) rates of RADPLAT for hypopharyngeal cancer were 68 % (K. Nomura, et al. 2012). Because we experienced the cases with laryngeal necrosis after RADPLAT, it is necessary to determine the appropriate dose of cisplatin, which is enough to eradicate tumor and preserve the function of larynx. Here, we retrospectively compared the regular- and reduced- dose of cisplatin in RADPLAT to treat patients with hypopharyngeal cancer. Sixty-three patients, who were worse than T2N0 and had the dense stain of tumor on angiography, were included in this study. The protocol for RADPLAT in our department was as follows; cisplatin (regular-dose: 100 mg/m2, reduced-dose: 75 mg/body) was administered per weekly for 4 weeks with radiotherapy (66 Gy). 31 patients (median age: 65.5 years) assigned to the regular-dose and 32 (median age: 70.0 years) to the reduced dose group. The median follow-up time was 36.5 months for the regular-dose and 20.0 months for the reduced-dose group. Most patients in both groups had stage IV hypopharyngeal carcinoma. The 5-year DSS rates were 60 % and 28%, and the laryngo-esophageal dysfunction-free survival (LEDFS) rates were 44 % and 37 % in the regular-dose and reduced dose group, respectively. One patient in each group experienced laryngeal necrosis. Our results suggest that the regular-dose of RADPLAT is an effective and organ-preservative treatment for hypopharyngeal cancer. The reduced-dose of cisplatin in RADPLAT should be avoided in the further clinical trials.
Three dimensionally cultured mesenchymal stem cell patches accelerate the ulcer wound healing.

S.Kwon*(1), J.Lee(2), Y.Kim(3), J.Choi(2)

(1)Seoul National University Hospital, Seoul, Korea, South, (2)Seoul National University Hospital, Seoul, Korea, South, (3)Sejong General Hospital, Bucheon, Korea, South

Introduction: Three-dimensional culture of mesenchymal stem cells is known to augment their therapeutic potential through enhancing their immunomodulatory property, pro-angiogenic function, and anti-apoptotic ability. The purpose of this study was to optimize the therapeutic and regenerative properties of human Adipose tissue derived mesenchymal Stem Cells (hASCs) spheroid and apply them to alleviate potential further damage from vicious cycle and to expedite the recovery of ulcer in the oral mucosa.

Methods and Results: We used human induced Pluripotent Stem cell derived Mesenchymal Stem Cell(iPS-MSC), Bone Marrow derived MSC (BM-MSC), and hASCs. 3D spheroids (200-300um) were created on a 3D micro-well culture dish and the presence of a hypoxic micro-environment within the core of the spheroids was confirmed as expression of markers of hypoxia were elevated. Cytokines and molecules relevant to angiogenesis, anti-inflammation, all which are necessary for regeneration were upregulated most strongly with the hASC. More importantly, the enhanced expression of manganese superoxide dismutase correlated with a down-regulation of caspase 3 in spheroids, whereas such correlation was not detected in 2D cultured cells. In order to apply these results to an in vivo setting, patches which had 3D cultured hASC-spheroids attached to them were manufactured and topically applied to the labial gingiva in a rabbit model, in which ulceration was induced using 70% acetic acid. We were able to demonstrate that 3D cellular patches were more effective at expediting the recovery/regeneration of the ulcerated region, which was apparent from the recovery of a full mucosal membrane. Whereas a disrupted epithelia was present for a relatively prolonged period in rabbits treated with injecting hASC to ulcer area.

Conclusion: Overall, these findings demonstrate the therapeutic efficacy of spheroid-hASCs patches to expedite the regeneration of defected areas and injured tissues. The enhanced secretion of various cytokines, and molecules that promote regeneration and a protective effect against oxidative-induced apoptosis, gives momentum to spheroid-hASCs as an attractive candidate for cell therapy and regenerative medicine.
Ultrasound Sonography accuracy in predicting Parathyroid Adenoma size and location.

S.Stern shavit*(1), G.Bachar*(1), S.Tzelnick(1), A.Mizrachi(1), M.Cohen(1), T.Shpitzer(1)

(1)Rabin Medical Center, Petach tikva, Israel

Background: Ultrasonography (US) is an accurate tool for preoperative localization of parathyroid adenoma (PTA). It enables the surgeon to perform a minimally invasive procedure and reduce morbidity. The aim of this study was to assess the accuracy of US in the size and location of a PTA. In addition we sought to compare the accuracy of a single experienced US operator to multiple operators.

Materials and methods Data were collected from the medical charts of all patients who underwent parathyroidectomy for primary hyperparathyroidism between 1996 -2012. Patients without preoperative US evaluation were excluded from the study. Preoperative US evaluation of PTA size was correlated with final pathology report and PTA location was correlated with intra-operative localization.

Results A total of 410 patients were included in the study. US evaluation localized adenoma correctly in 313 patients (76%) and accurately predicted PTA size in 83% of cases. The least accurate measurements were for adenomas of less than 1 cm (24%). A single operator neck US specialist had a higher accuracy rate than multiple operators. The difference was considerably significant for small adenomas (<1 cm) with no difference for adenomas over 1 cm (43% vs 14%, p<0.001).

Conclusion Neck US is an accurate and sensitive tool in evaluating PTA size and location. Neck US is less accurate for small adenomas (<1 cm), however an experienced neck US specialist may have an advantage over a less experienced general US operator.
Within-bolus variability of the Penetration-Aspiration Scale across two subsequent swallows in patients with head and neck cancer

J. Hedström*(1)

(1) Department of Otorhinolaryngology, Head and Neck surgery; Institute of Clinical Sciences; Sahlgrenska Academy at the University of Gothenburg; Sahlgrenska University Hospital, Gothenburg, Sweden.

Purpose: To compare two consecutive swallowing attempts to study if there is a difference in Rosenbek's Penetration Aspiration Scale (PAS) scores between the first and second swallowing attempt of the same bolus type in videofluoroscopic examination of swallowing (VFS). Additional aims include reflecting on which bolus sizes and consistencies are the most relevant to include in further studies for head and neck cancer (HNC) patients.

Material and methods: The VFS for 38 patients curatively treated for HNC were studied. All included patients showed swallowing difficulties (PAS ≥ 2). The examination protocol included two swallows each of six different boluses: 3, 5, 10, 20 ml thin, 5 ml mildly thick and 3 ml of extremely thick liquid. All boluses were compared between the first and second swallowing attempt with regard to PAS scores.

Results: No statistically significant differences in PAS were found between the first and second swallow for any of the boluses in this study on group level. For 20 ml thin and 3 ml extremely thick liquid there were low Intra-Class Correlations, indicating a low within-bolus agreement. The greatest within-bolus differences were found for 20 ml thin, 5 ml mildly thick and 3 ml extremely thick liquid, which demonstrated high intra individual coefficient of variation (0.458-0.759).

Conclusion: The data of this study show a high within-bolus variability of the PAS score between two subsequent swallows for all different consistencies. In order to assess swallowing safety, the highest PAS score for each bolus type is suggested for use in studies of HNC-patients.

Key words: Deglutition disorders, dysphagia, deglutition, head and neck neoplasms, videofluoroscopy

Johanna Hedström* 1, Lisa Tuomi* 1, Mats Andersson 2, Hans Dotevall 1, Hanna Osbeck 1, Caterina Finizia 1

* Shared first authorship;

Affiliations: 1 Department of Otorhinolaryngology, Head and Neck surgery; 2 Department of Radiology; Institute of Clinical Sciences, Sahlgrenska Academy at the University of Gothenburg, Sahlgrenska University Hospital, Gothenburg, Sweden.
In history, brachytherapy (BRT) was the first irradiation modality in oncology. Along decades it lost popularity and diffusion to the external beam delivering (EBRT) of the dose, both for the amazing technical and technological improvement with an increasing ability of conformating the of the EBRT, and for the long unsolved issues of the BRT itself concerning radioprotection as well as dose inhomogeneity and conformation.

Yet most of the above-mentioned issues of BRT have been overcome in the last decades through technical and technological improvements comparable to most authors to what happened in the EBRT field, in particular with the introduction of the after-loading, of the stepping source, of the image-guided brachytherapy.

With these new features, BRT, which still presents some problems concerning dose inhomogeneity and painting of large target volumes, offers undoubtedly several advantages in respect to EBRT, and in particular the possibility to reach very high doses on the target with a rapid fall-off, in an extent which is not easily reachable with whichever EBRT technique. Such advantages can be extremely useful in some particular situations as in case of need for reirradiation or of primary tumors, which are easily reachable and resectable by surgery, and are far from vital structures, but are associated to clear problems in reconstruction and/or esthetic/functional recovery.

Still another clear issue of modern brachytherapy is the expertise on the border between surgery and radiotherapy required for treatment planning, catheter placement and dose painting.

Aim of the present course is to share the experience of the group with the largest series of head and neck brachytherapy series in Italy (and one of the largest in Europe), with the description of the main technical aspects with particular attention to indications and catheter placement in the situations where brachytherapy can be in our opinion really an added value in head and neck oncology and namely:

- Primary SCC of the nasal vestibule/midface
- Adjuvant treatment in post-irradiation salvage neck dissections
- Endoscopy guided BRT of sinonasal and rhinopharyngeal post-irradiation recurrences
3D printing technology aids in transoral approach of cervical spine solitary osseous tumor

C.Huang*(1), W.Liao(2), K.Chang(3)

(1)Department of Otorhinolaryngology - Head and Neck Surgery, Kaohsiung Veterans General Hospital, Kaohsiung city, China, Republic of (Taiwan), (2)Department of Neurosurgery, Kaohsiung Veterans General Hospital, , China, Republic of (Taiwan), (3)Department of Otorhinolaryngology - Head and Neck Surgery, Kaohsiung Veterans General Hospital, , China, Republic of (Taiwan)

Purpose of the study
The new in-house 3D printing technology provides rapid, accountable 3D model on osseous tumor occurring in unconventional anatomical area. By demonstrating the model to medical staffs, we can improve quality in pre-surgical planning and surgical approach selection.

Materials and methods
A 73 y/o female patient with past history of diabetes mellitus and hypertension had complained swallowing difficulty for several months. On physical examination, right posterior oropharynx smooth bulging mass was noted and tonsil tumor was suspected. However, head and neck CT revealed a large osseous lesion without adjacent soft tissue enhanced mass in the anterior-right aspect of C1-2 joint, size about 3 cm. Therefore, neurosurgery doctor was consulted and C-spine MRI reported large solitary osseous body or osteochondral body. There was no history of prior surgery in C-spine, no history of trauma was recorded. Considering rare presentation of cervical spine anterior protruding osseous mass, 3D printed model of the spine and osseous tumor was built revealing potential distorted longus colli or longus capitis muscle anatomy and facilitated further discussion on surgical approach among otolaryngologists, neurosurgeon and radiologists. Thus, transoral removal of osseous tumor under microscope and neuronavigation was arranged.

Results
During the surgery, the mucosa of posterior oropharynx that covering the tumor was incised vertically to expose the tumor mass. The right longus capitis was dissected from the tumor toward the lateral side. The osseous tumor mass was removed piece by piece with high speed drill and Kerrison rongeur or other disc rongeur under microscope. After removal of the medial part of the tumor mass, the right longus capitis was dissected toward the medial side to expose the lateral part of the tumor. The lateral part of tumor was removed piece by piece under microscope. The patient tolerated the whole procedure well. After 1 month of uneventful recovery, the swallowing function had recovered without any sense of lumping or obstruction.

Conclusion
In house 3D printing technology provides rapid, reliable 3D model on unconventional osseous tumor, providing direct view on different approach and facilitates in cross specialty discussion which enhanced personalized pre-surgical planning and provide better patient engagement during hospitalization.
Anterior unilateral non-arteritic ischemic optic neuropathy after cervical oncologic surgery – a unique case in the literature

A.Reis-rego*(1), A.Pinto(1), M.Santos(1), D.Dias(3), C.Almeida-sousa(1), T.Feliciano(2)

(1)Centro Hospitalar do Porto, Portugal, (2)CHP, Portugal, (3)Centro Hospitalar do Proto, Portugal

-Purpose of the study: to highlight non-arteritic anterior ischemic optic neuropathy (NA-AION) as a rare but possible cervical surgery complication

-Materials and Methods: presentation of a unique clinical case in the literature and bibliographic review on the subject.

-Results: the loss of vision after non-ocular surgery is very rare, with an incidence between 0.003% - 0.008%. NA-AION corresponds to the minority of cases of vision loss after non-ocular surgery and is triggered by: prolonged surgery time, hypotension, anemia, arteriosclerosis, hypertension, diabetes, cervical lymphedema and hypercoagulability.

Herein we present the case of a 58-year-old male, non-smoker for 20 years with hypotensive tension profile and no other relevant background. He came to our ENT department, a tertiary referral centre, with 3 month long persistent dysphonia, with no other associated symptoms. A locally invasive laryngeal neoplasia was diagnosed. He underwent total laryngectomy with functional bilateral cervical ganglion dissection, complicating at day 12 with bilateral cervical hematoma drained surgically at the 16th day after laryngectomy. On the 17th day, he developed painless visual restriction of the right eye in the lower nasal quadrant with papillary edema and peri-papillary hemorrhages in the upper quadrants, with no other alterations; NA-AION was diagnosed. The patient initiated AAS 100 mg 1 id, with no improvement. During his internment, a daily and asymptomatic hypotensive profile was recorded as the only precipitating factor of NA-AION, including during both surgeries. He was referred for external consultation of ophthalmology after hospital discharge. At present, the disease is stable.

NA-AION after head and neck surgery is often bilateral, directly related to jugular resection, and occurs preferentially in the immediate postoperative period. Only 5 cases have been described so far, all of them bilateral, and in all but one, there was a jugular compromise, with total or near total visual loss. In the present case, we propose that cervical decompression surgery may have caused a rare increase in intraocular pressure, triggering ischemia, a mechanism facilitated by the hypotensive profile of the patient.

-Conclusion: despite its rarity, NA-AION is a disabling complication that must be referred in every informed consent in cervical surgery.
Cancer of tongue from diagnosis to management

N. Belhaj *(1) 

(1) Service ORL hopital des spécialités de Rabat, Rabat, Morocco

Dr Belhaj, Dr Benayad, Pr El AYOUBI, Pr Bencheikh, Pr Benbouzid, Pr Essakali

Objectif:
The tongue is an organ intended for tasting, mastication, swallowing and phonation. However, many malignant tumors can occasionally affect it.

Material and methods:
Our retrospective study is about 10 cases of cancers of the tongue, collected at our department, during 2 years (2015-2016).

Results:
The mean age has been 57 years. The predominance is feminine. Among the etiologic factors, tobacco and alcohol have been noticed in all male patients. Poor oral hygiene has been noticed in all our patients. The most common signs were tumefaction (50%), ulceration (42%), glossodynia 17% the gene at swallowing (9%).

On clinical examination, the appearance of the tumor in 75% was ulcerative to the average size of the lesion was 3 cm, the tumor developed at the level of the movable part of the tongue in all cases, and Invasion of the amygdala in only one case.

Diagnostic certainty was provided by the histology of squamous cell carcinoma in 100% of cases. CT showed satellite adenopathies in 55%, MRI showed invasion of the tonsillar and buccal floor in one case. According to the TNM classification, T1-T2 are found in 91% and No have been recorded in 45%. All patients were treated with surgery associated with radiotherapy, no cases of metastasis or recurrence were observed.

Conclusion:
Cancers of the tongue represent a relatively frequent localization of cancers of the upper aerodigestive tract. They occur mostly in elderly subjects. The essential etiological factor is alcohol-tobacco poisoning. Tumor size and lymph node invasion are the most important prognostic factors. Prevention is based on the avoidance of tobacco and alcohol, the maintenance of good oral hygiene and the removal or monitoring of precancerous lesions.
Cardiovascular response to topical cocaine, lidocaine and epinephrine in patients undergoing sinonasal surgery

R.Su*(1), J.Fortson(2), V.Akinola(1)

(1)Atlanta Cancer Research and Education Foundation, Atlanta, United States, (2)ENT Associates of South Atlanta, Atlanta, United States

Intranasal cocaine is used as a topical anesthetic in rhinolaryngologic procedures. Cocaine is frequently used in combination with epinephrine and lidocaine. The hemodynamic and clinical response in 140 patients who underwent 232 procedures during 2011-2013 was monitored. The rate pressure product (RPP) increased 16% above baseline at 60 minutes in this group of patients. Xerostomia and nausea were the most common post-operative symptoms. There were no episodes of myocardial infarction, arrhythmia, stroke, pulmonary edema or death in the immediate post-operative period. Twenty percent of these patients had hypertension. A single patient experienced a non Q wave myocardial infarction on post-operative day 21. A review of the literature reveals very few cases in which patients have suffered cardiac complications following clinical use of cocaine as topical anesthesia for nasal surgery. Cardiac injury has been reported with the recreational use of cocaine. Ventricular fibrillation has been reported in one patient undergoing septoplasty under general anesthesia after using intranasal cocaine and submucosa injection of lidocaine with epinephrine.

The short acting beta blocker Esmolol in combination with Nitroglycerin may be optimum therapy in patients with increased RPP. A combination of beta blocker and vasodilator is also a useful adjuvant therapy. Patients reporting atypical or typical chest discomfort should have appropriate work-up prior to discharge.

The purpose of this presentation is to increase awareness for the justification of the use of topical cocaine with lidocaine and epinephrine and its possible complications.
Drug Induced Sleep Endoscopy for Assessment of the Upper Airway in Children

D.Thompson*(1), B.Bhushan*(2), K.Billings(1)

(1)Ann & Robert H Lurie Children's Hospital of Chicago; Northwestern University Feinberg School of Medicine, Chicago, United States, (2)Ann & Robert H Lurie Children's Hospital of Chicago, Chicago, United States

Objective of the Round Table:

To discuss the role of drug induced sleep endoscopy (DISE) in the assessment of site of obstruction in the pediatric airway. To discuss treatment options for addressing multi-level obstruction in children with obstructive sleep apnea or upper airway obstruction.

Content of proposal:

Obstructive sleep apnea (OSA) occurs in 3% to 5% of children in the United States. According to the guidelines from the American Academy of Otolaryngology–Head and Neck Surgery and the American Academy of Pediatrics, adenotonsillectomy (T&A) is the first line of treatment for OSA. In some children, particularly with underlying syndromes like Down syndrome, T&A is not curative and residual OSA may persist on follow-up polysomnography (PSG). PSGs are the gold standard to diagnose the presence and severity of OSA, and the site/s of obstruction are sometimes identified by performing a thorough physical examination or an awake flexible laryngoscopy. However, neither of these methods allows for an evaluation of the airway during sleep or a scenario resembling sleep. Diagnostic technologies such as cine magnetic resonance imaging (MRI) and DISE have been utilized to delineate the sites of obstruction in those with residual OSA or airway symptomology. Once the sites of obstruction are identified, a more informative assessment and discussion of treatment options can be undertaken. Options may include continuous positive airway pressure (CPAP), use of oral appliances, or surgical interventions.

In this panel discussion, we would present and review the existing knowledge pertaining to the management of OSA in children. Due to variability in practice across different countries, and even across different hospitals, providers may have a range of experiences in implementing such techniques. Information shared by the panel participants, and the audience interactions, will shed light on such trends in different countries, cultures, healthcare facilities, and their experiences in randomized controlled trials. The heterogeneity in diagnostic modalities and outcomes can be discussed. This panel discussion would be relevant to increasing knowledge of OSA management that could improve global health outcomes with this issue, and an understanding of a step-wise approach to managing affected children. This panel discussion will review our experience with DISE, and a review of the most recent updates regarding treatment after site of obstruction identification usingDISE.

Panelist's name                      Nationality     Presented topics
Dana M Thompson                     American         Panel Discussion
Kathleen Billings                   American         Panel Discussion
Bharat Bhushan                      Indian           Panel Discussion
Epidemiology of papillary thyroid carcinoma

I. Azzam*(1)

(1) Service d’ORL-CCF hopital des specialités Rabat Maroc, Rabat, Morocco

Papillary thyroid cancers are differentiated epithelial malignant tumors of the follicular strain, of which they retain certain morphological and functional characteristics.

The objective of our work is to evaluate the epidemiological characteristics, the means of diagnosis and the management of papillary carcinomas in our structure.

Material and method:

It is a retrospective descriptive study containing 120 cases of patients treated in our institution for thyroid papillary carcinoma on positive definitive anatomopathological examination, spread over a period of 3 years. Our work consists of studying the clinical and therapeutic aspects of this entity. The data collection has been carried out by farm records and the statistical analysis is carried out on the spss software.

Results:

The analysis showed a predominance of the female sex, the malignant character was suspected echographically according to the TIRADS classifications in the majority of cases, the fine needle aspiration was positif in more than 95% of the cases. The extemporaneous examination was carried out on the most suspect nodule in 70% of the cases. All patients underwent total thyroidectomy. The mediasino-recurvurate curve was performed in more than 90%.fonctionnel neck dissection Was realized that in the presence of adenopathies 15% of the cases.

Hypocalcaemia is the most common postoperative complication. Patients with early stage tumors had significantly better quality of life compared to patients with advanced tumors.

Conclusion

Thyroid papillary cancer remains a curable disease thanks to an early coded management in the framework of a multidisciplinary consultation.

I. AZZAM, S. NITASSI, A. AYOUBI, R. BENCEIKH, A. BENBOUZID, A. OUJILAL, L. ESSAKALLI
GIANT NASO-MAXILLARY DERMATOFIBROSARCOMA IN A FEMALE NIGERIAN-CASE REPORT.

D.Aliyu*(1)

(1)usmanu danfodiyo university teaching hospital, sokoto, Sokoto, Nigeria

1Aliyu D, 2Sahabi SM

1Department of Ear, Nose and Throat, Usmanu Danfodiyo University Teaching Hospital, Sokoto.

2Department of Histopathology, Usmanu Danfodiyo University Teaching Hospital, Sokoto.

Purpose of study:
To present an unusual and first ever case of dermatofibrosarcoma of the nose and its attendant surgical challenges in a resource limited setting.

Materials and method:
Case study of a Patient who presented to the out patient clinic of the department of otorhinolaryngology of the Usmanu Danfodiyo University Teaching Hospital Sokoto in November 2012. Patient clinical case record was retrieved from the health record unit and analyzed.

Case Summary:
We report a 24years old housewife who presented to our out patient clinic with a two years history of progressively increasing painless swelling on the left naso-maxillary region of the face, associated with complete left nasal obstruction. Physical examination shows facial asymmetry with a huge, firm, ulcerative, pedunculated mass on the left nasomaxillary region of the midface with intranasal extension. Plain radiographs of the paranasal sinuses show no bony involvement. Hematologic investigations were within normal limits. She subsequently had examination under general anesthesia and complete tumour excision with good oncological margins. Histopathological analysis of the tissue confirmed the diagnosis. No recurrence after 4 years.

Conclusion
Naso-maxillary dermatofibrosarcoma is a rare clinical condition in our environment. This underscores the importance of a definitive histopathological diagnosis and good adequate surgical margin of all midfacial masses.

Key words: Naso-maxillary, dermatofibrosarcoma, nasal obstruction, ulcerative, swelling.
Heated air humidification vs. cold air nebulisation in tracheotomised patients increases cilia beat frequency in tracheal epithelium and reduces frequency of required suctioning procedures.

R.Birk*(1)

(1)Department of Otolaryngology, Head and Neck Surgery; Clinical Faculty Mannheim; University of Heidelberg, Mannheim, Germany

Introduction: Following tracheotomy the airways lack a mechanism of warming and humidifying the inspired air. Nebulization of saline is a common clinical practice to prevent desiccation of airways. The aim of the study was to compare cold-air-nebulization (CAN) and heated humidification (HH) on cilia activity and the necessary healthcare support.

Method: Tracheotomised patients (n=20) were randomized to conventional CAN with a jet nebulizer as a control or HH (T=37°C, relative humidity 100%) with high flow of air (30 l/min) delivered with the AIRVO2 blower-humidifier (Fisher & Paykel Healthcare, NZ). The ciliary beat frequency (CBF) in tracheal epithelial cells was measured in vitro using videomicroscopy on day 2, 4, 6, 8 and 10 following the tracheotomy. Number of required suctioning procedures per day to clean the trachea from the excessive mucus was assessed.

Results: Data for CBF is mean ± standard deviation. Overall CBF was significantly (p<0.001) higher in the HH group (6.4±1.6 Hz) compared to the CAN group (4±1.4 Hz). Differences in CBF were statistically significant (p<0.05) on all measurement days. Data for suction procedure is median (range). The number of required suctioning was lower in HH group relatively to CAN - 3 (12) vs. 5 (13) per day (p<0.001).

Conclusion: Results indicate a potential advantage of hydration with of heated and humidified air over the conventional nebulization of cold saline in the first 10 days following tracheotomy.
In-situ Simulation for MDT Management of Head and Neck Emergencies

G.Lloyd*(1), D.Allin(1), R.Oakley(1), I.Ahmad(1)

(1)Guy's Hospital, London, United Kingdom

Background: Airway compromise, haemorrhage, and tracheostomy complications can quickly threaten the life of a Head and Neck (H&N) patient. Such situations require effective teamwork between surgeons, anaesthetists, nursing staff and allied health professionals to ensure successful outcomes.

Methods: The Guy's Hospital Multi-Disciplinary H&N In-situ Simulation Project is physically integrated into the real clinical environment rather than a simulation centre allowing scenarios to be played out on the wards and in the operating theatres that are used in real life. Participants from ENT, anaesthesia and nursing gain increased familiarity with their workplace and existing clinical systems are tested which can identify shortcomings such as equipment availability or lack of an agreed protocol.

Cases from H&N morbidity meetings were discussed with lead clinicians to develop scenarios that emphasise the roles of leadership, co-operation and communication skills in managing H&N emergencies. Additional focussed talks and short clinical stations enable further knowledge and skills to be attained. Structured debriefing allows learning points to be shared by the team.

Results: Feedback questionnaires demonstrate that the in-situ simulation day addresses the personal learning needs of the participants who gain increased knowledge, skills and confidence in tackling emergency H&N scenarios. It has identified the need to disseminate protocols throughout the MDT, developed inter-disciplinary relationships and enhanced team morale.

Future: We are using CT imaging of real cases to create 3D-printed models of actual difficult airways that can be examined and instrumented thus allowing participants to identify, manage and treat ‘real’ airway pathology.
LARYNGEAL VASCULATURE: AN ANATOMICAL STUDY WITH CLINICAL CORRELATION

P.Perotti*(1), M.Ferrari(2), R.Morello(3), C.Piazza(3), S.Taboni(3), P.Nicolai(3)

(1)University of Brescia, Brescia, Italy, (2)Department of Otorhinolaryngology, University of Brescia, Italy, (3)Department of Otorhinolaryngology, University of Brescia, Italy

PURPOSE OF THE STUDY: The upper limit of CO2 laser coagulation is set to 0.5 mm, with greater vessels requiring adjunctive hemostatic instruments (monopolar, bipolar, clips). There is a lack of studies on the laryngeal vascular patterns aimed at the identification of the most frequent sources of bleeding. Aim of this study was to investigate the anatomy of the superior (SLA) and inferior laryngeal arteries (ILA) on fresh-frozen cadaveric specimens focusing on branches encountered during cordectomies, and identifying areas at risk for bleeding. These were correlated to the operative reports of patients treated by TLM for glottic cancer.

MATERIALS AND METHODS: Nine fresh-frozen Caucasian larynges were excised after injection of the arterial system by a silicon bicomponent resin. In order to identify the main arterial branches, their anastomoses, and the anatomical landmarks for transoral identification, SLA has been dissected from its entry point to the smallest injected arterioles. These data were compared to those encountered in 25 T1-T2 glottic cancers operated by TLM in the Department of Otorhinolaryngology, University of Brescia, Italy (September 2016 - January 2017). Bleedings requiring coagulation were recorded and topographically correlated to the landmarks identified during cadaver dissection.

RESULTS: Our study confirmed the presence of 2 SLA branches vascularizing the glottis: 1) the posterior-inferior artery (PIA) bifurcating in a branch postero-laterally to the arytenoid body, and another anterior to its vocal process; 2) the anterior-inferior artery (AIA) branching into 2 terminal vessels. Moreover, we identified 2 anastomotic arcades between PIA and AIA, one within the lateral portion of the vocal muscle, and another parallel to the former, located along the insertion of the conus elasticus to the vocal ligament. A third artery vascularizing the anterior glottis was represented by the endolaryngeal branch of the ILA. This makes an anterior pericommissural anastomosis with one of the vascular arcades between PIA and AIA, or directly with the AIA. We also analyzed 6 Type II, 5 Type III, 4 Type IV, 8 Type V, and 2 Type VI cordectomies. Bleedings requiring coagulation were encountered at the anterior pericommissural, posterior peri-arytenoid, and conus elasticus levels in 80%, 48%, and 60% respectively, according to the different procedures performed.

CONCLUSIONS: Bleeding during TLM for glottic cancer is encountered in well-defined endolaryngeal areas. This anatomical study and its clinical correlation provide an insight in the laryngeal vascular anatomy and may assist the younger surgeons in preventing and managing this troublesome complication.
Location of the Recurrent Laryngeal Nerve (RLN) During Thyroidectomy, the Proximal Versus the Intermediate Approach

E. Shehata*(1)

(1) Tanta University Hospitals, Tanta, Egypt

Purpose of the study: • To evaluate the overall risk of RLN injury with its routine exploration & the risk with each approach. • To recognize the anatomy of the distal part of the RLN.

Methods: Design: prospective study, including 117 patients subjected to thyroidectomy. The patients were allocated into group A (proximal approach) and group B (intermediate approach), on alternate base.

Outcome measures: the overall incidence of RLN and the incidence in each group, time needed to identify the nerve, incidence of RLN branching, risk of RLN injury regarding the different variables of the goiter.

Results: The overall RLN temporary paralysis was 5.47%, while the overall RLN permanent paralysis was 0.49% (0.9% in group A & 0% in group B). The mean time of identification in the group A was 6.33 minute and 5.88 minutes in group B, with no significant difference. There was significant risk of paralysis with the retrosternal extension, toxic goiter (p < 0.001), and the malignant goiter (p <0.05). There were trends of increasing paralysis with proximal nerve branching. Conclusions: RLN identification decreases much the incidence of paralysis, with no significant difference between the two approaches. The risk for paralysis was observed with retrosternal extension, toxic and malignant goiter. RLN divides usually before entrance under the inferior constrictor muscle.
Minimally invasive video-assisted neck surgery: an alternative to open surgery.

P.Parențe*(1)

(1) A Corunna Universitary Hospital, Lugo, Spain

Purpose of the course: To explain the minimally invasive video-assisted approach for neck pathologies, to compare surgical outcomes and postoperative complications of open surgery versus endoscopic approach in neck surgery and to analyse feasibility in a low volume hospital.

Materials and methods: We present the basis of the approach, show the technique using didactic videos of the procedures and present retrospective analysis of all minimally invasive video-assisted procedures performed at Hospital Universitario de A Coruña and at Hospital Universitario del Henares between 2005 and 2015, comparing operative time, postoperative complications (nerve injury, bleeding, infection), aesthetic result and duration of hospital stay in parathyroid, thyroid and submandibular gland surgery.

Conclusion: The minimally invasive video-assisted neck surgery is a surgical approach feasible and reliable. Results show an increase in surgical time comparing to the open technique, but it is a less aggressive technique that allows less complications, no need of drainages and less hospitalization time. Although scar is shorter, aesthetic results involve more characteristics such deepness, colour, etc. This technique could substitute the open procedure in cases of thyroid nodules not exceeding 35 mm in maximum diameter, submandibular gland benign tumours and inflammatory mild pathology and localized parathyroid adenomas, but the learning curve for the endoscopic approach forces some surgeons to stay in a classical model. Nevertheless, A well-established endoscopic team and meticulous dissection technique are important, as they allow to have a shorter learning curve and to perform only a few procedures for each gland a year without decreasing the quality and success.
Nasopharyngeal presentation of second branchial cleft cyst: diagnosis and surgical management – case report 29-year-old female patient- POSTER presentation

V.Stanojkovic*(1)
(1)Hospital Izola depp. ENT, Izola, Slovenia

Abstract:
Branchial cleft fistulae are rare congenital abnormalities that arise from the abnormal persistence of branchial apparatus remnants. A complete fistula is a tract that has an internal opening and an external opening. Second branchial cleft fistulae pass deep to second arch structures and over third arch structures, in a direction extending from the anterior border of sternocleidomastoid muscle to the upper pole of the ipsilateral tonsil fossa. Because of this anatomical route, these long tubular structures are intimately associated with major neurovascular structures in the neck. Fistulae are usually clinically apparent after birth with up to 80% being diagnosed before age 5 years. There may be an obvious opening in the anterior neck between the hyoid bone and suprasternal notch. Treatment is complete surgical excision and extirpation in toto of all abnormally placed epithelium, while preserving surrounding neurovascular structures, and using cosmetically acceptable incisions. Complete fistulae in adults are rare and diagnosis can be difficult.

Second branchial cleft cysts are the most common neck masses found in adults. However, the parapharyngeal or pharyngeal presence of branchial cleft cyst is very rare. It occurs as cervical sinus that temporarily appears in the process of branchial apparatus developing into various structures of neck is not closed but remains to exist.

However, there is a very rare case where second branchial cleft cyst appears in the form of cystic mass that is located in parapharyngeal or pharyngeal space. Rare location in the pharyngeal presence shown only three cases in the world.

We report one case of nasopharyngeal branchial cleft cyst in adults. We present the clinical presentation and surgical management of a sized cystic structures (40x25x9 mm) second branchial cleft cyst, pharyngeal presentation located from the epipharyngeal space to the hyoid bone in a 29-year-old female patient with main complaints of swelling sensation of pharynx, dysphagia and throat pain that had continued 2 days before otorhinolaringologist-examining.

Preoperative CT scans of the neck clearly demonstrated the cysta.
Biopsy revealed a squamous lined epithelial wall with lymphoid aggregation, which is characteristic of branchial cleft cyst.

We recommend a operation intra-oral to allow safe and complete extirpation per via naturale. The author completely removed cysts in intraoral approach for cystic mass in pharyngeal space.

We performed a transoral resection without any surgical complications- one day surgery.

Excision of cyst was performed in incision (extirpatio) of left oropharyngeal membrane under general anesthesia.

Keywords: Branchial Region; Cysts; Oropharynx; Congenital neck masses
Otorhinolaryngology Trainee and the Alternatives to Surgical Tracheostomy: A Survey Study

S. Al kindy*(1)

(1) COLLEGE OF MEDICINE, TAIF UNIVERSITY, Taif, Saudi Arabia

Objectives: Alternative to surgical tracheostomy (AST) including Submental (SMENI), Submandibular (SMANI) and retromolar intubations (RMI) are fairly new innovative airway procedures meant to avoid complications of the traditional surgical tracheostomy (ST). Otolaryngologist residents/registrars were surveyed to know their awareness, the will to be trained for these skills and to deal with its complications when done by other specialties. According to our knowledge there is no similar paper in the English literatures.

Method and material: Otorhinolaryngology residents/registrars in Riyadh, Jeddah and Taif were surveyed between March 2013 and June 2014, enrolled and non-enrolled Head/Neck (ORL-HNS) program trainee were include, senior consultants were excluded. It is a qualitative and cross section study.

Results: A total of fifty nine responded to the questionnaires, 56 (94.9%) were familiar with AST, 52 (88.13%) supported the concept of AST and 57 (96.6%) agreed to include it in ORL training programs, 30 (50.8%) thought it had a negative impact on ORL training 47 (79.7%) agreed to be part of any AST procedure while 27 (45.8%) agreed to deal with its complication if done by other specialty.

Conclusion: Most surveyed ORL residents/registrars were not familiar with AST, nevertheless, agreed for further training and to include it in the training programs. However, reserved dealing with related complication once done by other specialties.

We recommend that the supervising training body consider including AST in the curriculum.
The alveolar rhabdomyosarcoma of the salivary glands is a rare malignant tumor with a striated muscular differentiation. They sit particularly in the parotid and are characterized by their locoregional aggressiveness and occur especially in the adolescent.

**Observation**

We report a case of primary alveolar rhabdomyosarcoma of the parotid gland observed in a 4-year-old child. The patient presented a left parotid mass with rapidly progressive evolution associated to peripheral facial paralysis. Imagery has objectified an enormous mass with contrasting of the left parotidiennne lodge with extension to the infra-temporal fossa and the internal auditory canal.

The child benefited from a first surgery after embolization, with extemporaneous examination that returned in favor of a hemangioendothelioma the definitive diagnosis returned in favor of alveolar rhabdomyosarcoma the patient was addressed in radio-chemotherapy for complement of catch in charge.

**Discussion and conclusion**

According to the literature, alveolar rhabdomyosarcoma of the parotid gland is a rare tumor occurring mainly in the young and the child. Parotid swelling and facial paralysis are the main clinical signs. Radiotherapy-associated surgery Control of the disease but the local aggressiveness and the high risk of recurrence represent the main limit of the management of or the interest of a protocol codified within a framework of a multidisciplinary management.
Retrospective analysis of Diagnosis and Treatment of Fishbone over pharynx: A series of 198 cases

Y.Lu*(1), Y.Lu(2)

(1)Department of Otolaryngology, St. Martin De Porres Hospital, Chiayi, Taiwan; Department of Otolaryngology, Chung Shan Medical University Hospital, Taichung, Taiwan; Division of Otolaryngology, Chung Shan Medical University, Taichung, Taiwan, , China, Repu, (2)Department of Otolaryngology, St. Martin De Porres Hospital, Chiayi, Taiwan, , China, Republic of (Taiwan)

Background:

Fishbone ingestion is a common problem throughout the world and the first step in dealing with this condition is to locate the fishbone precisely. However, there is no study focusing on analyzing the relations between fishbones' locations and other associated factors. Thus, the aim of this study is to identify the link between locations of fishbone impaction, host's characters, diagnosis materials and methods of removal.

Methods:

A retrospective study was conducted at St. Martin De Porres Hospital, Taiwan between January 2015 and January 2016. All patients were diagnosed as fishbone over pharynx and underwent fishbones removal. In this study, we will review the patients’ data base (age, sex, diagnosis materials, treatment plan, fishbone location and fishbone length) and analyze the relation among them.

Results:

Consecutive 198 patients were included in this study. 103 patients (52.0%) were male. Mean age was 43.1 y (range, 1-84). 87 patients underwent lateral neck radiographics, but only 19 (23%) were reported by radiologist as positive for fishbone. The locations of fishbone were as following: 72 (36.4%) over tonsil, 112 (56.6%) over tongue base/vallecula, and 14 (7.0%) over hypopharynx. Tonsil was the most common location in the patient group with age less than 10 years old (83%), however, in elder patients, vallecula/tongue base was the most common location (62%) which showed significant difference between these two patients’ groups (p<0.001). Otherwise, the range of fishbone’s length was from 0.2 to 4.3cm. In the cases with fishbone’s length more than 2cm [55 cases (27.8%)], the most common location of fishbone was over tongue base/vallecula (64%) which also showed significant difference from those less than 2cm (p<0.001). Of 198 cases, 73 (36.9%) were removed transorally by direct vision and 125 (63.1%) were removed under the assistance of flexible nasopharyngoscope.

Conclusions:

Patient’s age and fishbone’s length are important factors associated with the location of fishbone ingestion. Lateral neck radiographics is not beneficial in diagnosis of fishbone over pharynx, but flexible nasopharyngoscope is an important method not only in diagnosis but also in treatment of fishbone over pharynx.
Safety and efficacy of surgery combined with bleomycin for complex cervical–facial lymphatic malformations of children

Y.Wang*(1)

(1)Department of Otorhinolaryngology Head and Neck Surgery, Shanghai Children’s Hospital, Shanghai Jiao Tong University, Shanghai, China, People’s Republic of

Objective: Lymphatic malformations occur most frequently in the head and neck region in children. In this retrospective study, we present our experience and evaluate the safety and efficacy of surgery combined with bleomycin intro-operatively for the management of head and neck lymphatic malformations in children.

Materials and Methods: The medical records of all patients with cervical–facial lymphatic malformations who presented to Shanghai Children’s Hospital from August 2014 to August 2016 were reviewed. Surgery using bleomycin intro-operatively is the treatment of choice for patients with macrocystic disease or giant cervical–facial lymphatic malformations.

Results: 50 patients met the inclusion criteria. Complete clinical disappearance of the disease was documented through follow-ups in 44 patients (88%) from the surgery group. In 6 patients, the lesions were incompletely removed or recurred after a month and were treated with sclerotherapy by bleomycin a few times to obtain complete clinical disappearance. The follow-up time was 1-25 months.

Conclusions: we recommend surgery combines with Bleomycin for microcystic disease with focal and less infiltrative lesions and for lesions located in the oropharynx, parapharynx, retropharynx, or hypopharynx. The surgical approach utilized must provide wide exposure of the entire area, allow excision of the mass with careful identification and preservation of vital nerves and remove utricle bubbles as much as possible. Bleomycin is considered to be effective and safe in the minimal inflammatory reaction and edema post operation.
Screening for Oral Cavity Cancer: A 1-year Experience of a Regional Hospital in Taiwan

C.Yuan*(1), C.Pan(2), T.Chi(2)

(1)Otolaryngology, Kaohsiung, China, Republic of (Taiwan), (2)Department of Otolaryngology, Kaohsiung Armed Forces General Hospital, Kaohsiung, China, Republic of (Taiwan)

BACKGROUND: The purpose of this study was to analyze the risk factors affecting precancerous lesions, and cancer of oral cavity, and to assess efficacy of visual screening for oral mucosal lesions.

METHODS: The medical records of patients older than 30 years of age with history of habitual cigarette smoking or betel quid chewing that received screening for oral mucosal lesions between January 2012 and December 2012 were retrospectively reviewed. The patients’ age, gender, risk factors, screening findings, and histopathology results of biopsy were included for further analysis.

RESULTS: A total of 1341 patients were enrolled in this study. There were 1080 males and 261 females ranging from 30 to 96 years of age, with a mean age of 53.9±13.6 years. With regard to associated risk factors, the most common group was the patients with habitual cigarette smoking alone (65.8%), followed by those with both habitual cigarette smoking and betel quid chewing (29.8%), and those with betel quid chewing alone (4.4%). After screening, 226 (16.9%) were found to be positive of oral lesions. Among these 226 patients, 69 (30.5%) underwent biopsy under local anesthesia, and the histopathology showed malignancy in 13 (5.8%). All of the confirmed malignant cases were squamous cell carcinoma. Among them, 12 received further staging examination and 1 was lost to follow-up resulting in unknown stage. Clinical staging by further examination in the12 cases showed 6 with stage I, 5 with stage II, and 1 with stage IV. The early stage oral cavity cancer (stage I and II) accounted for 84.6% (11/13). In this study, leukoplakia was the most frequent precancerous lesion found; however, erythroplakia had the highest malignant rate.

CONCLUSIONS: Most of the oral cavity cancers occurred in the patients with both habitual cigarette smoking and betel quid chewing. Therefore, visual screening for oral cavity cancer is recommended for patients with habitual cigarette smoking or betel quid chewing.
Smoking cessation intervention for head and neck patients: a comparison in practice between ENT consultants and trainees.

N.Gabuniya*(1), F.Kum(2), H.Lancer(1), R.Oakley(1), G.Murtagh(2)

(1)Guy's and St Thomas Foundation Trust, United Kingdom, (2), United Kingdom

Background:
Smoking is the single most preventable cause of death in the world, accounting for approximately 6 million deaths a year. It is an established cause of up to 73% of upper aerodigestive tract cancers. There is evidence that smoking cessation can even reverse small T1 laryngeal tumors.

Patients with a high suspicion of malignancy are referred to the Head and Neck Services/Clinic under an urgent “two week wait” referral, and approximately 20% of new presentations are smokers. A possible diagnosis of cancer appears to present as a ‘teachable moment’ whereby patients may become motivated to adopt risk-reducing behaviours.

This research reviews the difference in practice of ENT surgeons at consultant and trainee levels in delivering smoking cessation advice, barriers to delivering this message and potential improvement of current practice.

Methods:
Data collection was via questionnaire completed by 22 ENT trainees. The data was analysed and compared with the results of the same questionnaire completed by 20 ENT consultants.

Results:
Both participant groups have highlighted importance of GPs, surgeons who first see a patient and Cancer Nurse Specialists role in advising smoking cessation.

In comparison to consultants’ behavior, trainees are less likely to discuss smoking habits with patients, and only 18% (4/22) have advised stopping smoking to all smokers seen in clinic, whereas 85% of consultants advise smoking cessation to >80% of all smokers. Mainly due to lack of knowledge of the formal referral process, 76% of trainees and 70% of consultants have formally referred < 20% of all smokers to cessation services. According to trainees, the main obstacle in advising smoking cessation is the time limit of consultation, although 60% have stated that it takes less than 1 minute to deliver a message. All consultants state that there should be no reason to avoid discussion. 10% of trainees felt that it wasn’t their role to advise smoking cessation.

Conclusion:
Surgeons at any level should be able to advise and encourage smoking cessation to all smokers at their first presentation. The use of a ‘teachable moment’ is an effective method for surgeons to modify patients’ behaviour and support smoking cessation via a brief intervention.

Structured local inductions in hospital trusts and formal pathways for referrals in both primary and secondary care will improve current training and help overcome barriers in referral to smoking cessation services.
The application of new materials in the screen wall of the maxillary sinus fracture

L. Gong*(1)

(1) The Red Cross Hospital Affiliated to Xi'an Jiaotong University, China, People's Republic of

Objective: To explore the new material for the screen wall of the maxillary sinus fracture fixation clinical curative effect. Methods: from February 2011 to April 2013, new materials for screen open reduction and internal fixation in 31 cases were followed up for 2 months to 1 years, clinical analysis. Results: all the 31 cases were healed, and no serious complications were found in the follow-up. Conclusion: the new screen material is suitable material for internal fixation of the fracture of maxillary sinus wall.

The maxillary sinus is located on both sides of the main part of the jaw face, its fracture can cause facial deformity and maxillary sinus cavity dysfunction, the key is to correct the treatment and good fixation. The traditional jaw fracture internal fixation with metal materials, with mini plate or titanium plate for bone fixation, solid and reliable, its drawback is the existence of the stress shielding effect, damage to the normal bone pressure mode, hinder the rapid initial callus formation, corrosion of metal ion release, bone fracture healing, some patients with facial the foreign body and discomfort. Because of these deficiencies. In recent years, domestic and foreign countries have begun to use new materials in clinical application. In particular, the use of the third generation of bio absorbable implants in the treatment of fracture of the maxillary sinus has played an excellent role in the treatment of the fracture. The third generation of bio absorbable implants are mainly synthesized by the non crystalline copolymers such as L - L lactic acid, DL lactic acid and TMC monomer. The internal fixation of absorption with fracture healing, which avoids the stress shielding effect, and no need to remove the two operation and show its superiority.
Treatment for complex cervical–facial lymphatic malformations in children: a retrospective study

Y.Wang*(1)

(1)Department of Otorhinolaryngology Head and Neck Surgery, Shanghai Children's Hospital, Shanghai Jiao Tong University, Shanghai, China, People's Republic of

Title: Treatment for complex cervical–facial lymphatic malformations in children: a retrospective study

Purpose: Lymphatic malformations occur most frequently in the head and neck region in children. In this retrospective study, we present our experience and evaluate the safety and efficacy of surgery combined with bleomycin and sclerotherapy for the management of cervical–facial lymphatic malformations.

Methods: The medical records of all patients with cervical–facial lymphatic malformations who presented to Shanghai Children's Hospital from August 2014 to November 2015 were reviewed. Patients were included if the surgery was combined with bleomycin or sclerotherapy only.

Results: Thirty-three patients met the inclusion criteria. Twenty-nine patients were treated with surgery and bleomycin sclerotherapy intro-operatively, whereas 8 patients were treated with sclerotherapy (4 patients were treated after the initial surgery). The follow-up time was 2–17 months. In all 33 patients, the lesions completely disappeared, as confirmed during a clinical evaluation after treatment.

Conclusion: We recommend surgery for microcystic lesions when they are focal and less infiltrative and located in the oropharynx, parapharynx, retropharynx, or hypopharynx. Sclerotherapy is indicated for macrocystic lymphatic malformations that are superficial in location; recurring or vestigial cases after surgery; patients in poor condition who cannot tolerate surgery; and for volume reduction surgery or saving measures. The puncture and drainage should be performed with multipoint injections to eliminate all potential vesicles.

Authors: YING WANG; JIARUI CHEN; XIAOYAN LI

Author Institutions: Department of Otorhinolaryngology Head and Neck Surgery, Shanghai Children's Hospital, Shanghai Jiao Tong University. No.355, Luding Road, Shanghai, 200062, People's Republic of China
Usefulness of office examination with Narrow Band Imaging for the diagnosis of head and neck Squamous Cell Carcinoma and follow-up of premalignant lesions

M.Valls mateus*(1), I.Vilaseca(1), A.Nogués(1), M.Bernal-sprechelsen(1), M.López chacon(1)

(1)Hospital Clínic, Barcelona, , Spain

Purpose of the study. Narrow Band Imaging (NBI) is an optic technique that provides enhanced contrast of vessels in the mucosa and submucosa allowing the depiction of tumor neoangiogenesis. This study aims to assess the value of NBI examination performed in the office, for the diagnosis and follow-up of upper airway premalignant and malignant lesions.

Materials & Methods. Four-hundred eighty consecutive suspicious lesions of the upper aerodigestive tract were evaluated with white light endoscopy (WLE) followed by NBI examination under local anesthesia, before a biopsy/excision. Sensitivity, specificity, positive and negative predictive values, positive and negative likelihood ratios and accuracy of the findings were evaluated. Additionally, 151 premalignant lesions studied with the same protocol were followed-up without proven biopsy. Four year carcinoma-free survival was calculated according to initial vascular patterns. The learning curve was also analysed.

Results: WLE and NBI presented similar sensitivity to detect premalignant or malignant lesions of the upper airways, but the specificity, negative predictive value and positive predictive value were increased with the NBI examination. Overall the accuracy was improved from 78.3% with WLE to 88.7% with NBI, being the improvement relevant in all anatomic subsites. Accuracy of NBI increased significantly with increasing experience. After a mean follow-up of 25.2 ±18.4 months, 14 out of 151 lesions (9.3 %) converted into carcinoma. The 4-year carcinoma-free survival rate was 86.4%. The 4-year carcinoma-free survival rate differed significantly between those lesions classified as benign/mild dysplasia under NBI versus those presenting as moderate/severe dysplasia (88.9 vs. 73.5; p=0.018).

Conclusion. NBI provided a greater accuracy than WLE for detecting carcinomas of the head and neck area and showed promising usefulness for the follow-up of premalignant lesions. There is a learning curve in the implementation of the NBI examination.
Virtual MDT for Head and Neck Cancer using Google Hangouts on Air - Our Experience

D.Munaweera thantreege*(1)
(1)Ministry of Health, Sri Lanka, Suriyapaluwa kadawatha, Sri Lanka

Introduction
Head and neck cancer patient management is complex. Multidisciplinary teams (MDTs) are essential for optimal oncological treatment.

At present, MDTs for cancers, do not exist in Southern province of Sri Lanka as in most parts of low and middle income countries.

The key reason is the geographic distance between the treatment centers. It’s not practical to travel and physically meet considering the very busy clinical commitments at overcrowded and understaffed treatment facilities.

Methodology
This article explains the method we adopted to get the experts to discuss the patients over the internet using "Google Hangouts on Air".

A reliable Internet connection with high bandwidth was setup at both the peripheral and the teaching unit. Apart from laptops and Wi-Fi routers no additional equipment were used.

Process
A secure database was created in a dedicated server for the data collection.

Once diagnosed with cancer, patient details were entered to the database accessible only by the specialists. The server was configured so that an email is auto-generated and sent to all the participants allowing prior preparation.

Patients were requested to be present for further assessments and clarifications should there is a need.

Virtual discussions were carried out using Google Hangouts on Air.

Data was collected on patient demographics, diagnosis, management and follow up. As a part of "Google Hangouts on Air" software, a YouTube video is generated. This is private and confidential, and useful for future reference.

Clinical Audit was conducted.

Results
We have carried out the virtual MDT meetings from 30/10/2013 to 24/06/2015 (for 20 months).

We had 15 video conferencing sessions during this period.

Total Number of patients seen is 93.

Majority of patients had thyroid malignancies (42). Other cancers discussed include laryngeal carcinoma (9), oropharyngeal carcinoma (4), salivary carcinoma (3) and acoustic neuroma (2).
This clinical experience has shown us how simple technology can be utilized to deliver high level, global standard health care. We used already available, inexpensive technology and a solid workflow.

The situation of fragmented cancer care is universal. Where geographical distance is the barrier, virtual MDTs can be a solution.
Un cas d’abcès thyroïdien

A.Benallal*(1)

(1)CHU MOHAMMED VI OUJDA, Oujda, Morocco

Introduction : L’abcès de la thyroïde est une entité extrêmement rare, représente 0,1% des pathologies de la thyroïde, c’est les caractéristiques Anatomiques et physiologique de la glande qui lui procure une grande capacité de résistance vis-à-vis des agents pathogènes.

Objectif : Nous rappellerons à travers cette observation les moyens de défense de la thyroïde contre les infections, les différents facteurs prédisposant à l’abcès de la thyroïde, et les germes incriminés dans chaque étiologie. Nous discuterons les diagnostics différentiels et nous insisterons sur les modalités diagnostiques et de prise en charge thérapeutique

Observation : Nous rapportons un cas rare d’abcès thyroïdien survenu chez un enfant de 14 ans sans antécédents d’immunodépression qui s’est présentée avec une tuméfaction basi-cervicale antérieure inflammatoire évoluant sur 5 jours dans un contexte fébrile, le bilan thyroïdien était normal et l’échographie avait objectivé 02 lésions thyroïdiennes infectieuses, la plus volumineuse (isthmo-lobaire gauche) qui mesurait 38×20mm. Un scanner cervico-thoracique mettait en évidence une collection multiloisonnée du lobe thyroïdien gauche à contenu liquidien, sans signes de compression L’évolution était bonne sous biantibiothérapie a base amoxicilline protégé et la gentamycine sans recours au drainage ni à la chirurgie.

Discussion et Conclusion : Le diagnostic est souvent fait tardivement d’abcès thyroïdien vu le début insidieux et le caractère non spécifique des symptômes. Souvent prise pour thyroïdite subaigüe d’origine virale, l’administration de corticoïdes, traitement de base de cette pathologie, est susceptible d’aggraver le tableau clinique et de dissémer l’infection. C’est une pathologie rapidement progressive dotée d’une morbidité importante, pouvant compromettre le fonctionnement des structures anatomiques adjacentes par compression et nécrose tissulaire, et à distance par dissémination de l’infection. Ces complications peuvent mettre en jeu le pronostic vital. Le diagnostic rapide permettant d’entreprendre un traitement antibiotique précoce et un drainage chirurgical est le seul garant pour prévenir les complications. Le traitement ne doit pas omettre la cure chirurgicale des anomalies congénitales causales : fistule de la 4ème fente, fistule du tractus thyréoglosse, ou des facteurs prédisposant : goître multinodulaire, ainsi que la correction d’une immunodépression.

A.BENALLAL, K.BOUHAFS, A.AABACH, M.CHAOUAI, A.LACHKAR, F.ELAYOUBI, R.GHAILAN

ORL et chirurgie cervico-faciale CHU MED VI OUJDA
Un carcinome rénal à cellules claires révélé par une métastase thyroïdienne

M.Ridal*(1), N.Benmansour(2), M.El alami(2)

(1)Faculté de médecine de Fès - CHU Hassan II, Fès, Morocco, (2)CHU Hassan II Fes, Fes, Morocco

Objet de la présentation : 

La glande thyroïde est rarement le siège de métastases. Ces dernières représentent moins de 4 % de la pathologie maligne thyroïdienne dans les séries cliniques. Nous rapportons la découverte d’une métastase thyroïdienne d’un carcinome rénal à cellules claires.

Matériel et méthodes :

Il s’agit d’un patient de 57 ans adressé en ORL pour un goitre de découverte fortuite en euthyroïdie clinique et biologique. L’examen ORL objectivait un nodule thyroïdien droit plongeant, sans paralysie récurrentielle, sans adénopathies cervicales palpables. Une échographie et une TDM cervicale ont conclu à un goitre multi nodulaire plongeant. La cytoponction a révélé une lésion folliculaire sans signe de malignité.

Résultats :

Le patient a bénéficié d’une thyroïdectomie totale avec étude histologique définitive révélatrice d’une métastase thyroïdienne d’un carcinome rénal à cellules claires. Le bilan radiologique a objectivé une tumeur rénale droite pour laquelle le patient a bénéficié d’une néphrectomie totale élargie. L’étude anatomo-pathologique a confirmé le diagnostic d’un carcinome rénal à cellules claires.

Conclusion :

Le diagnostic de métastase thyroïdienne doit être évoqué devant une tuméfaction de la glande chez un patient avec des antécédents carcinologiques ou non et amener à pratiquer une cytoponction thyroïdienne. Le traitement de ces métastases thyroïdiennes se décide en fonction de l’évolution métastatique du cancer primitif.

Auteurs:

Ridal M, Benmansour N, El Alami MN

Faculté de médecine et de pharmacie- Service ORLCHU Hassan II Fès- Maroc
Une tumeur cervicale particulière, «Hibernome» : à propos d’un cas et revu de littérature
I.Nassim*(1), J.Oumellal(2)


Introduction : L’hibernome est une tumeur bénigne des parties molles, rare et méconnue qui se développe aux dépens des vestiges embryonnaires de la graisse brune. Sa localisation cervicale est d’autant plus rare. Nous rapportons le cas d’un hibernome sus-claviculaire pris en charge au sein de notre service d’ORL et de Chirurgie cervico-faciale en collaboration avec le service de neurochirurgie.

Objectif : Mettre la lumière sur les particularités épidémiologiques, cliniques, radiologiques, anatomopathologiques, génétiques et évolutives de l’hibernome, ainsi que les éléments de la prise en charge thérapeutique.

Observation clinique : Nous rapportons le cas d’une patiente de 39 ans, sans antécédents pathologiques, qui s’est présenté pour une masse sus-claviculaire droite augmentant progressivement de taille depuis 9 mois. Cette masse était indolore, mollâs responsable des paresthésies et sensation de lourdeur du membre supérieur droit. La TDM cervicale a objectivé une lésion de densité graisseuse bien circonscrite, mesurant 10x6 cm de diamètre, étendue depuis la région sus-claviculaire droite à la région nucale. La prise en charge chirurgicale a permis l’exérèse macroscopiquement complète d’une masse bien circonscrite, de coloration brune-rouge avec un centre jaune foncé à la coupe. L’étude histopathologique a montré un aspect en faveur d’un hibernome sans signes de malignité. Les suites postopératoires étaient simples sans récidive avec recul de 8 mois.

Discussion/Conclusion : L’hibernome cervical est une tumeur bénigne adipocytaire des parties molles. C’est une entité rare et méconnue qui se développe aux dépens des vestiges embryonnaires de la graisse brune. L’âge moyen de survenue est de 38 ans. Il peut être sous-cutané ou intra/intermusculaire et se présente sous la forme d’une masse indolore, à croissance lente. L’imagerie moderne, notamment l’IRM, prend une grande place dans l’approche diagnostique. L’examen histologique confirme la nature bénigne de la lésion et élimine un liposarcome. L’exérèse chirurgicale complète est curative permet d’éviter le risque de récidive sans nécessité d’un traitement complémentaire.
Primary ewing's sarcoma (ES) is a malignant small round-cell tumour that was first described in 1921. ES is an uncommon tumour seen most frequently in the long tubular bones and in the flat bones who affects young adults and children. Location of this tumor in skull base is a very rare entity. Whe have found 18 cases of primary cranial Ewing 's sarcoma (PCES) and only 2 cases of primary ES in the greater wing of sphenoid bone have been reported so far. The purpose of our study is to present another case of ES with skull base involvement, and to provide data concerning the clinical and therapeutic course of an extensive and partial-removed ES in the sphenoid bone.

We describe a case of primary involvement of the sphenoidal bone in a 41 years-old woman. After an accidental fall, the patient came to emergency service with headache radiating to the eyeball and traumatic head injury. During neurological examination right proptosis, decreased visual acuity, ocular palsies were found. This patient presented with a large mass in the sphenoid involving the orbit, cavernous sinus and infiltrating the middle cranial fossa with bone destruction.

Cranial magnetic resonance imaging (MRI) showed an heterogenous space occupying lesion 3.4cm x 3.4 cm x 2.4 cm in the sphenoidal sinus hipointense on T2W and non homogenous contrast enhancement. Cranial bone window-CT scan showed evidence of right sphenoid erosion. Thorax-abdomen CT-scan, and bone scintigraphy showed no involvement of other organs.

The patient underwent an endoscopic nasal surgery for resection but it was not complete due to bleeding and the bad clinical situation. The tumor was judged inoperable in spite of the absence of remote metastases because of its large size and its position involving cavernous sinus.

The histology and the chromosomal study was carried out confirming the diagnosis. After a multi disciplinar approach the patient received chemo and radiotherapy.

Primary ES of the skull bones is rare. Involvement of the skull pose a challenge for a complete excision to our surgical team. The prognosis without surgery is uncertain and is very poor due to the neoplasm's uncontrolled potential for metastatic spread, and therefore early and appropriate intervention is needed. We think it's necessary to study more cases in order to investigate the biological behavior of this rare entity. Early detection remains the key to effective treatment and improved prognosis.
Objet de la présentation: Présenter un cas de changement défavorable causé par gros abcès cervical profond, dont l’étiologie rare est associée à sialolithiases originales de la glande sub-mandibulaire.

Méthode: L’affaire a été examinée dans le service de la chirurgie de la tête et du cou du Complexe Hospitalier de Sorocaba (CHS), après le suivi du patient dans le service d’urgence, peropératoire et postopératoire. La description du rapport de cas a été basé sur la littérature sur le sujet.

Résultats: Patient apparition rapportée du cadre de la douleur située dans la région sub-mandibulaire postérieur droit à une aggravation progressive de la douleur accompagnée de dysphagie progressive et dyspnée efforts continus indépendants. Il a cherché un traitement dans le service d’urgence dans la ville d’origine, où il est resté hospitalisé avec des antibiotiques. Après trois semaines de traitement, le patient a développé une aggravation des symptômes, ce qui impliquait le transfert au service d’urgence du Centre Hospitalier de Sorocaba (CHS) pour la prise en charge de l’équipe de la tête et du cou.

L’examen physique a révélé un œdème, hyperémie et renflement du côté droit du cou. des tests préopératoires ont été effectuées. Tomodensitométrie préopératoire a montré collections confluentes qui compromettent l’espace rétro-pharyngé, puisque la hauteur du nasopharynx au niveau de la transition pharyngée avec l’extension parapharyngée bilatérale qui déterminent la compression sur la paroi postérieure de l’oropharynx et de l’hypopharynx. La glande sub-mandibulaire droit a montré des dimensions a augmenté, en observant l’image de calcul environ 0,7 cm projection proximale du conduit principal submandibulaire sur la droite. Trachéotomie et la résolution chirurgicale par le drainage de l’abcès à travers l’incision transversale a été faite collier. Patient développé une amélioration clinique significative et a été libéré quelques jours plus tard dans le besoin d’un suivi dans la tête et du cou clinique CHS.

Conclusion: Les infections du cou profond méritent une attention en raison du risque de complications graves qui peuvent entraîner la mort. Le cas présenté montre un abcès profond col causé par l’étiologie rare, sialolithiases, dont le diagnostic précoce, suivi par un traitement approprié, aurait pu éviter le cours sévère du patient. Malgré un traitement antibiotique recommandé comme traitement initial, le drainage chirurgical précoce montre son importance dans la prévention de l’insuffisance respiratoire dans les cas qui montrent une aggravation progressive.
TUMEUR ADENOIDE ADENOMATOIDE : A PROPOS DE DEUX CAS

M.Keita*(1), K.Fatoggomaissa(1), K.Diarra(1), S.Timbo(1), K.Singaré(1), K.N’faly(1), B.Guindo(1)

(1)CHU GABRIEL TOURE, , Mali

Objet : Les auteurs rapportent deux cas de tumeur odontogène adénomatoïde en passant en revue l’aspect épidémiologique, diagnostique et thérapeutique.

Matériels et Méthodes : Etude de deux cas cliniques colligés dans le service ORL et de Chirurgie cervico-faciale du CHU Gabriel Touré portant sur deux masses maxillaires gauche. La tomodensitométrie, la chirurgie d’exérèse et l’examen anatomopathologique ont permis de poser le diagnostic.

Résultats : Deux patientes âgées respectivement de 13 et de 14 ans tous de sexe féminin ont été admises en consultation externe pour volumineuses masses jugales gauche d’évolution lente depuis trois ans. La tomodensitométrie a objectivé une masse développée aux dépens de sinus maxillaire avec en son sein une densité de tonalité métallique évoquant une dent incluse intrasinusienne.

La voie d’abord vestibulaire a permis chez les deux patientes l’exérèse de l’ensemble de la poche kystique. La présence au sein de la poche kystique d’une dent pour la première patiente et trois dents pour la seconde a été notée. L’évolution post-opératoire a été favorable sans récidive avec un recul d’un an.

Conclusion : la tumeur adénoïde adenomatoïde est rare. La chirurgie d’exérèse est la seule alternative thérapeutique. Le volume de la masse nous a incité vers une voie d’abord vestibulaire.
ADENOPHLEGMON CERVICAL REVELANT UNE LEUCEMIE MYELOIDE CHRONIQUE: à propos d’un cas

N.Mahiou* (1), K.Karim (2), S.Nitassi (2), A.Ayoubi (2), R.Bensheikh (2), A.Oujilal (3), A.Benbouzid (2), L.Essakalli (1)

(1) Hôpital des spécialités rabat, Rabat, Morocco, (2) hopital des specialites rabat, Rabat, Morocco, (3) hopital des specialies rabat, Rabat, Morocco

INTRODUCTION : les adénophlémons sont les causes les plus fréquentes des tuméfactions cervicales inflammatoires, ils peuvent être primitifs ou secondaires à une adénite dont l’étiologie peut être rarement une leucémie myéloïde chronique. Cette dernière est un syndrome myéloprolifératif rare représentant 2 à 5 % des leucémies de l’enfant et 15 % des leucémies de l’adulte. La présence des adénopathies cervicales a été rarement décrite.

BUT : L’objectif de notre travail est de rapporter le cas d’un patient présentant un adénophlémon cervical révélant une leucémie myéloïde chronique.

OBSERVATION : Il s’agit d’un homme de 75 ans sans antécédent particulier notable, admis aux urgences d’ORL pour prise en charge d’une tuméfaction latéro cervicale droite, augmentant progressivement du volume depuis deux mois, associée à des signes généraux à type de fièvre et altération de l’état générale. L’examen clinique trouvait une tuméfaction latéro-cervicale droite avec des signes inflammatoires en regard.

Le bilan biologique a montré une Hb à 9.1 g/dj, une hyperleucocytose à 70 000, une CRP à 150 mg/l, et une insuffisance rénale fonctionnelle. La TDM cervicale a objectivé un gros adénophlémon latéro-cervical droit suppuré. Un drainage a été réalisé avec prélèvement bactériologique qui était en faveur d’un staphylocoque aureus.

Le malade a été mis sous bi-antibiothérapie (amoxicilline protégée + Quinolone) avec des mesures de réanimation, avec une légère amélioration clinique.

Un myélogramme avec BOM étaient en faveur d’une leucémie myéloïde chronique, chromosome Philadelphie positif.

Le patient a été adressé au service d’hématologie pour complément de prise en charge.

CONCLUSION :

Les Adenophlegmons ont un pronostic grave du fait de leurs complications vasculaires, hémorragiques et diffusion médiastinale, surtout en cas d’immunodépression, d’ou l’intérêt de savoir penser à un syndrome myéloprolifératif devant des anomalies hématologiques.
Carcinome vésiculaire occulte de la thyroïde révélé par un syndrome de la queue de cheval isolé: une présentation rare.

M.Boutaina*(1)

(1)HOSPITAL UNIVERSITY 20th AUGUST, Casablanca, Morocco

Objectif / Matériels et Méthodes :
Le carcinome vésiculaire de la thyroïde (CVT) est un cancer bien différencié qui représente 15-20% de tous les cancers de la thyroïde. Il est plus susceptible de présenter des métastases à distance que le carcinome papillaire vue son extension hémotагène. L’os constitue le deuxième site métastatique après les poumons. Nous rapportons un cas inhabituel de CVT occulte révélé par un syndrome de la queue de cheval secondaire à une métastase rachidienne comme première manifestation clinique de la maladie.

Résultats:
Une patiente âgée de 81 ans, s’est présentée au service de neurochirurgie pour une paraplégie et un dysfonctionnement sphinctérien. La TDM dorso-lombo-sacrée et l’IRM ont mis en évidence un processus tissulaire lytique mal limité centré sur les 3 vertèbres L4, L5 et S1, s’étendant en intra-canalaiare avec un envahissement des racines de la queue de cheval. La biopsie écho-guidée a objectivé une localisation métastatique rachidienne du CVT. Le patient a été adressé au service d’ORL où une thyroidectomie totale a été réalisée et dont l’étude anatomo-pathologique a confirmé un CVT primitif.

Conclusion:
Le syndrome de la queue de cheval secondaire à une métastase rachidienne est très peu fréquent comme manifestation primitive du CVT sans signes antérieurs de malignité. Le diagnostic précoce et la prise en charge rapide du carcinoma primaire et de la lésion métastatique peuvent prolonger la survie à long terme et permettre un pronostic favorable. La thyroidectomie et l’irathérapie améliorent la survie à 10 ans chez les patients présentant une tumeur métastatique.
Carcinome folliculaire occulte de la thyroïde révélé par un syndrome de queue de cheval isolé: une présentation rare.

M. Boutaina*(1)

(1) HOSPITAL UNIVERSITY 20th AUGUST, Casablanca, Morocco

Objectif / Matériels et Méthodes :

Le carcinome vésiculaire de la thyroïde (CVT) est un cancer bien différencié qui représente 15-20% de tous les cancers de la thyroïde. Il est plus susceptible de présenter des métastases à distance que le carcinome papillaire vue son extension hématogène. L’os constitue le deuxième site métastatique après les poumons. Nous rapportons un cas inhabituel de CVT occulte révélé par un syndrome de la queue de cheval secondaire à une métastase rachidienne comme première manifestation clinique de la maladie.

Résultats:

Une patiente âgée de 81 ans, s’est présentée au service de neurochirurgie pour une paraplégie et un dysfonctionnement sphinctérien. La TDM dorso-lombo-sacrée et l’IRM ont mis en évidence un processus tissulaire lytique mal limité centré sur les 3 vertèbres L4, L5 et S1, s’étendant en intra-canalaire avec un envahissement des racines de la queue de cheval. La biopsie écho-guidée a objectivé une localisation métastatique rachidienne du CVT. Le patient a été adressé au service d’ORL où une thyroidectomie totale a été réalisée et dont l’étude anatomo-pathologique a confirmé un CVT primitif.

Conclusion:

Le syndrome de la queue de cheval secondaire à une métastase rachidienne est très peu fréquent comme manifestation primitive du CVT sans signes antérieurs de malignité. Le diagnostic précoce et la prise en charge rapide du carcinome primaire et de la lésion métastatique peuvent prolonger la survie à long terme et permettre un pronostic favorable. La thyroidectomie et l’irathérapie améliorent la survie à 10 ans chez les patients présentant une tumeur métastatique.

Auteurs:

Chafiki Zakaria: médecin résident au service d’ORL/20 Août de CASABLANCA
Merzouqi Boutaina: médecin résidente au service d’ORL/20 Août de CASABLANCA
Hessnaoui Jaouad: médecin résident au service d’ORL/20 Août de CASABLANCA
Rouadi Sami: Professeur agrégé d’ORL au service d’ORL/20 Août de CASABLANCA
Abada Reda Allah: Professeur agrégé d’ORL au service d’ORL/20 Août de CASABLANCA
Roubal Mohamed: Professeur de l’enseignement supérieur d’ORL au service d’ORL/20 Août de CASABLANCA
Mahtar Mohamed: Professeur de l’enseignement supérieur d’ORL au service d’ORL/20 Août de CASABLANCA
Les variations anatomiques du nerf récurrent : A propos de deux cas

K.Fatoggoma issa*(1), M.Keïta(1), S.Timbo(1), K.Diarra(1), K.N'faly(1), K.Singaré(1), S.Soumaoro(1)

(1)CHU GABRIEL TOURÉ, , Mali

Objet : Rapporter deux cas de variations anatomiques du nerf récurrent et dégager leur implication chirurgicale.

Matériels et Méthodes : Etude clinique de deux patients ayant subi une lobo-isthmectomie dans le service ORL et de chirurgie cervico-faciale du CHU Gabriel Touré. Les variations anatomiques du nerf récurrent ont été découvertes en peropératoire.

Résultats : Il s’agit de deux patients âgés respectivement de 28 et de 58 ans, tous de sexe féminin ayant subi une loboisthmectomie droite. La découverte des variations anatomiques du nerf a été faite en préopératoire. L’abord du nerf récurrent a été réalisé par voie rétrograde du fait du volume de la masse.

Chez la première la dissection du nerf a permis d’identifier un nerf récurrent non récurrent tronculaire de type 1 et la dissection chez la deuxième patiente a objectivé un nerf récurrent en position pré vasculaire avec une branche qui se détachait du tronc nerveux et prenait naissance au niveau du nerf vague droit. Il s’agit d’une branche non récurrente de type II. Ce même nerf se bifurquait au niveau du point d’entrée dans le larynx.

Conclusion : les variations anatomiques du nerf récurrent sont diverses. Notre abord rétrograde a permis de repérer facilement le nerf et enfin d’éviter une lésion récurrentielle.
Les facteurs pronostiques des carcinomes vésiculaires de la thyroïde

G. Cherkaoui Salhi*(1)

(1) CHU IBN ROCHD CASABLANCA, Casablanca, Morocco

G. Cherkaoui Salhi, S. Choukry, S. Taleb, A. Guensi

S. Anajar, K. Choukry, R. Abada, S. Rouadi, M. Roubal, M. Mahtar

1 : service de médecine nucléaire, CHU Ibn Rochd Casablanca, Maroc

2 : service de ORL, CHU Ibn Rochd Casablanca, Maroc

Le but de l’étude: déterminer les facteurs pronostiques des carcinomes vésiculaires de la thyroïde dans la population marocaine.

Patients et méthodes: étude rétrospective étalée sur sept ans, elle a inclus tous les patients suivis pour carcinomes vésiculaire de la thyroïde non métastatiques d’emblée au service de médecine nucléaire du CHU Ibn Rochd de Casablanca. Les caractéristiques cliniques, anatomo-pathologiques, le traitement et l’évolution ont été analysés en comparaison avec un échantillon de patients suivis pour carcinome papillaire de la thyroïde traité au service au cours de la même période.

Résultats: l’étude a inclus 73 patients. L’âge moyen était de 51 ans, le sex ratio (H/F) de 0,17. L’étude univariée a permis de retenir l’âge >45 ans, la taille tumoral > 5 cm, l’envahissement local, la multifocalité, les emboles vasculaires, le taux élevé de thyroglobuline comme des facteurs indépendants de survenue de métastases. Le carcinome vésiculaire de la thyroïde est corrélé avec un risque de survenue de métastase plus élevé comparé au carcinome papillaire de la thyroïde.
La pyomyosite du muscle sternocléidomastoidien : à propos de 2 cas

M.Sellami*(1), M.Chaabouni(2), A.Chakroun(3), I.Charfeddine(2), M.Mnejja(2), A.Ghorbel(2)

(1)Service d’ORL et de chirurgie cervico faciale. CHU Habib Bourguiba. Sfax. Tunisie, Sfax, Tunisia, (2)Service ORL du CHU Habib Bourguiba, Sfax, Tunisia, (3)Service ORL du CHU Habib Bourguiba, Sfax, Tunisia

Objet de la présentation :

Etudier les caractéristiques cliniques et paracliniques de la pyomyosite du sterno-cleido-mastoidien (SCM) et décrire sa prise en charge thérapeutique.

Matièriels et méthodes :

Etude de deux observations de pyomyosite du SCM.

Résultats

Observation 1:
Patiente âgée de 40 ans, sans antécédents pathologiques particuliers, consulte aux urgences pour une tuméfaction latéro-cervicale droite évoluant depuis une semaine dans un contexte fébrile.

L’examen physique a monté une fièvre à 38.2 et une tuméfaction inflammatoire latéro-cervicale de 10 cm de grand axe. La nasofibroscopie a été normale.

Le bilan biologique a objectivé une hyperleucocytose à 17000 elts/ml et une CRP à 80mg/l. La glycémie était normale et la sérologie HIV était négative. Une tomodensitométrie cervicale a montré une tuméfaction du SCM droit qui était le siège d’une collection de 4×3×3 cm.

La patiente a eu un drainage chirurgical de la collection dont l’examen bactériologique a isolé un streptococcus du groupe A.

Une antibiothérapie parentérale (amoxicilline-acide clavulanique) a été instaurée pendant 4 jours avec relais par voie orale pendant dix jours. L’évolution a été favorable avec un recul de 2 ans sans récidive.

Observation 2 :
Une femme âgée de 24 ans, sans antécédents pathologiques, consulte pour une tuméfaction latéro-cervicale gauche évoluant depuis 7 jours associée à un torticolis et à une fièvre.

L’examen clinique a montré une fièvre à 39°C ainsi qu’une tuméfaction inflammatoire latéro-cervicale gauche faisant 15 cm.

Le bilan biologique a objectivé une hyperleucocytose à 22000 elts/ml et une CRP à 160 mg/l. La sérologie HIV était négative.

La tomodensitométrie cervicale a montré une tuméfaction hétérogène du muscle SCM gauche contenant une collection de 8×4×4 cm.

La patiente a eu un drainage chirurgical de la collection. Le prélèvement bactériologique a révélé un Staphylococcus aureus.

Une antibiothérapie parentérale (amoxicilline-acide clavulanique) a donné lieu à une nette amélioration clinico-biologique. La patiente a pu sortir après 7 jours et a poursuivi son traitement par voie orale pendant 5 jours. Aucune récidive n’a été notée après 3 ans de recul.
Conclusion :

La Pyomyosite est une affection rare chez l’immunocompétent. Son diagnostic est souvent retardé du fait de sa constitution insidieuse. Elle touche généralement les gros muscles. Le diagnostic est facilité par l’imagerie. Le traitement est médical basé sur une antibiothérapie associée parfois à un geste de drainage chirurgical. Le diagnostic de pyomyosite doit faire rechercher une infection par le VIH qui n’a pas été retrouvé chez nos patientes.
A propos d’un cas : Masse latéro-cervicale atypique révélatrice d’un micro-carcinome thyroïdien papillaire

N. Sedjelmaci*(1), A. Nasri(2), I. Brahmi(2)

(1) Centre Hospitalo-Universitaire Tlemcen, Tlemcen, Algeria, (2) CHU Tlemcen, Tlemcen, Algeria

Objet de la présentation :

Le microcarcinome de la thyroïde est une tumeur dont la taille n’excède pas 1cm dont la découverte par une métastase ganglionnaire cervicale est assez rare, n’empêchant pas d’évoquer ce diagnostic devant toute masse latéro-cervicale chronique d’allure kystique.

Matériels et méthodes :

Nous rapportons le cas d’une patient âgé de 37ans qui a consulté pour masse latéro-cervicale gauche chronique occupant la partie sus claviculaire gauche débordant sur l’espace cervical postérieur.

Un examen ORL minutieux ainsi qu’un bilan radiologique (Echographie cervicale, TDM, IRM) et biologique ont été réalisés.

Résultats :

L’examen clinique a retrouvé une masse latéro-cervicale gauche occupant la partie sus claviculaire gauche débordant sur partie l’espace cervical postérieur en arrière du muscle sterno-cléo-mastoïdien, rénitive indolore mobile par rapport au plan profond avec peau de recouvrement non inflammatoire.

Echographie cervicale : a mis en évidence trois formations kystiques sus claviculaires gauche et latéro-cervicale avec un nodule thyroidien basilobaire 4mm droit et un kyste basilobaire 5mm.

Cytoponction de la masse : en faveur d’une lésion kystique d’allure colloïde sans signes de malignité.

TDM

Retrouve deux formations kystiques hypodenses se rehaussant peu en périphérie présentant en arrière du SCM, et latéralement à la thyroïde.

IRM

Etait en faveur d’une masse kystique latéro-cervicale gauche multi-loculée et cloisonnée avec un contingent en hyper signal en T2 évoquant probablement un lymphangiome kystique

Bilan biologique Standard ainsi qu’une TSH, PTH ont été demandés (car le kyste parathyroïdien (rare) était un des diagnostics à évoquer)

TSH normal, PTH normal, Bilan standard normal

Notre patient a bénéficié d’un traitement chirurgical de la masse dans un premier temps, avec un examen anatomo-pathologique confirmant le diagnostic, complété par une thyroïdectomie totale associant un curage ganglionnaire et une ira-thérapie prévue.

Conclusion :
Une masse latéro-cervicale d'allure kystique peut être l’unique manifestation clinique d’un micro-carcinome thyroïdien.

Etant rare, ce diagnostic doit tout de même être évoqué devant toute masse latéro-cervicale chronique d’allure kystique chez un adulte jeune.

Le pronostic est controversé ce qui justifie une irathérapie avec une opothérapie freinatrice en complément du traitement chirurgical et une surveillance prolongée compte tenu de la lente évolutivité et de la possibilité de voir apparaître une métastase.
Étiologies rares des adénopathies cervicales chroniques de l’enfant

Y. Moussaoui*(1), A. Saheb(2)

(1) EPH Tiziouzou, Algérie, (2) EPH TZO, Algérie

Objet de la présentation: La présence d’une adénopathie cervicale chronique chez l’enfant est fréquente en pathologie ORL. Dans la majorité des cas elle est d’origine infectieuse mais elle peut être plus grave révélatrice d’une hémopathie. L’objectif de notre travail est d’évoquer les caractéristiques de certaines pathologies rares révélées par des adénopathies chroniques telles que la maladie de Kikuchi-Fujimoto (KF) et la maladie de Rosai-Destombes-Dorfman (RDD) car peu connues des cliniciens.

2. Matériel et méthodes: Étude rétrospective incluant les patients avec maladies de Kikuchi-Fujimoto et Rosai-Destombes-Dorfman

3. Résultats Nous avons colligé 5 observations dont deux enfants porteurs de la maladie de RDD âgés respectivement de 5 et 6 ans :
– le premier suivi pour leucémie aiguë lymphoblastique, ayant bien répondu au traitement antimitotique, consulte pour apparition d’adénopathies cervicales bilatérales et symétriques, indolores, bilan sanguin a éliminé une rechute de sa leucémie ;
– le deuxième orienté du service d’hématologie pour biopsie ganglionnaire devant la suspicion d’un lymphome à la cytoponction.

Une biopsie avec étude histologique des ganglions, réalisées chez les deux enfants, a confirmé le diagnostic de la maladie de RDD en montrant des ganglions d’architecture conservée dont les sinus sont dilatés avec de volumineuses histiocytes. Et trois enfants âgés respectivement de 7, 10 et 11 ans (2 filles et un garçon) chez qui le diagnostic de la maladie de Kikuchi-Fujimoto a été posé. L’examen ORL retrouve des poly-adénopathies évoluant dans un contexte fébrile, dont :
– un garçon âgé de 7 ans drépanocytaire connu, a présenté depuis 21 jours, des ADP cervicales unilatérales, indolores, atteignant 4cm de grand axe sans hépato-splénomégalie ;
– une fillette de 11 ans suivie en pédiatrie pour adénopathies multiples avec des lésions cutanées, chez qui le diagnostic de la maladie de Kawasaki a été posé et traité comme tel, mais devant la persistance des adénopathies une biopsie a été demandée ;
– une fillette de 10 ans, présentait des ADP cervicales bilatérales chroniques ; dans les 3 cas le diagnostic a été confirmé par l’étude histo-immunologique de l’adénopathie qui a montré une nécrose cellulaire avec prolifération histiocyttaire CD68.

4. Conclusion: Devant la présence d’adénopathies cervicales chez l’enfant, on ne doit pas omettre d’évoquer les affections rares. Dans le doute une adénectomie avec étude histo-immunologique permet de faire le diagnostic de ces maladies.
Ostéome récidivant révélant un syndrome de Gardner

Z.Chafiki*(1), S.Anajar(2), M.Baghdad(2), R.Abada(2), M.Roubal(2), M.Mahtar(2)

(1)Service d’ORL, hopital du 20 Aout, CHU Ibn-Rochd, Casablanca, Maroc, Casablanca, Morocco, (2)Service d’ORL et de chirurgie cervico-faciale, hôpital 20-Août, CHU Ibn Rochd, Casablanca, Maroc, , Morocco

Objet/matériel et méthodes

Le syndrome de Gardner rare, c'est une affection à transmission autosomique dominante. L'anomalie génétique est située sur le chromosome 5q 12.Nous rapportons le cas d'une patiente où le syndrome de Gardner a été découvert à l'occasion d'une récidive d'un ostéome mandibulaire ostéoïde.

Résultat :

Une fillette âgée de 13ans ; opérée il y a 18 mois pour ostéome mandibulaire gauche à l'étude anatomopathologique : ostéome ostéoïde ; qui consulte pour une masse au niveau de l'angle mandibulaire droit qui augmente progressivement de volume ;La tomodensitométrie du massif facial en faveur des lésions osseuses d'allure bénigne type exostose mandibulaire au nombre trois dont la plus volumineuse occupe la branche mandibulaire droite ;L'indication d'une exérèse chirurgicale a été posée, la patiente a bénéficié d'une ostéotomie avec des biopsies qui sont en faveur d'un ostéome ostéoïde ; une étude génétique a identifié une mutation au niveau du géne APC ; une endoscopie colorectale était sans anomalies.

Conclusion

L'expression clinique du syndrome du Gardner est une triade associant des polypes coliques ; des ostéomes de localisation multiple et des tumeurs des parties molles, des tissus sous cutanés ; c'est un modèle de prédisposition génétique à un cancer ; le traitement est souvent chirurgical dépend du siège de l’atteinte avec une surveillance adéquate .
Intérêt de l’échographie et de la scintigraphie au sestamibi dans la localisation préopératoire des adénomes parathyroïdiens dans les hyperparathyroïdies primaires

M.Sellami*(1), F.Maalej(2), A.Chakroun(2), B.Hammami(2), M.Mnejja(2), A.Ghorbel(2)

(1)Service d’ORL et de chirurgie cervico faciale. CHU Habib Bourguiba. Sfax, Tunisie, Sfax, Tunisia, (2)Service ORL du CHU Habib Bourguiba, Sfax, Tunisia

Objet de la présentation :
Evaluer le rôle de l’échographie et de la scintigraphie au sestamibi, réalisées en préopératoire, dans la localisation des adénomes parathyroïdiens dans l’hyperparathyroïdie primaire.

Matériel et méthode :
Etude rétrospective portant sur 58 patients opérés pour une hyperparathyroïdie primaire ayant eu en pré opératoire une échographie cervicale et une scintigraphie au sestamibi. Aucun patient n’a eu de chirurgie cervicale préalable. Nous avons étudié la sensibilité (Se), la spécificité (Sp), la valeur prédictive positive (VPP) et valeur prédictive négative (VPN) de l’échographie et de la scintigraphie au sestamibi dans la localisation de l’adénome parathyroïdien. Nous avons étudié les facteurs pouvant influencer la performance de ces deux explorations : la présence d’un goitre multinodulaire (GMN) associé, la taille de la glande parathyroïde pathologique et le taux de la parathormone (PTH) préopératoire.

Résultats :
La Se, la Sp, la VPP et la VPN de l’échographie dans la localisation des glandes parathyroides pathologiques étaient respectivement de 74%, 95%, 83% et 90%.

La Se, Sp, VPP et la VPN de la scintigraphie au sestamibi étaient respectivement de 91%, 97%, 91% et 95%.

Le goitre mutinodulaire associé diminue la sensibilité et la spécificité de l’échographie cervicale et de la scintigraphie.

Concernant la scintigraphie, le taux moyen de la PTH était de 562 UI/ml pour les cas de vrais positif alors qu’il a été de 238 UI/ml pour les cas de faux négatif (p=0,021).

Conclusion :
La scintigraphie au sestamibi donne une meilleure sensibilité et spécificité pour localiser un adénome parathyroïdien, et ceci est d’autant plus marqué que le taux de PTH est élevé. L’intérêt de l’échographe est essentiellement d’explorer la glande thyroïde.
L’exploration scintigraphique pré-chirurgicale de l’hyperparathyroïdie secondaire : expérience du service de médecine nucléaire de CHU de Casablanca

G. Cherkaoui Salhi*(1)

(1) CHU IBN ROCHD CASABLANCA, Casablanca, Morocco

G. Cherkaoui Salhi1, S. Choukry1, S. Taleb1, A. Guensi1
S. Anajar2, K. Choukry2, R. Abada2, S. Rouadi2, M. Roubal2, M. Mahtar2

1 : service de médecine nucléaire, CHU Ibn Rochd Casablanca, Maroc
2 : service de ORL, CHU Ibn Rochd Casablanca, Maroc

Le but de cette étude est de rapporter dans notre contexte l’apport de la scintigraphie parathyroïdienne dans l’exploration pré chirurgicale des hyperparathyroïdies secondaires.

Matériels et méthodes : il s’agit d’une étude rétrospective étalée sur cinq ans ayant colligé tous les patients suivis pour insuffisance rénale chronique terminale et adressés au service de médecine nucléaire du CHU IBN ROCHD de Casablanca pour scintigraphie parathyroïdienne dans le cadre du bilan pré-chirurgical de l’hyperparathyroïdie secondaire.

Résultats : l’étude a inclus 14 patients, l’âge moyen était de 46 ans (±16), le sex ratio était de 0.3. La scintigraphie parathyroïdienne utilisant à la fois l’étude de soustraction et double phase était positive dans 80% des cas; Une localisation unique a été retrouvée dans 35% des cas tandis que dans 45% des cas, la scintigraphie parathyroïdienne a montré plus d’un foyer d’hyperfixation cervical.

Conclusion : l’apport de la scintigraphie parathyroïdienne dans l’hyperparathyroïdie secondaire est un sujet de controverse. Toutefois, son utilisation dans notre contexte a permis de guider l’acte chirurgical dans 80% des cas.
Complications infectieuses graves dans la chirurgie majeure des cancers pharyngo laryngés

A. Daoudi*(1), S. Zitouni(2), S. Kharoubi(3)

(1) service ORL CHU Annaba Faculté de médecine de Annaba, Annaba, Algeria, (2) service ORL CHU Annaba, Annaba, Algeria, (3) service ORL CHU Annaba, Annaba, Algeria

Objet de la présentation:

Le développement de la médecine moderne est associé à l’apparition de pathologies iatrogènes liées à la difficulté d’améliorer la qualité des procédures de soins et d’entretien. La chirurgie de ses cancers pharyngo laryngé comporte une période post opératoire très lourde, l’infection hospitalière reste le paramètre le plus grave de cette période.

Matériels et méthodes:

Etude rétrospective sur 512 chirurgies totale ou partielle du carrefour pharyngo laryngé entre 1996 à 2015.

Prédominance masculine, age moyen de 44 ans avec des extrêmes de 35 - 85 ans.

Diabète : insulino dépendant:15 malades et non insulino dépendant 30 malades.

Bilan du traitement chirurgical:

420 laryngectomies totales, 20 Pharyngo laryngectomies totales, 12 Sub glosso Pharyngo laryngectomies totales, 60 Laryngectomies partielles reconstructives (CHEP).

Résultats:

Complications locales post opératoires observées:

- a/ complications locales infectieuses: problèmes de pharyngo plastie (20%), infection de la cavité opératoire (10%), fuites salivaire(20%), pharyngostome(30%).
- b/ flore bactérienne: infection mono microbienne: 10%; poly microbienne 30%.
- c/ délai d’apparition de l’infection:10 jours avec des extrêmes à j3 et j34.
- d/ germs en cause: Pseudomonasse, Acinobactere, Staphylocoque, Protéus, E coli et Serratia.

Conduite tenue après identification des germes:

- antibio thérapie adaptée avec soins locaux :30% des cas
- reprise chirurgicale dans 75% des cas consistant à faire:
  - fermeture simple de la pharyngo plastie : 45% des cas
  - fermeture de la pharyngo plastie par lambeau: 40% des cas.
- durée d'hospitalisation: en moyenne 63,15 jours avec des extrêmes de 30 à 150 jours.
- complications à distances: 6 décès dont 2 diabétiques en milieu de réanimation.

Conclusion:
Les défenses de l'organisme chez ces patients ayant subit une chirurgie lourde et mutilante sont fréquemment altérées.

La prévention des altérations de ces défenses porte sur les protocoles de mise en place et de surveillance des dispositifs introduits chez les patients (cathéters - sondes) sur le contrôle stricte de la prescription des antibiotiques et sur la qualité de l'état nutritionnel.

Si l'hygiène hospitalière est sous la responsabilité des soignants, le développement d'une lutte efficace contre les infections nosocomiales passe par la création de service d'hygiène hospitalière compétente rassemblant un personnel formé et par une volonté de considérer la lutte contre l'infection hospitalière comme un axe prioritaire dans le développement d'une médecine de qualité.
Carcinome adénoïde kystique du sinus maxillaire : à propos d'un cas

S.Turki*(1), A.Hachicha(1), A.Mardassi(2), M.Abouda(1), S.Sahtout(3)

(1)Hôpital des Forces de Sécurité Intérieure de La Marsa, Tunis, Tunisia, (2)Centre d’expertise et de médecine aéronautique, Tunis, Tunisia, (3)Cabinet Privé, Tunis, Tunisia

Le carcinome adénoïde kystique est une tumeur épithéliale maligne se développant aux dépens des glandes salivaires. Sa localisation au niveau du sinus maxillaire (à partir des glandes salivaires accessoires) est très rare et de pronostic sombre. En effet, il est caractérisé par une évolution lente et insidieuse responsable de diagnostic souvent à un stade avancé. Une chirurgie large suivie de radiothérapie post-opératoire est le meilleur garant pour en améliorer le pronostic.

**Observation**

Une patiente âgée de 60 ans, d’origine mauritanienne, s’est présenté à nos consultations pour une tumeur déformante du massif facial, évoluant depuis 6 mois. A noter qu’il y a 3 mois, et ayant au départ refusé un geste chirurgical, elle a bénéficié d’une radiothérapie type IMRT à la dose de 70 Gy, sans aucun résultat.

A l’examen, présence d’une tuméfaction jugale gauche déformante comprimant et refoulant le globe oculaire vers le haut avec diminution de l’ouverture palpébrale.

L’endoscopie nasale a retrouvé une volumineuse formation tumorale comblant la fosse nasale gauche. L’examen de l’oropharynx a mis en évidence un envahissement palatin dépassant la ligne médiane.

La biopsie a conclu à un carcinome polymorphe de type salivaire de faible grade de malignité.

L’examen tomodensitométrique a montré une tumeur du massif facial centrée sur la paroi postérieure du sinus maxillaire gauche et le palais osseux, envahissant l’orbite et l’espace rétro-zygomato-maxillaire sans extension endocrânienne.

Le bilan d’extension n’a pas retrouvé de métagastases à distance.

La patiente a été opérée par voie paralatéronasale pour une résection tumorale large avec maxillectomie et exentération orbitaire.

L’examen anatomopathologique définitif a retrouvé un carcinome adénoïde kystique avec envahissement de la berge palatine. La patiente ayant déjà été irradiée à doses pleines, il n’a pas été possible de pratiquer une nouvelle radiothérapie. Une chimiothérapie ciblée a été proposée mais la patiente est décédée avant d’entamer le traitement.

**Conclusion**

Le carcinome adénoïde kystique se caractérise par une évolution insidieuse responsable de diagnostics à des stades avancés. La conduite thérapeutique, bien établie, associe une chirurgie large suivie d’une radiothérapie post-opératoire. Il faut savoir convaincre le patient de l’importance du geste chirurgical, parfois délabrant, le plus précoce possible, afin d’améliorer le pronostic.
Les corps étrangers de l’oropharynx constituent une urgence fréquente chez l’enfant. La prise en charge obéit à une règle, tout corps étranger ayant pénétré par les voies naturelles peut être extrait par les mêmes voies.

Objectifs : la particularité de ce corps étranger et les difficultés rencontrées lors de son extraction.

Matériels et Méthodes : fille de 6 ans admise pour prise en charge d’un corps étranger, il s’agit d’un chapeau de stylo piégé au niveau de l’espace para-pharyngé, l’examen de la cavité buccale retrouve l’extrémité distale du manche du chapeau visible à travers une plaie de 1 cm entre la paroi latérale gauche de l’oropharynx sans saignement actif, la TDM mettait en évidence le corps étranger enclavé dans l’espace para-pharyngé gauche et qui venait au contact de l’axe vasculaire du cou sans lésions vasculaires.

Résultats : L’extraction était difficile vu que le chapeau était accroché comme un hameçon sous la muqueuse. Elle a été réalisée sous anesthésie générale par la voie naturelle.

Conclusion : Les corps étrangers oro-pharyngés sont assez fréquents chez les enfants. Leur extraction doit se faire tant qu’il est possible par la voie naturelle. La vraie solution au problème réside dans l’éducation des parents et la surveillance rigoureuse des enfants.


Service d’Orr et chirurgie maxillo-faciale de l'Hôpital des Spécialités de Rabat
Association tumeur de warthin et tuberculose primitive de la parotide : à propos d’un cas

R.Bouatay*(1), A.El korbi(1), N.Kolsi(2), S.Jellali(3), A.Moussa(3), K.Harrathi(3), J.Koubaa(3)

(1)Hôpital universitaire Fattouma Bourguiba de Monastir, Tunisie, (2)hôpital universitaire Fattouma Bourguiba de Monastir, Tunisie, (3)hôpital Fattouma Bourguiba de Monastir, Tunisie

La tumeur de warthin constitue la deuxième tumeur de la glande parotide représentant 14 à 30 % de toutes les tumeurs parotidiennes. La tuberculose primitive de la parotide est rare et son diagnostic préopératoire est difficile. La coexistence entre ces deux lésions est exceptionnelle, et dans la littérature, seuls quelques cas ont été rapportés.

L’objectif de ce travail est de rapporter un cas rare d’une coexistence entre tumeur de warthin et tuberculose parotidienne.

**Observation :** Il s’agit d’un homme âgé de 53 ans, sans antécédents pathologiques particuliers, adressé pour exploration d’une tuméfaction de la loge parotidienne droite évoluant depuis 5 mois augmentant rapidement de taille sans autres signes associés en particulier pas de coliques salivaires, et pas de fièvre ni sueurs nocturnes. L’examen trouvait une masse de la loge parotidienne droite de 4 cm de grand axe ferme indolore mobile sans signes inflammatoires locaux. Il n’y avait pas d’adénopathies cervicales palpables ni d’asymétrie faciale associée. L’IRM parotidienne avait montré une lésion nodulaire bien limitée de contours réguliers, encapsulée ayant un aspect multiloculaire kystique hétérogène en hyposignal T1, hypersignal T2 modérée hétérogène, avec présence d’un nodule tissulaire au sein de la lésion hypervascularisé, faisant suspecter une lésion d’allure agressive. Le patient a eu une parotidectomie exofaciale avec à l’examen extemporané tumeur de warthin. Les suites post opératoires étaient simples.

L’histologie definitive avait conclu à une tumeur de warthin associée à une tuberculose primitive. Le patient a été mis sous traitement antituberculeux après un bilan préthérapeutique correct.

**Conclusion :** La tuberculose primitive de la glande parotide est rare. Son association avec une tumeur parotidienne est exceptionnelle. Elle pose un problème diagnostique car ni la clinique, ni la biologie, ni l’imagerie ne permet d’affirmer l’étiologie tuberculeuse d’un syndrome tumorale parotidien. Le diagnostic est anatomopathologique et le traitement repose sur les antibacillaires.
Carcinome épidermoïde de la lèvre inférieure survenant sur une lésion de lupus discoïde
S.Achraf amine*(1), A.Lachkar*(2), K.Hamid(2), A.Abdenbitsen(2), F.Elayoubielidrissi(2), M.Ghailan(2)
(1)Centre hospitalier universitaire Mohammed VI D'Oujda, , Morocco, (2)CHU Mohammed VI d'Oujda, , Morocco

Introduction :
De nombreux exemples recensés dans la littérature font état d'une possible dégénérescence des lésions des muqueuses du L.E.C. Nous rapportons un cas de carcinome épidermoïde greffé sur une lésion de la lèvre inférieure chez un patient suivi pour L.E.C. au service d'ORL du CHU Mohamed VI d'Oujda.

Observation
Un homme âgé de 47 ans, sans ATCD pathologique notable, ayant une notion de photosensibilité avec notion d'exposition solaire prolongée, qui présente des plaques érythémato-violines atrophique au niveau des zones photo-exposées évoluant depuis 20 ans évoquant un lupus cutané chronique discoïde sans signe clinique,biologique ou radiologique de systématisation, Le patient a présenté un processus ulcéro-bourgeonnant de la lèvre inférieure douloureux faisant 3 cm de grand axe friable saignant au contact d'allure suspecte, évoluant depuis 2 ans, l'examen du reste de la cavité buccale étant sans particularité, par ailleurs on note des adénopathies submandibulaire et jugulo-carotidienne haute bilatérales d'allure suspecte.

La biopsie mettait en évidence un carcinome épidermoïde infiltrant bien différencié.

La panendoscopie ne révèle pas de tumeur synchrone.

Une chirurgie d'exérèse carcinologique est alors réalisée avec une plastie labiale par un lambeau de Karapandzic et un évidemment ganglionnaire bilatéral.

Discussion
Le carcinome épidermoïde est une complication rare du lupus érythémateux discoïde de longue date. L'incidence globale du carcinome épidermoïde dans le lupus érythémateux discoïde a été rapportée à 3,3%.

La lèvre inférieure est la zone la plus affecté par la transformation maligne de la lésion lupique discoïde avec une fréquence de 83,3% des cas selon Liu. Le diagnostic peut être évoqué cliniquement, ceci dit une preuve histologique est nécessaire pour confirmé la greffe carcinomateuse,

Les carcinomes épidermoïde labiaux relèvent de la chirurgie d'exérèse avec plastie de reconstruction, plusieurs techniques peuvent être utilisés; lambeau de camille Bernard, d'Abbé-Estlander, Gillies, le lambeau de Karapandzic nous semble préféré vu la rapidité de sa réalisation, mais aussi permet une reconstruction avec des lèvres continentes, sensibles, en revanche, donne une microstomie. Quelle qu'en soit la technique de reconstruction l'aspect fonctionnel est un élément primordial de toute reconstruction labiale.

La radiothérapie directe sur la lésion, et particulièrement, la curiethérapie est actuellement exceptionnelle.

Conclusion
Le risque de dégénérescence de lésions cutanées du L.E.D est minime, quoique la surveillance des cicatrices lupique reste indispensable, surtout dans notre contexte ou l’exposition au rayon UV s’ajoute comme facteur prédisposant une éventuelle transformation maligne, le traitement chirurgical s’impose dès l’apparition de lésions suspecte confirmé histologiquement.
LARYNGECTOMIES SUPRA-CRICOÏDIENNES AVEC RECONSTRUCTION A L’AIDE DES MUSCLES SOUS-HYOÏDIENS : EVALUATION ONCOLOGIQUE ET FONCTIONNELLE CHEZ 37 PATIENTS DU CHU DE CAEN ET DU CENTRE DE LUTTE CONTRE LE CANCER FRANÇOIS BACLESSE – ETUDE PRELIMINAIRE

O.Vella*(1)

(1)CHPC, Cherbourg, France

La reconstruction laryngée, après chirurgie partielle par voie externe, est nécessaire pour préserver ses trois fonctions (respiration, phonation, et déglutition). Plusieurs techniques de reconstruction après laryngectomie supra-cricoïdienne (LSC) sont décrites dans la littérature.

Notre travail consiste à analyser rétrospectivement les données oncologiques chez 37 patients traités par les équipes du CHU et du CLCC de Caen de 2005 à 2015 par LSC et reconstruction à l’aide des muscles sous-hyoidiens et à évaluer prospectivement les résultats fonctionnels. Une confrontation aux données de la littérature complète notre étude.

Nos résultats montrent un taux de chirurgie sans trachéotomie de 64.9% avec une reprise rapide de l’alimentation orale (délai moyen d’ablation de la sonde nasogastrique de 13 jours), similaires aux résultats de l’équipe de Pignat. Deux patients ont dû être trachéotomisé en postopératoire du fait d’un emphysème sous-cutané. Nos taux de récurrence locale (11.1%) et de préservation laryngée (89.8%) sont superposables aux données de la littérature. L’évaluation fonctionnelle de la voix par le score moyen au VHI30 est de 28.3 (supérieur à un traitement par radiothérapie externe ou par cordectomie laser). La fonction de déglutition est également excellente avec un score de 2.7 au DHI30, montrant une amélioration de celle-ci par ce procédé de reconstruction. Les valeurs du débit inspiratoire de pointe reste à être confirmer par d’autres études afin d’apprécier le rétrécissement de la filière pharyngo-laryngée.

Cette méthode, par les suites fonctionnelles simples, possède une place centrale dans l’arsenal thérapeutique.
INTRODUCTION La chirurgie des hyperparathyroïdies représente la quasi-totalité de la chirurgie des glandes parathyroïdes.

MATERIEL ET METHODES Il s'agit d'une étude rétrospective étalée sur 5 ans de janvier 2011 à Novembre 2016, nous avons analysé une série de 30 patients ayant bénéficié d'une parathyroïdectomie pour hyperparathyroïdie réalisée dans notre formation.

RESULTAS L'âge moyen des patients était de 43,5 ans, nous avons noté une prédominance féminine avec un sex ratio de 0,37. Onze cas ont été admis dans notre formation pour une hyperparathyroïdie primaire et 19 cas pour une hyperparathyroïdie secondaire à une insuffisance rénale chronique. Les douleurs osseuses et asthénie étaient les maîtres symptômes. Tous les patients avaient présenté une hypercalcémie avec un taux moyen de 114mg/l associée à une hyperparathormonémie moyenne de 671 pg/ml dans l'hyperparathyroïdie primaire et de 2062,5 pg/ml dans l'hyperparathyroïdie secondaire. L'échographie cervicale a permis de visualiser des nodules rattachés aux parathyroïdes chez 63% des patients, tandis pour la scintigraphie au SESTAMIBI ce taux était de 100% dans les cas où elle a été pratiquée permettant ainsi de faire un diagnostic de localisation précis. Sur les onze patients opérés pour une hyperparathyroïdie primaire dix cas ont bénéficié d'une exérèse totale d'un adénome unique et un d'une exérèse totale de plus d'un nodule alors que ceux opérés pour une hyperparathyroïdie secondaire ils ont bénéficié d'une hyperparathyroïdectomie subtotale. L'étude anatomopathologique a objectivé un adénome parathyroïdien chez 47% des patients, des adénomes multiples chez 17% des cas, une hyperplasie diffuse chez 33% des cas et 3% pour carcinome parathyroïdien. Dans notre série 96% des malades ont été opérés par voie cervicale et chez 4% patient ont a eu recours à une sternotomie pour un adénome parathyroïdien ectopique. L'évolution été favorable chez 93% des patients après un recule de 22 mois avec une normalisation biologique de la calcémie et de la PTH dans 3 mois Par ailleurs nous avons eu un cas de décès par une hypocalcémie sévère post opératoire et un cas de récidive pour carcinome parathyroïdien.

DISCUSSION ET CONCLUSION La prise en charge de l'hyperparathyroïdie primaire a nettement évolué ces dernières années grâce à l'amélioration du diagnostic de localisation préopératoire. Ceci a permis de réaliser de plus en plus de gestes unilatéraux et de chirurgie ciblée dite minimale invasive et ainsi de diminuer le coût et la morbidité. Pour la chirurgie des hyperparathyroïdies secondaire les auteurs préconisent la parathyroïdectomie subtotale pour sa morbidité moindre.
Prise en charge chirurgicale des carcinomes différenciés de la thyroïde : Expérience du service

A.Bouayed*(1), H.Tahraoui(1), C.Boubris(1)

(1)centre hospitalo-universitaire, Tlemcen, Algeria

Objectif : Analyser les aspects diagnostiques, anatomopathologiques, thérapeutiques et les résultats évolutifs (morbilité – récidives – survie) et évaluer l’atteinte ganlionnaire dans le but de contribuer à la meilleure prise en charge possible des cancers différenciés de la thyroïde dans notre contrée.


Résultats : L’examen anatomopathologique trouvait un carcinome papillaire (74,1%), vésiculaire (16,5%) ou papillaire à composante vésiculaire (9,4%). Trente patients ont eu un curage fonctionnel systématique uni ou bilatéral, une métastase ganlionnaire a été notée chez neuf d’entre eux. Quarante-six patients ont eu un prélèvement ganlionnaire uni ou bilatéral, un curage fonctionnel a été pratiqué chez six d’entre eux devant un examen extemporané positif. Les taux de rémission, de récidive et de métastases étaient respectivement de 83,3%, 6,7% et 10% dans le premier groupe, et de 89,3%, 4,3% et 6,4% dans le deuxième groupe. Par ailleurs, un décès a été observé chez deux patients du deuxième groupe (1,4%). Aucune différence statistiquement significative n’a été retrouvée entre les deux bras.

Conclusion : Les résultats dans notre série mettent en évidence l’intérêt du prélèvement sus-claviculaire et jugulaire inférieur permettant d’éviter le curage cervical fonctionnel systématique.

Mots-clés : Cancer différencié, thyroïde, prélèvement ganlionnaire
Traitement chirurgical de l’hyperparathyroïdie secondaire : Indications et Résultats

F. El Hedhili*(1), S. Mezri*(2), C. Zgolli(2), R. Ben mhamed(3), K. Akkari(2)

(1) Faculté de Médecine de Tunis, Ariana, Tunisia, (2) Hôpital Militaire d’Instruction principale de Tunis, Tunisia, (3) Hôpital Militaire d’Instruction Principale de Tunis, Tunisia

Objet : L’hyperparathyroïdie secondaire représente une situation fréquente en cas d’insuffisance rénale au stade de l’hémodialyse. Devant l’échec du traitement médical des troubles phosphocalciques, la chirurgie s’impose. Par ce travail nous rapportons l’expérience de notre équipe et faisons le point sur les indications du traitement chirurgical de l’hyperparathyroïdie secondaire.

Méthodes : notre étude est rétrospective portant sur 18 patients pris en charge pour hyperparathyroïdie dans le service d’ORL de l’Hôpital Militaire d’Instruction principale de Tunis sur une période de 3 ans allant de 2013 à 2016.

Résultats : L’âge moyen de nos patients était de 38,6 ans. L’insuffisance rénale étaient associée multiples comorbidités dont l’hypertension artérielle dans 8cas. Huit patients était en hémodialyse depuis 8ans, trois patients depuis 6ans, quatre patients depuis 5ans et trois patients depuis 4ans. Cette hyperparathyroïdie a été asymptomatique dans 27,7% des cas et manifester par des symptômes osseux dans 66,6% des cas. La calcémie moyenne en préopératoire était de 2,45 mmol/l. L’hypercalcémie a été présente chez 64,6% des cas. La phosphorémie moyenne était de 1,28mmol/l. Le taux de PTH moyen en préopératoire était de 1643,4 pg/ml avec des extrêmes de 480pg/ml à 5522pg/ml. Le dosage de la vitamine D n’a été réalisé que dans 44,4% des cas. Les phosphatases alcalines avaient un taux moyen de 430UI/l. L’échographie cervicale n’a objectivé l’hyperplasie d’une ou de plusieurs parathyroïdes que dans 50% des cas. La scintigraphie MIBI réalisée dans 38,8% des cas, a montré une fixation dans 38,8% des cas. Tous nos patients ont eu une parathyroïdectomie 7/8e. L’examen extemporané a conclu à du tissu parathyroïdien dans 88,8% des cas. L’examen anatomopathologique définitif a conclu à une hyperplasie parathyroïdienne dans 83,3% des cas. La surveillance post opératoire par la cinétique de la calcémie et celle de la PTH a montré une normalisation des deux paramètres dans 77,7 % des cas et 72,2% des cas respectivement. Le taux d’échec thérapeutique était de 27,7%. Un de nos patients proposé pour greffe rénale a eu une thyroïdectomie totale en association avec la parathyroïdectomie et l’examen histologique a conclu à un carcinome papillaire de la thyroïde.

Conclusion : La parathyroïdectomie subtotale est le traitement chirurgical de choix des hyperparathyroïdies secondaires à l’IRC sévères ou rebelles au traitement médical. Le geste thyroïdien associé peut révéler d’autres pathologies concomitantes. La prise en charge nécessite une parfaite collaboration entre néphrologue, anesthésiste et chirurgien.
LE CANCER DIFFERENCIE DE LA THYROÏDE CHEZ L’ENFANT ET L’ADOLESCENT (A PROPOS DE 22 CAS)

S.Anajar*(1), J.Hassnaoui(2), R.Abada(3), S.Rouadi(3), M.Roubal(4), M.Mahtar(3)

(1)CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (2)CHU IBN ROCHD CASBLANACA MAROC, Casablanca, Morocco, (3)CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (4)chu Ibn Rochd hôpital 20 août, Csablanca, Morocco

OBJECTIF : Mettre en relief les particularités du cancer de la thyroïde chez l’enfant et l’adolescent, et d’évaluer nos résultats par rapport à la littérature internationale a travers une série de cas la plus représentatif au MAROC : 22 cas.


RESULTATS : L’âge moyen de nos patients était de 14 ans, avec une sex-ratio 3,4, la plupart de nos patients ont consulté pour un nodule thyroïdien, associé dans 22,7% des cas à une adénopathie cervicale, et dans 9,1% à des signes de compression.

L’ensemble des patients ont bénéficié d’une thyroïdectomie totale, suivie d’un curage ganglionnaire dans 31,82%. Le diagnostic de cancer thyroïdien a reposé sur l’examen anatomopathologique de la pièce opératoire, qui a objectivé un carcinome papillaire dans 95,4% des cas, et un carcinome vésiculaire dans 4,5%. Le traitement par l’iode radioactif 131 a été réalisé dans 100% des cas. Par la suite tous nos patients ont été mis sous hormonothérapie thyroïdienne. Une surveillance étroite et régulière a permis de détecter des métastases ganglionnaires chez 3 patients, et les métastases à distance chez 4 patients.

CONCLUSION : Le cancer différencié de la thyroïde de l’enfant et l’adolescent est une entité rare mais agressive, son traitement se base sur la chirurgie, associée à l’irathérapie donnant un pronostic excellent.
LA PRISE EN CHARGE D'HYPERPARATHYROIDIE PRIMAIRE EXPERIENCE DU SERVICE

C.Adel*(1), N.Abes(2), S.Benlahreche(2), F.Belbekri(2), K.Messaoudi(2)

(1)CHU constantine algerie, , Algeria, (2)chu constantine, , Algeria

HYPERPARATHYROIDIE PRIMAIRE EXPERIENCE DU SERVICE

Nous rapportons notre expérience dans la prise en charge de l'hyperparathyroïdie primaire

Et nous comparons nos résultats avec les données de la littérature

Étude rétrospective descriptive des cas d’hyperparathyroïdie primaire hospitalisés au sein du service d’endocrinologie CHU Constantine et opérés au sein de notre service ORL CHU Constantine Algérie

Période allant du 01/01/2014 au 31/12/2015 (2 ans)

Matériel

Dossiers tirés de l’archive du service.

Les dossiers inclus: ceux classé comme hyperparathyroïdie primaire.

21 dossiers au total.

Résultats

Nous avons retrouvé 21 cas d’hyperparathyroïdie primaire hospitalisés durant une période de 2 ans (2014-2015)

AGE MOYEN: 50 ans (19 -79 ans)

Sexratio 11F / H

2 cas d’hyperparathyroïdie non sporadiques, un NEM 2A et un cas de carcinome parathyroïdien avec une polykystose renale.

Circonstances de découverte :signes d’hypercalcémie 14% des cas, complication d’hypercalcémie (rénales, osseuses…)72% découverte fortuite 14%.

Biologiquement : CALCEMIE corrigée moyenne=116 mg/l (88-189).PTH moyenne =931 pg/ml (65-3000).vitD moyenne=10 ng/ml (3-32)

Tous nos malades ont bénéficié d’une échographie cervicale et une scintigraphie MIBI, et 6 malades d’une TDM cervicomiastinale.

60 % ont bénéficié d’une chirurgie

Le résultat anapathe a montré un adénome parathyroïdien dans tous les cas, sauf un seul (carcinome parathyroïdien)

On n’a pas note de paralysie recurrentielle.

Normalisation de la PTH dans 79%

Conclusion
La parathyroidectomie est le traitement de choix de l'hyperparathyroïdie primaire chez les patients jeunes et ceux avec des complications. Le traitement médicamenteux reste une alternative, pour les sujets âgés, ou avec des risques pour l'anesthésie.
Le nerf laryngé inférieur non récurrent: à propos d’un cas

M. Sellami*(1)

(1) CHU BEJAIA, Bejaia, Algeria

Introduction :
Le nerf laryngé inférieur non récurrent est une variation anatomique rare. Les anomalies du trajet du nerf récurrent en particulier sa non récurrence le rend difficile à identifier et très vulnérable durant l’acte chirurgical.

Le diagnostique préopératoire de la non récurrence du nerf laryngé inférieur est difficile.
Un nerf laryngé inférieur droit non récurrent est suspecté devant une exploration radiologique montrant une anomalie de l’artère sub clavière droite.
Un nerf laryngé inférieur gauche non récurrent est suspecté devant un cas de situs inversus.

Buts :
Mettre en avant une variation de trajet anatomique du nerf laryngé inférieur ou nerf récurrent, véritable danger chirurgical au cours d’une thyroïdectomie.

Matériel et méthodes :
Étude rétrospective sur un cas présentant un nerf récurrent non récurrent.

Résultats :
M. S, patiente âgée de 31 ans, sans antécédents notables, qui a bénéficié d’une thyroïdectomie totale pour goitre multi-hétéro-nodulaire.
Les nerfs laryngés inférieurs ont été systématiquement recherchés et identifiés en per-opératoire.
À droite, le nerf laryngé inférieur se détachait directement du nerf vague pour rejoindre le larynx.

Conclusion :
Le nerf laryngé inférieur est caractérisé par ses grandes variations anatomiques, en particulier du côté droit.

Puisque c’est pas tous les nerfs laryngés inférieurs non récurrents qui sont associés à une anomalie vasculaire, une bonne connaissance de l’anatomie et une dissection méticuleuse sont essentielles pour l’identification de toute variante du nerf laryngé inférieur et éviter sa blessure durant l’acte chirurgical thyroïdien.
La myostatine et l’activine A, deux membres de la superfamille des TGF-β, sont des facteurs tumoraux régulateurs de la masse musculaire squelettique. Chez l’homme, des concentrations plasmatiques élevées d’activine A ont été observées chez des patients cancéreux et en particulier dans les sous-populations cachectiques, suggérant leur implication dans la survenue de la cachexie. L’objectif principal était d’étudier les modifications des concentrations plasmatiques d’activine A, myostatine et follistatine associées aux cancers des voies aéro-digestives supérieures. Les objectifs secondaires étaient d’étudier leur influence sur la survenue de la cachexie, d’apporter la preuve d’une sécrétion tumorale de ces facteurs et de déterminer les effets de l’exérèse tumorale sur leurs concentrations plasmatiques. 55 patients ont été inclus dans l’étude : 32 dans le groupe cancer (exclusivement type histologique de carcinome épidermoïde) et 23 dans le groupe contrôle. Les patients ont bénéficié d’une évaluation nutritionnelle complète et de prélèvements multiples : sanguin avant et 7 jours après chirurgie, biopsies musculaires, biopsies tumorales. Les concentrations plasmatiques de myostatine, activine et follistatine ont été mesurées avant et après chirurgie de résection tumorale. Les concentrations de myostatine, activine A et follistatine ont également été mesurées dans un milieu d’incubation d’une biopsie tumorale. L’activine A et la follistatine plasmatiques étaient significativement augmentées dans le groupe cancer (320 vs 203 pg/ml ; p<0.001) (3593 vs 2148 pg/ml ; p<0.001), tandis que la myostatine plasmatique était significativement diminuée dans ce groupe (1542 vs 2100 pg/ml ; p=0.010). De façon surprenante, les analyses au 7ème jour post-opératoire ont mis en évidence une augmentation de l’activine plasmatique (379 vs 320 pg/ml ; p<0.001) tandis que les concentrations de myostatine et follistatine n’étaient pas modifiées. L’inflammation systémique post-opératoire majeure est un facteur explicatif probable de ce résultat. L’incubation de biopsie tumorale a permis la détection systématique dans le milieu de myostatine et d’activine A, apportant une preuve solide d’une production tumorale de ces facteurs par les tumeurs de type carcinoma épidermoïde. Le système myostatine/activine A est modifié dans un contexte de cancer des voies aéro-digestives supérieures. L’activine A semble particulièrement jouer un rôle dans la survenue de la cachexie tandis que la follistatine aurait un rôle protecteur de la masse musculaire. Ce système pourrait être une cible thérapeutique visant à réduire la cachexie dans un contexte de cancer afin d’améliorer la qualité de vie et la survie des patients.
Les clefs de la réussite d'une laryngectomie partielle supracrlicoidienne (LPSC) avec cricoxyoidoépiglottopexie (CHEP).

O. Laccourreye*(1)

(1) Université Paris Descartes Sorbonne Paris Cité, Service d’ORL, HEGP, APHP., Paris, France

The technical keys for a successful supracricoid partial laryngectomy (SCPL) with cricohyoidoepiglottopexy (CHEP).

Les clefs de la réussite d’une laryngectomie partielle supracricoidienne (LPSC) avec cricoxyoidoépiglottopexie (CHEP).

Purpose:

The current course, based on a university teaching database comprising more than 300 patients with a minimum of 5 years of follow together with videos of fresh cadaver dissection, clinical cases and a review of the medical literature devoted to supracricoid partial laryngectomy (SCPL) with cricohyoidoepiglottopexy (CHEP), wishes to precise the keys that allow to achieve the best functional outcome after this specific partial laryngectomy in the face of selected glottic cancer.

The main objectives of this instructional course are:

- To describe and explain the surgical anatomy that allow for physiologic phonation, respiration and swallowing after SCPL-CHEP.
- To underscore the key technical points as well as the perioperative management that results in a successful SCPL-CHEP.
- To document the main operative errors to avoid when performing SCPL-CHEP as well as the long term (>10 years) functional outcome.
- To analyse the impact of various variables such as age, gender, comorbidity, pre and postoperative radiation therapy on the functional outcome.

By the end of the course the instructor from the Paris Descartes University hope that the audience will have expanded their knowledge in the management of patients with selected glottic carcinoma amenable to a supracricoid partial laryngectomy (SCPL) with cricohyoidoepiglottopexy (CHEP).
Lésions bénignes pseudo-sarcomateuses à localisation cervicale

S. Jbali*(1), S. Kedous(2), S. Dhamбри(2), H. Belaid(2), S. Mahfoudhi(2), S. Touati(2), S. Gritli(2)

(1) Institut Salah Azaiez de Tunis, Tunis, Tunisia, (2) Institut Salah Azaiez, Tunis, Tunisia

Parmi l’ensemble des tumeurs des tissus mous, les lésions bénignes sont les plus fréquentes. Parmi les lésions bénignes biopsiées un certain nombre présente un aspect clinique et/ou histologique trompeur, orientant à tort vers le diagnostic de sarcome. Le diagnostic de sarcome entraînera, en effet, une exérèse chirurgicale large, parfois délabrante, suivie dans la plupart des cas d’une radiothérapie à haute dose. Le compte rendu anatomo-pathologique constituera, ainsi, l’élément clef pour la décision thérapeutique.

Nous rapportons le cas d’un patient âgé de 23 ans, sans antécédents pathologiques notables qui consultait pour une masse sus claviculaire droite lentement évolutive. L’imagerie trouvait une formation tumorale développée aux dépens des muscles scalènes vascularisée de 24 mm. La cytoponction à l’aiguille fine trouvait un aspect plutôt en faveur d’une lésion maligne. Opéré par voie latéro-cervicale, la tumeur semblait envahir le muscle scalène ventral en peropératoire. Même l’examen extemporané parlait d’une tumeur mésenchymateuse suspecte. En l’absence d’atteinte ganglionnaire associée, on a préféré attendre l’histologie définitive. Celle-ci concluait à une fasciite nodulaire bénigne.

A travers cette observation, nous passerons en revue les principaux groupes de lésions bénignes des tissus mous peuvent être confondues avec un sarcome qui ne sont pas l’apanage exclusive de la région cervicale. Ces lésions varient légèrement en fonction de l’âge. Ainsi, chez l’enfant, surtout avant un an, certaines lésions sont particulièrement inquiétantes sur le plan histologique alors qu’elles sont parfaitement bénignes. Ces lésions sont rares et très variées.

En somme, le diagnostic de malignité, notamment de sarcome, est de la responsabilité du pathologiste qui doit donc exiger d’une part d’être en possession des informations cliniques indispensables et d’autre part d’obtenir un prélèvement correct. Dans le cas contraire et en cas d’hésitation diagnostique, il se doit d’émettre dans son compte rendu des réserves quant à la certitude de son diagnostic.
INTRODUCTION: La Laryngectomie Totale est l'exérèse totale du larynx (BILLROTH); elle concerne les cas classés T3 et T4 (immobilité ; sous glotte ; loge hyo-thyro-épiglottique ; extra-laryngée), C'est la technique chirurgicale la plus couramment utilisée dans le cancer du larynx . Le cancer du larynx occupe la 7ème localisation dans notre pays et la 1ere (vads)

Objet de la présentation: Analyser les résultats carcinologiques
- Analyser les résultats fonctionnels
- Analyser les causes d’échec

MATERIEL ET METHODES: En 10 ans de 2006 à 2015 : 594 patients ont été opérés dont 403 LT (376 LT et 27 LT R ), 150 CHEP et 41 cordectomies

Age moyen: 55 ans (extrêmes: 29-79 ans)
Sexe: 192 hommes/37 femmes

La LT ou Pharyngo-Laryngectomie Totale ou Pharyngo-Laryngectomie Circulaire avec évidement cellulo-ganglionnaire bilatérale de principe constitue le traitement de référence suivi de radiothérapie post-op pour les cancers avancés du larynx.

RESULTATS: Blessure des gros vaisseaux: 32 patients (VJI, C E)
- Atteinte nerveuse: XII (01), XI(03)
- Atteinte du dôme pleural: 00 cas
- Fermeture sous tension du néo-pharynx : 09 CAS

CONCLUSION : La Laryngectomie Totale garde une place importante dans l'arsenal thérapeutique de la pathologie néoplasique du larynx malgré qu'elle reste délabrante et mutilante pour le malade, son seul handicap est la perte de la voix au profit d’une guérison presque totale, Cette technique chirurgicale nécessite une équipe expérimentée (orl, réanimateur, technicien, diététicien, orthophoniste et psychologue) pour être au chevet de ce patient rendu handicapé.

UNE SENSIBILISATION AUSSI BIEN DU CORPS MEDICAL QUE DU PUBLIC RESTE UN ATOUT MAJEUR POUR UNE PRISE EN CHARGE AUSSI RAPIDE QUE POSSIBLE.

Dr Ainouche-Dr Alloune - Pr Djennaoui- service ORL-CHU-MUSTAPHA-ALGER
Réponse thérapeutique des métastases osseuse des cancers différenciés de la thyroïde (à propos de 52 cas)

S.Choukry*(1)

(1)CHU Ibn Rochd, Casablanca, Morocco

S. Choukry1, G. Cherkaoui1, J. Benouhoud1, A. Guensi1
S. Anajar2, K. Choukry2, R. Abada2, S. Rouadi2, M. Roubal2, M. Mahtar2
1: Service de médecine nucléaire du CHU Ibn Rochd Casablanca
2 : Service d’ORL de l’hôpital 20 Aout Casablanca

Introduction
Le cancer de la thyroïde est un cancer relativement rare, il représente 1% de l’ensemble des cancers.
La majorité des cancers différenciés de la thyroïde (CDT) ont une évolution lente, une extension le plus souvent loco-régionale et un bon pronostic. Cependant, certains peuvent se compliquer de métastases à distance.
Le poumon est le 1er site métastatique des cancers thyroïdiens, suivi de la localisation osseuse, qui sont symptomatique dans 80% des cas, se présentant cliniquement sous forme de douleur, tuméfaction ou fracture. Elles sont ostéolytiques et difficile à mettre en évidence sur la radiographie.

But du travail :
Le but de notre travail est d’évaluer la réponse thérapeutique à l’irathérapie chez les patients atteints de CDT métastatique à l’os.

Mathériels et méthodes :
Notre étude inclus tous les patients admis pour CDT, ayant bénéficié d’un complément thérapeutique par irathérapie à l’iode 131, entre Janvier 2009 et Aout 2015 dans le service de médecine nucléaire du CHU Ibn Rochd.

Résultats :
Parmi les 643 cas étudiés, 52 ont présenté des métastases osseuses (8%) retrouvés au balayage post-irathérapie.
L’âge moyen des patients était de 36ans, les métastases osseuses étaient observées chez 41 femmes (78,8%) et 11 hommes (21,1%).
Le type histologique de la tumeur primitive était papillaire dans 63% des cas et vésiculaire dans 37% des cas.
Les localisations osseuses étaient au niveau du rachis dorso-lombaire essentiellement, au niveau du gril costal, du fémur et des os du bassin, les lésions étaient multifocales dans 77% des cas.
Une réponse complète était obtenue chez 13 patients (25%), une réponse partielle chez 5 patients (9.61%) et absence de réponse chez 34 patients (65.39%)
Conclusion :

L’os est le 2ème site métastatique du cancer de la thyroïde.

Administrar des doses élevées d’131 est partiellement bénéfique à ces patients, ce qui justifie le recours à plusieurs cures d’irathérapie en respectant les limites de radio toxicité.
KTT dégénéré et tumeur thyroïdienne
(1)hôpital sidi bouzid, , Tunisia, (2)Hôpital la RABTA, Tunis, Tunisia, (3)hopital la rabta, , Tunisia

Objet de la présentation :
Nous rapportons un cas d’association rare d’un kyste de tractus thyréoglosse chez un adulte avec tumeur thyroïdienne et dont l’étude anatomopathologique était en faveur d’un microcarcinome papillaire du KTT sans atteinte thyroïdienne.

Materiels et méthodes :
Il s’agit d’une femme de 59 ans, ayant consulté pour une tuméfaction cervicale antérieure augmentant progressivement de volume, sans signe de compression.

Resultats
L’examen clinique avait mis en évidence une tuméfaction cervicale antérieure médiane au niveau de la région préalaryngée, arrondie lisse, régulière de 1 cm de diamètre, de consistance rénitente mobile à la déglutition sans signe inflammatoire à son niveau. La palpation de la loge thyroïdienne avait révélé la présence d’une masse basi-cervicale antérieure de 03cm ferme mobile à la déglutition. Il n’existait pas d’adénopathies cervicales palpables.

L’échographie cervicale avait objectivé au niveau de la tuméfaction une image kystique finement hétérogène mesurant 16X09 mm, avec une glande thyroïde en place et qui était le siège, au niveau du lobe gauche, d’un nodule ovalaire de 32X17X14 mm de diamètre classé TIRADS III.

Une résection chirurgicale du KTT a été réalisée selon la technique de Sistrunk emportant en bloc le kyste avec le corps de l’os hyoïde associée à lobo-isthmectomie gauche. Les résultats anatomopathologiques montraient un foyer de carcinome papillaire au sein du kyste sans envahissement locorégional. . L’examen histologique de la thyroïde était normal excluant toute métastase d’un carcinome thyroïdien primitif.

La patiente était mise sous traitement freinateur.

Conclusion :
Les kystes du tractus thyréoglosse sont les plus fréquentes des dysembryoplasies cervicales. La dégénérescence maligne sur reliquats du tractus représente 1 % des kystes opérés. Cependant, sa prise en charge thérapeutique et la surveillance, en l’absence d’atteinte thyroïdienne, demeurent un sujet de débat.
Cancer de la thyroïde chez des patientes antérieurement traitées pour cancer de sein

S. Choukry*(1)

(1) CHU Ibn Rochd, Casablanca, Morocco

S. Choukry1, J. Benouhed1, G. Cherkaoui, A. Guensi1
S. Anajar2, K. Choukry2, R. Abada2, S. Rouadi2, M. Roubaiz2, M. Mahtar2

1: Service de médecine nucléaire du CHU Ibn Rochd Casablanca
2 : Service d’ORL de l’hôpital 20 Aout Casablanca

Introduction:
Au Maroc le cancer du sein constitue un véritable problème de santé public, il représente le cancer le plus fréquent chez la femme et cause un nombre important de décès du fait du retard diagnostic.

Contrairement, le cancer de la thyroïde est relativement rare et de bon pronostic, avec une prédominance féminine

But de travail :
Le but de cette étude est de décrire les caractéristiques des patientes admises pour un cancer différencié de la thyroïde et traitées auparavant pour un cancer du sein.

Matériel et méthodes:
L’étude a inclus toutes les patientes admises entre janvier 2010 et décembre 2016 au service de médecine nucléaire du CHU Ibn Rochd de Casablanca pour cancer différencié de la thyroïde et qui ont été traitées pour cancer du sein.

Parmi les 1700 cas étudiés, 7 patientes avaient un antécédent de cancer du sein.

Résultats:
Tous les cas retrouvés étaient de sexe féminin, d’âge variant de 39 à 70 ans, avec une moyenne d’âge de 52,3 ans, dont 3 patientes atteintes de cancers du sein avant 50 ans. Les patientes ont été traitées pour leur cancer du sein et considérées guéries.

Deux patientes présentaient des microcarcinomes papillaires, trois carcinomes papillaires de variante vésiculaire et deux carcinomes papillaires de variante oncocytaire.

Plusieurs études intéressant l’association de cancer du sein et de la thyroïde définissent des critères de risque potentiel de développer un cancer de la thyroïde après un cancer du sein, et incitent une vigilance chez ce groupe de patientes.

Conclusion:
Bien qu’aucune confirmation des études réalisées dans ce sens n’a été faite, il semble y avoir une relation étroite entre l’incidence du cancer du sein et de la thyroïde rendant souhaitable un suivi régulier de ces patientes.
cancer thyroïdien étendu au larynx

S.Benyahia*(1)

(1) faculté de médecine d’alger chu mustapha service orl et ccf, Algeria

1. si le cancer de la thyroïde est diagnostiqué et traité à un stade précoce, meilleure serait l’issue de la maladie, nous vous proposons 5 cas de cancers thyroïdiens localement avancés et étendus aux larynx, leurs prise en charge.

2. nous avons pris en charge au service orl et ccf du chu Alger centre 5 cas de patients atteints de néoplasie thyroïdienne étendus au larynx, l’Age moyen était 55 ans (45 - 69 ans) 4 hommes pour 1 femme, adressé pour cure chirurgicale, l’exploration endoscopique a mit en évidence une réduction du diamètre et de la filière trachéale, source de symptomatologie clinique a type de dyspnée au 2 temps, la cytoponction a été contributive dans 3 cas sur 5, résultats ayant conclus a un carcinome papillaire, et 2 cytologie bénigne, la tomodensitométrie cérvido-médiastino thoracique a objectivé une tumeur thyroïdienne infiltrant la trachée dans 3 cas sur 5, le bilan hormonal chez tout nos patients s’est révélé sans particularités, les quartes patients de sexe masculin ont tous des facteurs de risque que sont le tabac et l’alcool mais sevré depuis plus de 15 ans en moyenne.

3- tout nos patients ont bénéficié d’une cure chirurgicale avec un accord préalable des patients quand a la possibilité d’une trachéotomie définitive, thyroïdectomie totale avec curage centrale, associé à une laryngectomie totale, du fait de l’impossibilité de conserver une armature cartilagineuse suffisante, les suites opératoires ont été classique, 1 cas d’hématome post opératoire, 2 cas de crise de tétanie dut a une hypocalcémie post opératoire résolutive par supplémentation calcique, un pharyngostome a été noté dans 2 cas sur 5, qui ont nécessité des soins locaux, et fermé au bout de 21 jours. Le résultats de l’examen de la pièce opératoire a été en faveur de carcinome vésiculaire dans 3 cas et papillaire dans 2 cas, les ganglions jugulo-carotidiens et récurentiels non envahies, ils ont bénéficié dune 1ra thérapie sans radiothérapie externe associée ; a ce jour tout les patients sont vivants sans récidive locale, ni ganglionnaire, pas de métastases a distance a 2 ans.

4- le cancer de la thyroïde étendu au larynx, est rare, est de prise en charge classique maîtrisable dans sa composante cervicale.
LA CHIRURGIE THYROIDIENNE ET LA RECHERCHE DU RECURRENT : QUELLE PLACE POUR LA DISSECTIO RETROGRADE

K.Fatogoma issa*(1), K.Mohamed amadou(1), D.Kassim(1), S.Soumaoro(1), K.Singaré(1), A.Alhousseini(2), T.Samba karim(1)

(1)CHU GABRIEL TOURE, , Mali, (2)CHU GABRIEL TOURE, Bamako, Mali

Objectifs : Evaluer la technique de dissection rétrograde et ses résultats.


Résultat : Nous avons réalisé 21 thyroïdectomies dont 17 lobisthmectomies, 3 thyroïdectomies totales et 1 thyroïdectomie subtotale. Nous avons disséqué 25 nerfs dont 19 NR droite et 6 N R à gauche. Les variations anatomiques du nerf ont concerné : les divisions extra laryngées (bifurcation, trifurcation) dans 12 cas, le nerf récurrent non récurrent dans un cas. Le nerf était tronculaire dans 13 cas. Le trajet du nerf a été postéro-latéral par rapport au ligament de Berry dans 17 cas et passait entre les fibres dans 4 cas. Le trajet du nerf par rapport à l’artère thyroïdienne inférieure était retro vasculaire dans 18 cas, pré vasculaire dans 3 cas et transvasculaire dans 3 cas. La branche postérieure de l’artère thyroïdienne inférieure a été visualisée dans les tous cas. Aucun cas de lésion nerveuse recurrentielle n’a été noté.

Conclusion : La technique de dissection rétrograde dans la chirurgie thyroïdienne mérite d’être vulgarisée en zone sahélienne, étant donné sa faible morbidité telle que témoigne nos résultats dessus.
Tuberculose thyroïdienne simulant un carcinome anaplasique : à propos d'un cas

S. Anajar*(1), R. Abada(2), Z. Chafiki(3), S. Rouadi(3), M. Roubal(4), M. Mahtar(4)

(1) CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (2) Chu Ibn Rochd Hopital 20 aout, Casablanca, Morocco, (3) Chu Ibn Rochd 20 août, Casablanca, Morocco, (4) Chu Ibn Rochd Hôpital 20 août, Casablanca, Morocco

INTRODUCTION : La tuberculose est une infection bactérienne chronique provoquée par une bactérie appartenant au complexe Mycobacterium tuberculosis.

La localisation thyroïdienne est une forme rare de la tuberculose extrapulmonaire décrite initialement par Lebert en 1862. Sa fréquence est estimée entre 0,1–1 % dans les séries cliniques et entre 2–7 % sur les données autopsiques. Elle se définit par la présence du bacille de Koch (BK) ou l’existence de lésions histologiques spécifiques dans le tissu thyroïdien.

Cette affection peut revêtir différentes formes cliniques ce qui rend le diagnostic difficile, son traitement est simple et son pronostic dépend de l’association à d’autres localisations.

Le but de notre travail est de présenter un tableau de tuberculose thyroïdienne simulant un cancer anaplasique de la thyroïde, de discuter les modalités diagnostiques et thérapeutiques de cette localisation.

MATÉRIELS ET MÉTHODES : Patiente âgée de 70 ans, suivie qui présente depuis 4 mois une tuméfaction latéro-cervicale gauche dure et fixe par rapport aux deux plans cutané et profond avec une peau en regard légèrement inflammatoire, d'évolution rapidement progressive sans signes compressifs ni signes de dysthyroïdie ni signes généraux associés.

Une tomodensitométrie cervicale a été demandée montrant une masse latéro-cervicale gauche plongeant en sous claviculaire de densité hétérogène et de contours flous envahissant l’isthme et le lobe thyroïdien gauche. Ce processus envahit le tissu sous cutané et refoule la trachée à droite.

Une biopsie de la masse avec étude anatomopathologique a été faite montrant un tissu fibreux très inflammatoire siège d’une inflammation granulomateuse riche en cellules épithélioïde et géantes avec de petits foyers de nécrose compatible avec une tuberculose. La patiente a été mise sous traitement antibacillaire. L’évolution après la fin du traitement antibacillaire a été favorables.

RÉSULTATS ET CONCLUSION : La localisation thyroïdienne de la tuberculose est une forme rare, même dans les zones endémiques comme le Maroc.

Les auteurs soulignent la relative résistance du corps thyroïdien en raison de sa bonne oxygénation (vascularisation riche) et du caractère bactériostatique des hormones thyroïdiennes, cela expliquerait la rareté de cette localisation. Le diagnostic de tuberculose thyroïdienne reste difficile et Le tableau de cancer anaplasique est exceptionnel.
Titre : Les Cancers thyroïdiens révélés par des métastases : étude rétrospective a propos de 16 cas

B.Belhoucha*(1), K.Hssaine(1), A.Raji(1)

(1)CHU MED VI MARRAKECH, , Morocco

Resumé :
Introduction :
Les métastases révélatrices des cancers thyroïdiens sont rares ; la mortalité est > à 50% à un an en cas de métastases révélatrices.

Objectif : étudier le profil épidémiologique, clinique et thérapeutique des cancers de la thyroïde révélée par des métastases.

Matériels et méthodes : Il s’agit d’une étude rétrospective incluant 16 patients pris en charge pour cancer de la thyroïde révélée par des métastases.

Résultats :
14 patients ont bénéficié d’une intervention chirurgicale pour leurs métastases. 2 patients ayant des métastases pulmonaires ont bénéficié d’une ponction biopsie pleurale a but diagnostic.

La thyroïdectomie totale a été effectuée chez 14/16 nos patients. Le curage ganglionnaire a été effectué chez 12 patients (75%). la radiothérapie des sites métastatiques n’a pas montré d’amélioration notée en dehors des soins palliatifs significatifs pour nos patients avec une survie ≥ 5 ans chez 07 patients qui n’ ont pas reçu de radiothérapie externe . La rémission complète a été constatée dans 8 cas (50 %).

Conclusion :
Le pronostic d’un cancer thyroïdien s’aggrave lorsqu’il est révélé par une métastase.

le traitement chirurgical des métastases des cancers thyroïdiens donne de bons résultats fonctionnels et améliore la qualité de vie même en cas de tumeurs géantes ou traitées au stade de complications mécaniques graves ; la lenteur d’évolution des cancers thyroïdiens pose la question du traitement chirurgical précoce des métastases.

: 

Introduction:
The revealing metastases of thyroid cancers are rare; mortality is> 50% at one year in case of revealing metastases.

Materials and Methods: This is a retrospective study including 16 patients treated and followed for thyroid cancer revealed by metastases.

Results:
14 patients underwent surgery for their metastases. 2 patients with lung metastases underwent pleural biopsy was diagnostic purposes. Total thyroidectomy was performed in 14/16 patients. 2 patients underwent debulking for the adhesion of the primary tumor. The lymphadenectomy was performed in 12 patients (75%), radiotherapy for metastatic sites showed no improvement
noted without significant palliative care for our patients with ≥ 5 years survival in 07 patients which do not receive it.

CONCLUSION:

Prognosis of thyroid cancer worsens when revealed by a metastasis. surgical treatment of thyroid cancer metastases gives good functional results and improves the quality of life even in case of giant tumors or treated at the stage of serious mechanical complications; the slow evolution of thyroid cancer raises the question of early surgical treatment of metastases
Syndrome de Tolosa-Hunt, à propos d’une observation

M.Bellakhdhar*(1), A.Cheniti(2), M.Mejbri(3), W.Kermani(3), M.Ghamem(3), M.Abdelkefi(3)

(1)CHU Farhat Hached, Sousse, Tunisia, (2)service ORL et CCF Farhat Hached, Sousse, Tunisia, (3)service ORL Farhat Hached, Sousse, Tunisia

but: rapporter un cas rare du syndrome de Tolosa- Hunt, discuter ses aspects cliniques, radiologiques et modalités thérapeutiques.

Matériel et méthodes :
Nous rapportons un cas du syndrome de Tolosa- Hunt colligées au service ORL Farhat Hached de Sousse.

Résultats :
Il s’agit d’un patient âgé de 37 ans, sans antécédents pathologiques notables, qui a consulté pour des céphalées hémi crâniennes droites associées à une obstruction nasale évoluant depuis deux mois, apparition secondaire d’une diplopie et d’une exophtalmie droite douloureuse. L’examen ophtalmologique a objectivé une exophtalmie unilatérale droite douloureuse axile réductible, un ptosis, une ophtalmoplégie et un œdème papillaire homolatéral.

L’endoscopie nasale a objectivé la présence d’un polype translucide issu du méat moyen droit.

Une TDM du massif facial a conclu à un comblement pansinusien avec épaississement de la loge caverneuse droite étendue à l’apex orbitaire droit d’allure inflammatoire et une perméabilité conservée des structures vasculaires caverneuses.

Un complément IRM a confirmé l’épaississement de nature inflammatoire de l’apex orbitaire et de la loge caverneuse droite qui apparaissaient en hyper signal T2 avec rehaussement après injection de Gadolinium.

Le diagnostic de syndrome de Tolosa-Hunt a été suspecté. Le patient a été mis sous corticothérapie et antibiothérapie.

Une méatotomie moyenne droite avec ablation du polype du méat moyen ont été réalisées.

L’examen anatomopathologique a conclu à un polype inflammatoire avec un granulome cholestérolique non spécifique.

L’évolution clinique était rapidement favorable avec régression de la diplopie, de l’exophtalmie et une disparition de l’œdème papillaire.

Conclusion :
Le syndrome de Tolosa-Hunt est une entité clinique rare dont la pathogénie est encore inconnue. Les données de l’imagerie par résonance magnétique ont une place importante dans le diagnostic positif de cette pathologie. La réponse spectaculaire, à la corticothérapie est évocatrice mais spécifique. Le syndrome de Tolosa-Hunt reste toutefois un diagnostic d’exclusion nécessitant une surveillance prolongée.
LYMPHOMES DE L’AMYGDALE PALATINE SUR TERRAIN RETROVITAL: A PROPOS D’UN CAS AU CHUD BORGOU

F. Bouraima*(1)

(1) CHUD BORGOU, Cotonou, Benin

OBJECTIF
Le but de notre travail a été de décrire un cas de lymphome de l’amygdale palatine chez un patient HIV positif sous antirétroviral et pris en charge au CHUD BORGOU.

MATERIELS ET METHODES
Cas clinique commenté et revue de littérature.

RESULTATS
Il s’agit d’un patient de 56 ans, de sexe masculin porteur du VIH et sous traitement antirétroviral depuis 3 ans. Il a été reçu en janvier 2016 pour une tuméfaction latéro-cervicale droite évoluant progressivement depuis 9 mois accompagnée de dysphagie aux solides et d’odynophagie.

L’examen physique a permis de noter une tumeur bourgeonnante en chou fleur de l’amygdale palatine droite mesurant 3cm de grand axe et un conglomérat d’adénopathies latéro-cervical droit associé à deux adénopathies sous mandibulaire et sus claviculaire homolatérales.

La tomodensitométrie a permis de confirmer les lésions et préciser les extensions tumorales.

L’examen histopathologique du prélèvement biopsique de la tumeur de l’amygdale palatine droite a conclu à un lymphome.

Le patient a été mis sous chimiothérapie au protocole CHOP classique (6 cures) avec disparition totale de la tumeur amygdalienne droite et du conglomérat d’adénopathies.

L’évolution a été favorable après un recul de 3 mois.

CONCLUSION
L’association lymphome de l’amygdale palatine et VIH est rare dans le nord Bénin.

Mots clés : Lymphome, VIH, chimiothérapie, antirétroviral.

TONSIL LYMPHOMA AND HIV : ONE CASE IN CHUD BOURGOU

ABSTRACT

OBJECTIVE

The aim of our work was to describe one case of the lymphoma tonsil in a patient HIV positive under antiretroviral and managed at CHUD BORGOU.

MATERIALS AND METHODS
Clinical case commented and literature review.
RESULTS

This is a patient, of 56-year-old male HIV-positive patient under antiretroviral therapy for 3 years. He was admitted in January 2016 for progressive onset of right latero-cervical swelling started 9 months back associated with dysphagia and odynophagia.

Clinical examination showed a budding mass of the right palatine amygdale measuring 3cm and a conglomerate of right latero-cervical lymphnode associated with two other lymphnode under mandibular and supraclavicular homolateral.

Computed tomography was used to confirm the diagnosis and the tumor extensions.

The biopsy specimen result confirm the lymphomatous tumor origin. Sample was sent to Belgium for immunohistochemistry.

The patient undergone chemotherapy CHOP protocol (6 round) with total disappearance of the right tonsillar tumor and lymphnode.

The trend was favorable after a decline of 3 months.

CONCLUSION

The association of lymphoma tonsil and HIV is rare in northern Benin

Keywords: Lymphoma, HIV, chemotherapy, antiretroviral.
Cancer de la langue (A propos de 33 cas)
A. Benallal*(1)

(1) CHU MOHAMMED VI OUJDA, Oujda, Morocco

Le cancer de la langue est un fléau de la santé publique vue l’augmentation importante du nombre des cas par année. Les principaux facteurs de risques sont le tabac, la mauvaise hygiène bucco-dentaire et la négligence des lésions précancéreuses.

But: L’objectif de notre étude est de déterminer le profil épidémiologique du cancer de la langue dans la région de l’Oriental, de dresser une classification TNM, d’analyser le traitement du cancer de la langue et enfin confronter nos résultats à la littérature

Matériel et méthode : Notre étude rétrospective et descriptive porte sur 33 patients (17 femmes et 16 hommes) présentant un cancer de la langue recueillit au niveau du centre d’oncologie CHU Mohammed VI d’Oujda sur une période de 5 ans.

Résultats et discussion : La fréquence du cancer est de 8,6% de l’ensemble des cancers VADS. L’âge moyen de nos patients est de 54 ans. Le sex-ratio est de 0,94. Les principaux facteurs de risque sont le tabac (aucune femme ne fume, 86% des hommes fument) et la mauvaise hygiène bucco-dentaire (74%). Sur le plan clinique, le délai de consultation moyen est de 6 mois, les signes cliniques les plus fréquents sont la gêne à la mastication (56,3%), paresthésie (51,5%), nodules (48,5%), dysphagie (39,4%) et ulcération (15,2%). Les formes de la tumeur révélée par l’examen clinique sont ulcéreuse (54,5%), ulcéro-végétante (39,4%) et végétante (6,10%). La totalité de nos patients ont présenté un carcinome épidermoïde. Selon la classification TNM, 43,4% de T1-T2, 56,5% de T3-T4, 52% de N0-N1 et 43,7% de N2. Le traitement a consisté à la chirurgie et la chimio-radiothérapie chez 41,38% des patients, la chirurgie et la radiothérapie chez 24,14% et la chimio-radiothérapie chez 20,69 %. Des récidives locales ont été notées chez 12% de nos patients. Le recul moyen est de 2 ans. 21,4% de nos patients ont vécu entre 2 et 3 ans, 3 patients sont décédés et 3 autres sont perdus de vue.

A. BENALLAL, M. BADDI, K. BOUHAFS, A. AABACH, M. CHAOUI, A. LACHKAR, F. ELAYOUBI, R. GHAHILAN

ORL et chirurgie cervico-faciale CHU MED VI OUJDA
Traitement des carcinomes différenciés de la thyroïde localement agressifs

C.Halouani*(1), T.Mannoubi(2), S.Dalléji(2), R.Ben mhammed(2), K.Akkari(2)

(1)HOPITAL MILITAIRE DE TUNIS, Tunis, Tunisia, (2)hopital militaire de Tunis, , Tunisia

Introduction : les cancers différenciés de la thyroïde sont peu agressifs et d’évolution lente. Parfois, ils se déclarent tardivement par un envahissement des organes avoisinants ou par des métastases.

But de la présentation : détailler les modalités de prise en charge thérapeutique des carcinomes papillaires de la thyroïde localement étendus.

Matériels et méthodes : nous rapportons une série de 6 patients traités d’un carcinome différencié de la thyroïde localement étendus, colligés dans notre service d’ORL de l’hôpital militaire de Tunis sur une période de 10 ans (2007 à 2016).

Résultats : l’âge moyen de nos patients était de 61 ans. Il s’agissait de 2 hommes et 4 femmes. Le type histologique était un carcinome papillaire de la thyroïde dans 4 cas et vésiculaire dans 2 cas. L’extension s’est faite vers les muscles adjacents, l’œsophage cervical et l’axe laryngotrachéal dans le premier cas laissant un résidu tumoral après chirurgie, dans le deuxième cas une extension médullaire objectivée à l’IRM comprimant la moelle ayant bénéficié d’une laminectomie cervicale, dans le troisième cas une adénopathie métastatique englobait la veine jugulaire interne et la carotide était d’exérèse difficile traitée par radiothérapie avec succès, au quatrième cas une adénopathie métastatique adhérant à l’œsophage était traitée par chirurgie avec succès. Dans les deux derniers cas un envahissement sternal était objectivé traitement chirurgicalement aussi par exérèse de la moitié supérieure du sternum avec reconstruction. Un complément par 131I thérapie était instauré dans tous les cas. L’évolution est favorable dans tous les cas sans récidive.

Conclusion : le cancer papillaire de la thyroïde peut être guéri dans plus de 85 % des cas. Le traitement doit avoir une morbidité minimale et la surveillance doit préserver la qualité de vie de ces patients. Les rares patients dont la maladie progresse malgré les traitements actuels doivent être pris en charge dans des centres spécialisés et bénéficier des progrès récents diagnostiques et thérapeutiques.
**UCNT : Particularités évoluives, étude retrospective.**


(1) établissement hospitalier skikda, , Algeria, (2) CHU annaba, , Algeria, (3) CHU de constantine, , Algeria, (4) liberale, , Algeria, (5) Eh de skikda, , Algeria, (6) chu constantine, , Algeria

but de la communication est d’ Analyser les particularités évoluives de l’UCNT du cavum au sein de l’établissement hospitalier de skikda.


Matériels et méthodes : il s’agissait de 6 enfants et de 38 adultes atteints d’UCNT. Prédominance masculine avec sex-ratio : 2 pour l’enfant et 4 pour les adultes. L’âge moyen chez les enfants était de 11 ans, pour les adultes il était de 53 ans. 2 enfants étaient classés T2, 3 enfants T4 et un enfant au stade T1. Chez les adultes la tumeur était classée T4 chez 13 malades, T3 chez 9 malades, T2 chez 20 malades et T1 chez 2 malades. Le statut ganglionnaire était N1 chez 4 enfants, N2 chez 2 enfants et N3 chez 1 enfant. Chez les adultes il était N0 chez 8 malades (14,3 %), N1 chez 26 malades (54,3 %), N2 chez 6 malades (17,1 %) et N3 chez 2 malades (14,3 %). Un seul enfant avait une métastase osseuse au moment du diagnostic. Pour les adultes 4 malades avaient des métastases osseuses lors du diagnostic. Tous les enfants ont eu une chimiothérapie néoadjuvante puis radiothérapie externe conventionnelle curative. 2 seul enfant a présenté une poursuite évolutive sous forme métastatique puis décédé malgré une chimiothérapie de rattrapage. Tous les adultes N+ ont eu chimiothérapie néoadjuvante suivie de radiothérapie conventionnelle curative sur le cavum et les aires ganglionnaires. Les patients M+ ont eu une chimiothérapie puis évaluation de la réponse tumorale. Seuls 2 malades ont eu une bonne réponse à la chimio et ont eu une radiothérapie curative. La survie globale à 2 ans était de 85,7 % à 2 ans pour le groupe d’enfants, pour le groupe d’adulte la survie globale est de 74, 2 % à 2 ans et 64,4 % à 5 ans. tout les patients présentaient un UCNT comme type histologique.

Conclusion: le groupe d’enfants présente un nombre réduit par rapport au groupe des adultes, néanmoins on remarque que le cancer du cavum a une tendance à avoir une forme localement avancée chez les enfants mais en contrepartie une bien meilleure réponse au traitement et une meilleure survie.
Une angine unilatérale de l'adulte Savoir évoquer un lymphome

A. Benallal*(1)

(1)CHU MOHAMMED VI OUJDA, Oujda, Morocco

Introduction : Une asymétrie amygdalienne accompagnée de dysphagie constitue un symptôme clinique banal révélant le plus souvent une angine. Toutefois, il existe des cas particuliers où cette symptomatologie commune peut révéler un processus tumoral d'origine lymphomateuse aux dépens de l'amygdale. Nous en rapportons deux cas.

Objectif: L’objectif de notre travail était de rapporter les caractéristiques cliniques et les facteurs prédicatifs de forte présomption de malignité d’une lésion amygdalienne.

Résultats : Nous rapportons deux cas colligé dans notre formation, de deux patients de sexe masculin âgés de 43 et 59 ans, tabagiques chroniques ont consulté principalement pour odynophagie, dysphagie, halène fétide, dont l’examen a révélé des angines ulcéreuses extensives fébriles résistantes au traitement associées à des poly adénopathies cervicales, la biopsie a montré chez les deux patients un lymphome non hodgkinien diffus B à grande cellules, le bilan tomodensitométrique a révélé un stade II et III de la maladie puis les patients sont adressés pour prise en charge oncologique.

Discussion et conclusion : Les lymphomes non hodgkinien amygdaliens demeurent rares. La chimiothérapie, associée à la radiothérapie, représente le traitement curatif des formes précoces. Leur pronostic est généralement bon dans les formes localisées et lorsque le diagnostic histologique par biopsie de l’amygdale est posé précocement.

A. BENALLAL, K. BOUHAFS, A. AABACH, M. CHAOUAI, A. LACHKAR, F. ELOYUBI, R. GHAHAIN
ORL et chirurgie cervico-faciale CHU MED VI OUJDA
Carcinome vésiculaire sur thyroïde linguale : modalités de prise en charge

S.Anajar*(1), Z.Chafiki(2), R.Abada(2), S.Rouadi(2), M.Roubal(3), M.Mahtar(2)

(1)CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (2)Chu Ibn Rochd Hôpital 20 août, Casablanca, Morocco, (3)Chu Ibn Roche Hôpital 20 août, Casablanca, Morocco

INTRODUCTION : La thyroïde linguale résulte de l’absence de migration de l’ébauche thyroïdienne. Cette dernière se développe sur place, c’est-à-dire au niveau du foramen caecum. Elle peut représenter le seul tissu thyroïdien retrouvé chez le patient, ou être en association avec une thyroïde normale.

La survenue d’un carcinome sur une thyroïde linguale constitue une situation exceptionnelle avec seulement une trentaine de cas décrits dans la littérature.

MATÉRIELS ET MÉTHODES : Nous rapportons l’observation d’une patiente âgée de 37 ans, sans antécédents médicaux particuliers, consulte pour une tuméfaction de la base de la langue évoluant depuis six mois s’étant compliqué il y a un mois d’une dysphonie. L’examen clinique a retrouvé une masse tissulaire du plancher buccal de 4cm de grand axe, la thyroïde n’était pas palpée en pré-trachéal et aucune adénopathie cervicale n’a été retrouvée. L’échographie cervicale a confirmé la présence de la masse décrite et a objectivé une thyroïde en place hypoplasique.

La TDM cervicale a objectivé la présence d’un processus tumoral centré sur l’épiglotte, infiltrant le voile du palais.

Une scintigraphie cervicale a été réalisée montrant un foyer de captation assez intense au niveau de la région cervicale haute.

Une trachéotomie sous-isthmique de sécurité a été mise en place avant la résection du processus lingual. L’examen histologique de la pièce opératoire un aspect histologique en faveur d’un carcinome vésiculaire sur thyroïde ectopique linguale

RÉSULTAT ET CONCLUSION: Même en présence d’une glande thyroïde normale, le carcinome thyroïde ectopique doit être pris en compte dans le diagnostic différentiel d’une masse cervicale, que ce soit sur la ligne médiane ou au-dessus du cartilage thyroïdien, dans tous les cas, le traitement est principalement chirurgical.
carcinosarcome du sinus maxillaire : cas rare

S.Anajar*(1), J.Hassnaoui(2), R.Abada(2), S.Rouadi(2), M.Roubal(2), M.Mahtar(2)

(1)CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (2)Chu Ibn Rochd Hôpital 20 août, Casablanca, Morocco

INTRODUCTION : Le carcinosarcome est une tumeur hautement maligne caractérisée par une différenciation histologique maligne double avec composants épithéliaux et mésenchymateux.

Le but de notre travail est d'évaluer les aspects cliniques et paracliniques ainsi que les principes thérapeutiques du carcinosarcome maxillaire

MATÉRIELS ET MÉTHODES : La tumeur est extrêmement rare, avec seulement 14 cas rapportés ont été décrite dans la littérature depuis 1957 dans la littérature, nous rapportons un cas d'un homme âgé de 55 ans qui a présenté des douleurs de l'hémiface droite le scanner a objectivé une masse tissulaire au niveau du sinus maxillaire droit et la cavité nasale droite. Une biopsie sous anesthésie générale de la masse au niveau de la cavité nasale a été faite objectivant a l'examen anatomopathologique un aspect compatible avec un carcinosarcome.

Le patient a été traité par chimioradiothérapie, mais aucun effet significatif n'a été obtenu. Le patient est décédé 4 mois après l'examen initial

RESULTATS CONCLUSION : Il s'agit d'une tumeur agressive, rapidement progressive avec un mauvais pronostic. En raison de la rareté du carcinosarcome et du manque relatif de données sur leur prise en charge, il n'existe pas d'algorithme de traitement clairement défini pour les patients atteints du carcinosarcome. Le traitement de cette maladie rare reste indéterminé
Paragangliome carotidien en situation sous bifurcation opéré sans embolisation

K. Djilali alad*(1), E. Saadaoui(2), O. Megharbi(3), A. Bensaad(4)

(1) Chu sidi bel abbes, Sidi bel abbes, Algeria; (2) chu sidi bel abbes, Sidi bel abbés, Algeria; (3) service d’ORL CHU de Sidi Bel abbes, Algeria; (4) chu sidi bel abbes, Algeria

Objet de la présentation : les paragangliomes cervicaux sont des tumeurs rares, et surviennent dans 1/30 000 à 1/100 000 cas dans la population générale. Son diagnostic est obligatoire avant toute chirurgie risquée, les investigations permettent un diagnostic précis et dans la majorité des en préopératoire, sa prise en charge nécessite une collaboration entre plusieurs spécialités, et la conduite à tenir est variée entre surveillance et chirurgie, le bénéfice-risque doit être évalué et en cas de risque majeur l’abstention doit être une stratégie incontournable.

Matériels et méthodes utilisés : Nous allons rapporter ce cas inhabituel situé sous la bifurcation carotidienne et à travers lequel nous décrivons les caractéristiques cliniques radiologiques permettant le diagnostic préopératoire ainsi que les modalités de prise en charge de ses tumeurs.

Résultats : il s’agit d’un patient âgé de 55 ans sans antécédents particuliers qui présente une tuméfaction jugulocarotidienne sushomohyoidienne droite de 4 cm de diamètre battante indolore, la peau en regard est normale, l’angioscanner retrouve une masse hypervascularisée rehaussée après injection du produit du contraste, en situation retrocarotidienne retrojugulaire interne sous le bulbe carotidien, l’IRM retrouve un tumeur en isosignal T1n hypersignal T2 et prise de contraste, de type artériel, le bilan hormonal confirme le caractère non sécrétant du paragangliome, l’attitude thérapeutique adoptée chez notre patient était une exérèse par une cervicotomie latérale sans embolisation préalable, l’évolution est favorable sans séquelles.

Conclusion : le paragangliome carotidien est une tumeur rare bénigne dans la majorité des cas et qui se développe à partir des cellules paraganglia au niveau de l’adventice des vaisseaux, sa localisation sous la bifurcation carotidien ne est rare

Son diagnostic est souvent tardif étant donné l’évolution lente et la non spécificité des signes cliniques. L’IRM a la meilleure sensibilité pour le diagnostic préopératoire. La chirurgie est le seul traitement curatif, et nécessite dans la plus part des cas une embolisation préalable ce qui n’est pas le cas chez notre patient, L’anatomopathologie permet de poser le diagnostic de certitude.
Cellulite cervico-faciales : facteurs favorisants, aspects clinico-paracliniques et principes thérapeutiques à propos de 123 cas

M. Mouzouri*(1), A. Lachkar(2), A. Khannoussen(2), A. Aebdenbitsen(2), F. Elayoubi elidrissi(2), M. Ghailan(2)

(1) Centre hospitalier universitaire mohammed VI Oujda MAROC, , Morocco, (2) Centre hospitalier universitaire Mohammed VI, Oujda, Morocco

OBJET :
La cellulite cervico-faciale est une dermo-épidermite infectieuse. C'est une pathologie grave pouvant mettre en jeu le pronostic vital. Un point de départ dentaire est retrouvé dans 80% des cas.

Le but de ce travail est de préciser les facteurs favorisants, les aspects cliniques, les principes thérapeutiques ainsi que l'apport du scanner dans la prise en charge des cellulites cervico-faciales.

MATÉRIELS ET MÉTHODES :
Etude rétrospective de 123 cas colligés au service d’ORL et CCF CHU Oujda entre février 2012 et décembre 2016.

RÉSULTATS :
L'âge des patients varie entre 9 ans et 65 ans avec une moyenne d'âge de 36 ans, on a noté une prédominance masculine (82 cas).
Le diabète est retrouvé dans 34 cas, la cellulite était la circonstance de découverte du diabète dans 4 cas.
29 malade étaient tabagique et 6 alcooliques. Une extraction dentaire est retrouvé chez 19 malades, et tous les malades avaient un mauvais état buccodentaire.
La prise d'AINS est retrouvée dans 46 cas, la prise d’ATB dans 24 cas, et la corticothérapie dans 13 cas.
Les signes cliniques étaient : Tuméfaction inflammatoire chez tous les malades, altération de l’état général dans 16 cas, trismus dans 95 cas, dysphagie dans 33 cas, dyspnée chez 7 patients, œdème du plancher buccal dans 21 cas, fistule cutanée dans 13 cas, empâtement cervical dans 12 cas, œdème palpébral dans 9 cas, douleur thoracique supérieure dans 4 cas, crêpitations sous cutanées dans 13 cas. 84 patients ont bénéficié d’une TDM cervico-faciale avec coupes médiastin ales sans et avec injection de produit de Contraste.
L'étude bactériologique du liquide de drainage a été réalisée chez 16 patients, et avait retrouvée une flore polymicrobienne.

Tous les malades ont été mis sous traitement médical, le drainage n’a été nécessaire que dans 67 cas. L’évolution était favorable dans 121 des cas deux malades sont décédés.

CONCLUSION :
La cellulite cervico-faciale diffuse est une infection grave et peut mettre en jeu le pronostic vital, la pratique d’un examen TDM en urgence est indispensable devant toute suspicion de cellulite diffuse afin de faire un bilan lésionnel précis, d’adapter le protocole thérapeutique et d’éviter les complications qui peuvent mettre en jeu le pronostic vital du patient.
Métastase cérébelleuse révélatrice d’un carcinome papillaire de la thyroïde

Z.Chafiki*(1), A.Balage(2), S.Anajar(2), R.Abada(2), M.Roubal(2), M.Mahtar(2)

(1)Service d’ORL, hospital du 20 Aout, CHU Ibn-Rochd, Casablanca, Maroc, Casablanca, Morocco, (2)Service d’ORL, hospital du 20 Aout, CHU Ibn-Rochd, Casablanca, Maroc, , Morocco

Objectif /matériel et méthode : Le mode habituel d’extension des carcinomes thyroïdiens est principalement lymphatique locorégionale. Nous rapportant le cas d’un patient qui présente une métastase cérébelleuse révélant un carcinome papillaire de la thyroïde

Résultat : un homme de 46 ans se présente aux urgences avec syndrome cérébelleux, la tdm cérébral révèle un processus tumoral cérébelleux droit. La résection chirurgicale objective un carcinome papillaire dont scanner cervical montre des micronodules thyroïdiens bilatéraux. Le patient a bénéficié d’une thyroïdectomie totale dont l’étude histologique parle d’un carcinome papillaire

Conclusion : les métastases cérébelleuses est une rare présentation initiale des carcinomes papillaires, ce qui explique l’absence d’un protocole thérapeutique standard. Une résection chirurgicale suivie d’ira thérapie avec des résultats variables.
Métastase cérébrale d'un microcarcinome papillaire de la thyroïde

S. Choukry*(1)
(1) CHU Ibn Rochd, Casablanca, Morocco

S. Choukry1, G. Cherkaoui1 , J. Benouhoud1, A. Guensi1
S. Anajar2, K. Choukry2, R. Abada2, S. Rouadi2, M. Rouba2, M. Mahtar2
1 : Service de médecine nucléaire du CHU Ibn Rochd Casablanca
2: Service d’ORL de l’hôpital 20 Aout Casablanca

Introduction:
Le carcinome papillaire de la thyroïde est le plus fréquent des cancers thyroïdiens. Au maroc il représente le troisième cancer de la femme après le cancer du sein et le cancer du col utérin.
La majorité des cancers différenciés de la thyroïde (CDT) ont une évolution lente, une extension le plus souvent loco-régionale et un bon pronostic.
Le micro carcinome papillaire de la thyroïde est réputé d’excellent pronostic avec de très rares cas d’évolution fatale.
Le poumon et l’os sont les principaux sites métastatiques, contrairement au cerveau qui reste un site métastatique exceptionnel.

Intérêt du travail :
A travers ce travail nous rapportons un cas exceptionnel de micro carcinome thyroïdien métastatique au cerveau

Observation médicale :
Une femme de 45 ans adressée au service de service de médecine nucléaire du CHU Ibn Rochd pour irathérapie complémentaire pour un micro carcinome papillaire thyroïdien multifocal bilobaire traité par thyroïdectomie totale.
La patiente a rapporté 6 mois après sa thyroïdectomie l’installation progressive d’une hémiparalysie faciale gauche associée à une anosmie.
Le bilan thyroïdien fait sous un traitement substitutif de LT4 retrouve une Tg à 10ng/ml et une TSHus à 2,15 UI/ml.
La TDM cérébrale a montré un processus fronto-temporal droit d’allure secondaire.
L’IRM cérébrale réalisée dans le cadre de son bilan préopératoire temporo-frontal droit largement nécrosé et siège de remaniements hémorragiques, compliqué d’un engagement sous factoriel qui indiqua sa mise sous corticoïdes.
Un bilan complet à la recherche d’une origine autre que thyroïdienne a été réalisé. Il était négatif rendant ainsi fortement suspect l’étiologie thyroïdienne.

Conclusion :
Bien que réputé d’évolution excellente, le micro carcinome thyroïdien nécessite comme toute pathologie néoplasique un suivi rigoureux durant les premières années.
La tuberculose ganglionnaire cervicale Culture, typage et antibiogramme

N. Benmansour*(1), M. Ridal(2), H. Abbassi(2), O. Lahlou(3), K. Ameziane(4), M. Elamine elalami(5)


Objet de la présentation : Malgré l’efficacité actuelle de la chimiothérapie antibacillaire dans la plupart des localisations tuberculeuses, la forme ganglionnaire cervicale continue à poser des problèmes thérapeutiques, fonctionnels et esthétiques. L’objectif de notre travail est d’étudier le profil bactériologique de la tuberculose ganglionnaire cervicale, sa corrélation histobactériologique, ainsi que son profil épidémiologique, afin d’améliorer la prise en charge de cette forme de tuberculose extrapulmonaire.

Matériels et méthodes : Il s’agit d’une étude prospective, de Juin 2010 au Décembre 2012, à propos de 108 malades traités dans notre service d’ORL et chirurgie cervico-faciale, en collaboration avec le service de Microbiologie, pour des adénopathies d’origine tuberculeuse. Plusieurs paramètres ont été analysés, les antécédents, les aspects cliniques et paracliniques notamment la culture, le typage et le test de sensibilité sur des prélèvements ganglionnaires et d’expectoration.

Résultats : L’âge moyen de nos patients est de 19 ans, 20 % des patients ayant antécédents d’une tuberculose ganglionnaire traités, les adénopathies ont été multiples dans 76.5%. La nécrose caséeuse était un critère d’inclusion à l’étude, la culture était positive dans 17 % des cas dont un cas est doublément positif dans le ganglion et l’expectoration, un cas de Mycobactérium Bovis, le reste est de Mycobactérium Tuberculosis, qui sont sensible à tous les antibacillaires testés sauf dans un seul cas où il y avait une résistance à la rifampicine à 10%. Le taux de guérison était à 78 % des cas, 11% de prolongation du traitement médical de trois mois, 4 cas ont été repris pour persistance des adénopathies ou de fistule malgré un traitement bien suivi.

Conclusion : La tuberculose ganglionnaire est une forme extrapulmonaire relativement fréquente, elle pose essentiellement des difficultés thérapeutiques. Le diagnostic est toujours retenu sur les données anatomopathologiques, la culture détermine l’espèce responsable et sa sensibilité mais n’est pas un examen de routine, elle doit être réservée aux cas de persistance ou récidive d’adénopathies pour dépister les cas de multi-résistance.
Les lymphangiomes kystiques cervico-faciaux

(1) Hôpital universitaire Fattouma Bourguiba de Monastir, service d’ORL, Tunisie, (2) hôpital Fattouma Bourguiba de Monastir, Tunisie, (3) hôpital universitaire Fattouma Bourguiba de Monastir, Tunisie, (4) Hôpital Fattouma Bourguiba de Monastir, service de Radiologie, Tunisie, (5) hôpital Fattouma Bourguiba de Monastir, service d’ORL et de CCF, Tunisie

Les lymphangiomes kystiques sont des dysembryopathies bénignes rares du système lympho-ganglionnaire, représentent 6% des tumeurs de l’enfant. La région cervico-faciale est le siège de prédilection (75% des cas). Le but de ce travail est de rappeler les aspects étiopathogéniques, diagnostiques ainsi que les alternatives thérapeutiques des lymphangiomes cervico-faciaux.

Matériel et Méthodes:


Résultats :

L’âge moyen des patients était de 20 ans avec des extrêmes d’âge allant de 10 mois à 52 ans. Le sexe ratio était de 1 (5H/5F). L’infection des voies aériennes supérieures précédant l’apparition de la tuméfaction était notée dans 2 cas. Le délai moyen d’évolution était de 8 mois avec des extrêmes allant de 3 mois à 1 an.

La tuméfaction était principalement de siège latéro-cervical dans 6 cas, facial pur dans 3 cas (siège parotidien dans 1 cas, sub-mandibulaire dans un cas et sous mentonnière dans un cas) et de siège cervico-facial chez un seul patient. Dans le cadre du bilan étiologique et d’extension : une échographie seule a été réalisée chez 2 patients et le couple échographie/tomodensitométrie dans 4 cas et un complément par une imagerie par résonnance magnétique était nécessaire dans 4 cas.

8 patients ont eu une exérèse complète de la tumeur. 2 cas de lymphangiome submandibulaire et cervical ont été traités par sclérothérapie.

L’évolution était favorable avec absence de récidive après un recul post thérapeutique moyen de 24 mois.

Conclusion :

Les lymphangiomes kystiques cervico-faciaux sont des tumeurs vasculaires, bénignes, rares, d’origine lymphatique. La chirurgie complète est le traitement de choix notamment pour les formes multikystiques. La sclérothérapie est une alternative thérapeutique seule ou associée à la chirurgie.
Le cancer du cavum de l’enfant en Tunisie.

S.Kedous*(1), S.Jbali*(2), S.Dhamбри(1), M.Dhaha(1), I.Nacef(1), S.Touati(1), S.Gritli(1)

(1)Institut Salah Azaiez, Tunis, Tunisia, (2)Institut Salah Azaiez de Tunis, Tunis, Tunisia

Le cancer du nasopharynx (CNP) est l’une des tumeurs épithéliales les plus fréquentes en oncologie pédiatrique avec une incidence en Tunisie de 20/100 000. Son originalité vient de ses caractéristiques épidémiologiques, anatomo-cliniques et évolutives. En l’absence d’études dédiées à l’enfant, les protocoles thérapeutiques sont inspirés de ceux de l’adulte.

Nous proposons d’étudier les spécificités épidémiologiques, anatomo-cliniques, thérapeutiques et évolutives du cancer du cavum chez l’enfant.


L’âge moyen de nos patients était de 13 ans. On a noté une prédominance masculine (sex-ratio : 1.5). Le délai moyen de consultation était de 3.9 mois. Les signes rhinologiques étaient au premier plan du tableau clinique. Ainsi, une épistaxis inaugurale était notée dans 71.4% des cas. L’examen physique trouvait un syndrome tumoral ganglionnaire dans 84.4% des cas. Cette atteinte ganglionnaire était bilatérale dans 80.9% des cas. Un syndrome paranéoplasique était noté dans 14.5%. La biopsie du cavum confirmait le diagnostic montrant un UCNT du cavum dans 100% des cas. 6.8% (7 patients) étaient métastatiques d’emblée. La tumeur était classé T3-T4 dans 93.2% et N2-N3 dans 90.3%. Le profil sérologique de l’EBV a montré une élévation des IgG anti VCA dans 42,8% seulement sans corrélation significative avec le statut ganglionnaire. Tous nos patients ont reçu 3 cures de CT à base d’Adriamycine et de Cisplatine suivies d’une RT locorégionale. Les enfants ayant des métastases osseuses ont reçu une RT externe sur le site métastatique et dans les cas de métastases pulmonaires une chimiothérapie anti-métastatique. La réponse après la chimiothérapie néo-adjuvante était favorable dans 71% des cas de notre série et les adénopathies avaient régressé dans 85% des cas. Une rémission complète était notée dans 73% des cas. La survie globale et la survie sans maladie à 5 ans étaient de 80 et 70% respectivement. Outre la sclérose cutanée cervicale et la xérostomie, une surdité profonde séquellaire était notée dans 3% des cas.

En somme, le traitement du cancer du cavum de l’enfant en croissance ne diffère pas de celui de l’adulte. Les résultats sont globalement bons au prix d’une toxicité aigüe et surtout tardive plus marquée. Les nouvelles techniques de radiothérapie pourront, certes, pallier à ces risques et améliorer la survie.
TUMEURS THYROIDIENNES DE LA FEMME ASPECTS CLINIQUES ET THERAPEUTIQUES EN ORL-CCF

R. Guezo*(1)

(1) CNHU, Cotonou, Benin

BUT : étudier les aspects cliniques et thérapeutiques des tumeurs thyroïdiennes de la femme

MATERIEL ET METHODE : l'étude a été rétrospective, descriptive et analytique. Un recensement exhaustif de tous les cas de tumeurs thyroïdiennes chez la femme avec confirmation histopathologique, prise en charge chirurgicale et suivis inscrits.

RESULTATS

Sur 337 cas de tumeurs thyroïdiennes 303 ont concerné la femme. La fréquence des tumeurs thyroïdiennes chez le sujet de sexe féminin par rapport à toutes les tumeurs thyroïdiennes a été de 89,9%. Le motif de consultation le plus fréquent a été une tuméfaction antéro-cervicale : 281 cas soit 93%. L'état général était bon chez 299 patientes soit 98,7%. Les tumeurs avaient mesuré entre 5 cm et 20 cm dans 210 cas soit 72,9%. La palpation avait permis de retrouver des tuméfactions fermes dans 292 cas (96,4%). Les tumeurs étaient mobiles et indolores dans 300 cas (99%). La peau en regard était saine dans 302 cas (soit 99,7%). Des adénopathies étaient présentes dans 8 cas. L'échographie a objectivé des tumeurs multinodulaires dans 198 cas (71,9%). L'histopathologie a révélé des tumeurs bénignes 294 cas (97%) et 9 cas de tumeurs malignes soit 3%. Les gestes chirurgicaux les plus exécutés ont été la thyroïdectomie subtotale 146 cas (48,2%) et la thyroïdectomie totale 129 cas (42,3%). Les suites opératoires ont été simples chez 269 patientes soit 88,8% et compliquées dans 34 cas (11,2%). La complication la plus fréquente a été la cicatrice chéloïde 8 cas soit 3,1%. La paralysie récurrentielle unilatérale a été enregistrée dans 6 cas (1,8%).

CONCLUSION : La femme fait 89,9 fois plus de tumeurs thyroïdiennes que l’homme mais ces tumeurs sont le plus souvent bénignes (97%). La thyroïdectomie en est le traitement efficace et sûr avec des suites simples.

MOTS CLES : tumeurs thyroïdiennes, goître, cancer, femme, thyroïdectomie.
APPORT DU DOSAGE DE LA PTH DANS LE LIQUIDE DE RINCAGE DE PONCTION A L'AIGUILLE FINE DANS LE DIAGNOSTIC DES ADENOMES PARATHYROÏDIENS.

L.Beddar*(1), M.Nacer khodja(2), O.Metrouh(2), K.Seddiki(2), Y.Ghedada(1), E.Haffaf(2)

(1)HOPITAL CENTRAL DE L’ARMEE, Alger, Algeria, (2)HOPITAL CENTRAL DE L’ARMEE, Alger, Algeria

1. Objet de la présentation:

L’hyperparathyroïdie est la 3ème pathologie endocrinienne, son diagnostic est purement biologique par le dosage de la parathormone dans le sang (PTH).

Cependant la détection et la localisation des glandes parathyroïdes hyperfonctionnelles est une étape très importante dans la prise en charge diagnostic et thérapeutique.

Objectif: Confirmer l’existence d’un adénome parathyroïdien suspect à l’échographie cervicale en regard d’une hyperparathyroïdie.

2. Matériels et méthodes:

13 patients dont 09 femmes et 04 hommes (moyenne d’âge: 46 ans), présentant une masse thyroïdienne à l’échographie (nodule thyroïdien ou adénome parathyroïdien) avec hyperparathyroïdie biologique, ont bénéficié d’une ponction de la masse à l’aiguille fine avec dosage de la PTH dans le liquide de rinçage par des méthodes radio immunologiques.

Tous les patients ont bénéficié d’une scintigraphie des glandes parathyroïdes, (protocole soustraction ou double phase, complétée par un SPECT/CT centré sur la région cervicale).

3. Résultats:

08 patients sur 13 ont eu une PTH dans le liquide de rinçage élevée.

Parmi ces 08 patients, 07 ont eu une scintigraphie parathyroïdienne positive.

Les 05 patients qui ont eu une PTH négative ont eu une scintigraphie parathyroïdienne négative aussi.

4. Conclusion:

Chez les patients présentant une hyperparathyroïdie avec une masse thyroïdienne suspecte d’un adénome parathyroïdien, le dosage de la PTH dans le liquide de rinçage de ponction à l’aiguille fine est d’un grand apport dans la démarche diagnostique.
Corrlation entre le score TI-RADS et la nature histologique des nodules thyroïdiens


(1)Hôpital universitaire Fattouma Bourguiba de Monastir, Service d'ORL, , Tunisia, (2)hôpital Fattouma Bourguiba de monastir , service d'ORL et de CCF, , Tunisia, (3)hôpital Fattouma Bourguiba de Monastir, service d'ORL et de CCF, , Tunisia, (4)Hôpital universitaire Fattouma Bourguiba de Monastir, , Tunisia, (5)hôpital Fattouma Bourguiba de Monastir, service de Radiologie, , Tunisia

Objectif :

Le but de notre travail est de décrire la sémiologie échographique des nodules thyroïdiens en se basant sur le score TIRADS (Thyroïd Imaging-Reporting and Database System), en évaluant sa place dans le diagnostic positif et de la corrélérer avec les résultats de l'histologie définitive.

Matériels et méthodes

Etude rétrospective ayant colligé, sur une période de 3 ans, 130 nodules thyroïdiens qui étaient classés selon la classification TI-RADS. Pour tester la corrélation entre le score TI-RADS et le résultat histologique, nous avons appliqué le test «t » de student pour échantillons indépendants. L'analyse des sous-groupes a été réalisée par l'étude du test de Pearson.

Résultats

L'âge moyen de nos patients était de 44 ans avec une nette prédominance féminine (sex-ratio=5 ,8). Aucun patient n'a eu une irradiation cervicale dans l'enfance. Le délai moyen de consultation était de 15 mois.

A l’échographie, la taille moyenne des nodules était de 3 cm, 58 nodules étaient hypoéchogènes (5 fortement hypoéchogènes), 31 nodules contenaient des microcalcifications et 3 étaient plus épais que larges. 8 nodules présentaient des contours irréguliers. Des adénopathies suspectes ont été objectivées dans 5 cas.

28 nodules (21%) étaient classés TI-RADS 4B et 6 nodules (4%) TI-RADS 5. Tous nos patients étaient opérés, parmi les 130 nodules, 24 nodules (18%) étaient malins et 104 nodules (80%) étaient bénins.

Il existe une corrélation statistiquement significative (P< 0 ,001) entre le score TI-RADS et le type histologique définitif. Dans l’étude des sous-groupes, il existe également une corrélation statistiquement significative (P < 0,001) entre un score TI-RADS≤ 3 et histologie bénigne, et score TI-RADS ≥ 4 et histologie maligne.

Conclusion

L’échographie reste l'imagerie de référence dans la prise en charge des nodules thyroïdiens, tant pour le diagnostic que pour le guidage cytologique des nodules suspects. Le système TI-RADS est un outil standardisé permettant de stratifier de malignité afin de mieux définir et d’harmoniser les conduites à tenir.
Corrélaison du score TIRADS à l’histologie définitive des nodules thyroïdiens
S.Eddafi*(1), L.Arjdal(1), Y.Rochdi(2), H.Nouri(1), L.Aderdour(1), A.Raji(3)
(1)Service ORL et CCF CHU Mohamed VI, Marrakech, Morocco, (2)Service ORL CCF CHU Mohamed VI, Marrakech, Morocco, (3)Service ORL et CCF CHU Mohamedvi, Marrakech, Morocco

Objet: Le système TIRADS est un outil standardisé qui vise à harmoniser le langage et le mode de description utilisés en échographie de la thyroïde. Le but de ce travail est de préciser l’apport de l’échographie et son degré de concordance avec l’examen anatomopathologique définitif des nodules thyroïdiens au sein de notre service.

Matériels et méthodes : nous avons analysé rétrospectivement 360 dossiers des nodules thyroïdiens suivis aux services d’ORL entre mai 2011 et décembre 2016.

Résultats : Age moyen de nos patients était de 41 ans avec des extrêmes entre 7 et 75ans). Le sex-ratio était de 2,78(265 F/95 H). 191 patients ont subit une thyroïdectomie totale alors que 169 ont subit une Loboisthmectomie. Les nodules étaient classé dans leur majeur partie entre score 2,3, et 4a alors que les autres scores ne représente qu’un tiers de nos 360 nodules.

À l’histologie définitive 262 nodules étaient bénins et 98 étaient malins. À la Corrélation entre les scores TIRADS et l’histologie définitive nous avons trouvé que la majeur partie des nodules classés 2, 3 et 4a ont été bénin à l’histologie définitive et que la grande partie des nodules classés 4b, et 5 on été malin à l’étude histologique définitive c’est-à-dire une augmentation du pourcentage des nodules malin à l’histologie définitive avec l’augmentation du score TIRADS. L’étude a montré que le score TIRADS a une Sensibilité de 66,66%, une Spécificité de 95%, une VPP de 82% et VPN de 90%.

Conclusion : La classification TIRADS outil de sélection permettant de stratifier aisément le risque de carcinome thyroidien et de définir la conduite à tenir.
kystes et fistules congénitaux de la face et du cou : à propos de 81 cas

M. Elbouderkaoui*(1), R. Ait elabdia(1), Y. Rochdi(1), H. Nouri(1), L. Aderdour(1), A. Raji(1)

(1) CHU Marrakech, Morocco

INTRODUCTION: Les kystes et fistules congénitaux de la tête et du cou représentent un ensemble disparate d’anomalie liée pour la plupart à un défaut de migration ou de coalescence de bourgeons embryonnaires. Le but de cette étude est de rapporter notre expérience dans la prise en charge de ce type de malformations.


RESULTATS: La malformation la plus fréquente dans notre série était les kystes du tractus thyéro-glosse (KTT) avec 65,4% des cas, suivi des fistules pré-hélicéennes (16% des cas). Les fistules de la 1ère fente branchiale représentaient 9,8% des cas et en dernière position les lymphangiomes kystiques avec 8,4% des cas. L’âge de nos patients varie entre 8 mois et 62 ans avec une prédominance masculine. Les circonstances de découverte varient selon le type de la malformation. L’exérèse chirurgicale était le traitement dans tous les cas avec une bonne évolution sans aucun cas de récidive.

DISCUSSION: Les kystes et fistules congénitaux de la face et du cou ont pour origine la persistance d’un reliquat embryonnaire excédentaire ou d’une structure embryonnaire transitoire. Ils représentent un groupe d’anomalies diverses dans leur topographie et leur expression clinique. Leurs circonstances de découverte sont variables : à la naissance en présence d’une tuméfaction ou d’une fistule externe, ou plus tardivement devant des épisodes de surinfection répétés ou devant une tuméfaction inflammatoire isolée. Le principe thérapeutique repose sur un acte chirurgical curatif d’emblée, l’exérèse incomplète étant source de récidives difficiles à traiter.

KYSTE DERMOIDE DU PLANCHER SIMULANT UNE TUMEUR DE LA GLANDE SOUS MAXILLAIRE : A PROPOS DE DEUX CAS

A.Mbaye*(1)

(1)Centre Hospitalier National Universitaire de FANN, Dakar, Senegal

MBAYE A1, THIAM N F1, FAYE D2, SEYE M2, NDIAYE C1, AHMED H1, NDIAYE Mo1, YOUNES H1, DIEYE A1, DIOME S1, NDIAYE M1, NDIAYE I C1, NDIAYE Ng3, THIAM4, DOH4

1. Service d’ORL de l’hôpital de FANN
2. Service d’ORL du centre de santé Philippe maguillène Senghor
3. Service d’anesthésie reanimation de l’hôpital de FANN
4. Service d’anatomie pathologique de l’hôpital Aristide Le Dantec

INTRODUCTION

Les kystes dermoïdes sont des développements tissulaires bénins congénitaux caractérisés par la présence en son sein de follicules pileux, de cheveux, de glandes sébacées, de matériel kératosique ou d’autres cristaux de cholestérol. Leur localisation au niveau de la sphère ORL est rare : ils représentent 7% dont 1,6% siègent au niveau du plancher buccal. Lorsqu’ils sont de localisation sous mandibulaire, ils peuvent prêter à confusion avec une tumeur de la glande sous maxillaire.

Nous rapportons deux cas de kystes dermoïdes et discuterons de leur caractéristique clinique et des attitudes thérapeutiques.

OBSERVATIONS

Il s’agissait de deux patients sans antécédent pathologique particulier : l’un de sexe féminin âgée de 23 ans et l’autre de sexe masculin âgé de 21 ans. Ils présentaient une tuméfaction de la région sous maxillaire qui évoluait respectivement depuis huit ans et deux ans. L’examen clinique retrouvait une masse ferme, indolore non inflammatoire soulevant une partie latérale du plancher sans gêne fonctionnelle associée. Les deux résultats échographiques concluaient à une hypertrophie de la glande sous maxillaire. Les patients ont été admis au bloc opératoire. En per opératoire, on effectuait l’exérèse complète d’une poche kystique profonde indépendante de la glande sous maxillaire qui était d’allure saine. L’incision de la pièce opératoire laissait soudre du sébum.

Les suites opératoires étaient simples et l’examen anatomo-pathologique a conclu à un kyste dermoïde.

CONCLUSION

Les kystes dermoides sont relativement rares. Ils peuvent simuler plusieurs pathologies, il faut donc savoir y penser.

Mots clés : kyste, dermoïde, chirurgie
La médiastinite nécrosante descendante ou cellulite cervico-médiastinale est une maladie infectieuse gravissime, engageant le pronostic vital dans 30 à 40 % des cas, elle est due à l'extension médiastinale d'un processus infectieux oropharyngé ou cervical.

Le but de ce travail est de rapporter l'expérience de notre service dans la prise en charge de cette pathologie à travers une étude rétrospective portant sur 11 patients. Résultats : L'âge moyen de nos patients était de 27 ans avec nette prédominance masculine. Nous avons recensé 7 cas de prise d'anti-inflammatoires. Dix patients avaient une porte d'entrée dentaire et un cas de corps étranger métallique pharyngé négligé. La TDM cervico-thoracique a été demandée chez tous les patients. L'infection était polymicrobienne dans 50 % des cas. Les modalités du traitement chirurgical dépendaient de la localisation des lésions. L'évolution postopératoire était favorable dans la majorité des cas. Cependant, l'évolution était mortelle dans 4 cas.

Conclusion : La médiastinite nécrosante descendante est une pathologie grave qui impose une prise en charge rapide et efficace. Il s'agit d'une entité succédant très souvent à une lésion initiale, d'apparence banale, de la sphère ORL. La prise en charge nécessite à la fois un traitement antibiotique par voie systémique et un drainage des collections.
HN-FR-29

Tumeur desmoïde du cou : à propos d’une observation


(1) Service d’ORL et de chirurgie cervico faciale. CHU Habib Bourguiba, Sfax, Tunisie, (2) Service ORL du CHU Habib Bourguiba, Sfax, Tunisie, (3) Service d’anatomie et de cytologie pathologiques, CHU Habib Bourguiba, Sfax, Tunisie, (4) Service de chirurgie plastique, CHU Habib-Bourguiba, Sfax, Tunisie, (5) Service de chirurgie plastique CHU Habib Bourguiba, Sfax, Tunisie

Objectif de la présentation :
Nous présentons un cas rare de tumeur desmoïde du cou. A travers ce cas, nous discutons l’étiopathogénie de cette tumeur ainsi que les modalités de sa prise en charge.

Matériel et méthode :
Etude d’un cas de tumeur desmoïde posttraumatique du cou.

Résultat :
Un homme âgé de 47 ans, ouvrier du bâtiment, a été hospitalisé pour une tuméfaction cervicale droite apparue 4 mois plutôt à la suite d’un traumatisme professionnel et ayant progressivement augmenté de taille. L’examen clinique a retrouvé une masse latéro-cervicale droite, dure, adhérente au plan profond faisant 6 cm de grand axe.

La tomodensitométrie a montré un processus expansif isodense bien limité se développant au dépend des muscles scalènes droits faisant 6×5×3 cm. La tumeur refoulait le paquet vasculaire en avant. Une imagerie par résonnance magnétique a révélé une masse en isosignal T1, hypersignal T2 et prenant d’une manière hétérogène le Gadolinium. L’examen cytologique n’était pas contributif et la chirurgie a été proposée.

L’exploration chirurgicale a montré une tumeur bien limitée adhérente aux muscles scalènes et à deux branches duplexus cervical profond, venant au contact duplexus brachial sans l’envahir. L’exérèse de la tumeur était complète emportant des racines duplexus cervical profond et le tissu musculaire adhérent. Les suites opératoires ont été simples sans déficit nerveux.

L’examen anatomopathologique a été en faveur d’une tumeur desmoïde. Six mois après, le patient ne présentait aucun signe de récidive

Conclusion :
Les tumeurs desmoïdes sont des tumeurs bénignes rares des parties molles, prenant naissance à partir du tissu conjonctif des fascias, des aponevroses ou des cloisons intramusculaires des muscles striés. Leur étiopathogénie est multifactorielle complexe et le traumatisme représente un facteur déclenchant fréquent. Le traitement est avant tout chirurgical. La radiothérapie postopératoire est indiquée dans les cas de mages macroscopiquement tumoraux ou de récidive tumorale.
La glande parotide est le siège de pathologies variées. L'IRM joue un grand rôle diagnostique. Nous présentons une étude rétrospective cherchant des critères cliniques et radiologiques permettant d’évoquer une pathologie parotidienne atypique.

L’étude a été menée au CHU Bichat Claude Bernard, de 2010 à 2013. Les pathologies parotidiennes rares ont été sélectionnées. Les caractéristiques cliniques et d’imagerie des lésions (relue grâce à une grille de lecture élaborée à partir de critères IRM établis) ont été comparées à la littérature.

Nous avons sélectionné un kyste de la première fente, un kyste parotidien, un kyste lymphoépithélial, une tuberculose, un abcès, 4 lipomes, un kyste épidermique, un lymphome, une sarcoïdance, 2 sialadénites chroniques, une maladie de Kimura, 2 carcinomes épidermoïdes, une métastase de carcinome épidermoïde cutané, et une malformation veineuse.

Dans la pathologie parotidienne, la clinique est peu spécifique et l’IRM joue un rôle important. Elle permet de différencier les pathologies kystiques pures des tumeurs à composante kystique prédominante grâce aux séquences avec Gadolinium et de diffusion.

Dans la pathologie tumorale bénigne, l’IRM avec séquence en saturation de graisse peut différencier un lipome ou kyste épidermique d’autres tumeurs bénignes. Les séquences de diffusion permettent de différencier un lymphome d’autres tumeurs malignes ; ou encore les abcès des tumeurs nécrotiques.

En conclusion, une lecture critique systématisée d’IRM pourrait permettre d'étayer le diagnostic et parfois d’évoquer des étiologies atypiques pour en optimiser la prise en charge.
La glande parotide est le siège de pathologies variées. L'IRM joue un grand rôle diagnostique. Nous présentons une étude rétrospective cherchant des critères cliniques et radiologiques permettant d’évoquer une pathologie parotidienne atypique.

L'étude a été menée au CHU Bichat Claude Bernard, de 2010 à 2013. Les pathologies parotidiennes rares ont été sélectionnées. Les caractéristiques cliniques et d’imagerie des lésions (relue grâce à une grille de lecture élaborée à partir de critères IRM établis) ont été comparées à la littérature.

Nous avons sélectionné un kyste de la première fente, un kyste parotidien, un kyste lymphoépithélial, une tuberculose, un abcès, 4 lipomes, un kyste épidermique, un lymphome, une sarcoïdose, 2 sialadénites chroniques, une maladie de Kimura, 2 carcinomes épidermoides, une métastase de carcinome épidermoïde cutané, et une malformation veineuse.

Dans la pathologie parotidienne, la clinique est peu spécifique et l'IRM joue un rôle important. Elle permet de différencier les pathologies kystiques pures des tumeurs à composante kystique prédominante grâce aux séquences avec Gadolinium et de diffusion.

Dans la pathologie tumorale bénigne, l'IRM avec séquence en saturation de graisse peut différencier un lipome ou kyste épidermique d’autres tumeurs bénignes. Les séquences de diffusion permettent de différencier un lymphome d’autres tumeurs malignes ; ou encore les abcès des tumeurs nécrotiques.

En conclusion, une lecture critique systématisée d'IRM pourrait permettre d’étayer le diagnostic et parfois d’évoquer des étiologies atypiques pour en optimiser la prise en charge.
Intérêt diagnostique de l’échographie dans les adénopathies cervicales tuberculeuses

M. Sellami*(1), M. Chaabouni(2), A. Chakroun(2), F. Maalej(2), B. Hammami(2), M. Mnejja(2), A. Ghorbel(2)

(1) Service d’ORL et de chirurgie cervico faciale. CHU Habib Bourguiba. Sfax. Tunisie, Sfax, Tunisia, (2) Service ORL du CHU Habib Bourguiba, Sfax, Tunisia

Objet de la présentation :
Evaluer l’intérêt de l’échographie dans le diagnostic des adénopathies cervicales tuberculeuses.

Patients et méthodes :
Notre étude rétrospective a porté sur 131 patients porteurs d’une adénopathie cervicale chronique ayant eu une échographie cervicale précédant l’étude histologique.

Nous avons évalué la performance de l’échographie dans le diagnostic de l’origine tuberculeuse en prenant comme référence le résultat de l’examen histologique définitif. Le test de chi-deux a été utilisé pour l’étude statistique. Une valeur p< 0.05 a été considérée comme statistiquement significative

Résultats :
Le résultat de l’examen histologique a montré que la tuberculose ganglionnaire a été retrouvée chez 66 patients (50.4 % des cas).

L’examen échographique a révélé une nécrose centrale dans 22% des cas de tuberculose et dans 6 % des autres cas et a représenté un critère significativement associé au diagnostic de tuberculose avec une différence significative (p=0.007). Les autres critères ( hypoéchogénicité, calcifications et vascularisation) pris seuls n’ont pas été significativement associés au diagnostic.

Conclusion :
Selon le rapport de l’OMS de 2015, la prévalence et l’incidence de la tuberculose en Tunisie sont respectivement de 42/100 000 et 33/100 000. L’échographie cervicale est un examen peu couteux et anodin qui est utile pour orienter le diagnostic vers une origine tuberculeuse.
Cellulites cervicales extensives avec extension médiastinale

N.Benmansour*(1), M.Ridal(2), N.Elamine elalam(2)

(1)Service ORL et CCF - CHU Hassan II, Fès, Morocco, (2)Service ORL et CCF – CHU-Hassan II – Fès, Morocco

Object de la présentation : Les objectifs de notre travail étaient d’attirer l’attention sur cette affection gravissime, de faire le point sur la clinique, les examens paracliniques et le traitement des cellulites cervicales extensives (CCE) avec extension médiastinale. Enfin, insister sur l’intérêt d’un diagnostic précoce et une prise en charge adéquate seul garant d’une amélioration du pronostic.

Patients et méthodes : Il s’agit d’une étude rétrospective (2010 – 2015) portant sur 32 patients présentant une CCE avec extension médiastinale, pris en charge dans notre service d’ORL et de CCF. Une revue de la littérature a été réalisée à partir de la base de données Medline.

Résultats : Notre série se compose de 13 femmes et de 19 hommes. L’âge moyen de nos patients était de 32 ans. La porte d’entrée était surtout dentaire mais aussi oropharyngée. Les germes les plus fréquemment isolés étaient : streptocoque β hémolytique du groupe A et les anaérobies. Le terrain diabétique aggravait le tableau clinique dans 9 cas ainsi que la prise de la corticothérapie dans deux cas, alors qu’une patiente était HIV positif.

Le diagnostic de médiastinite a été fait grâce à la TDM thoracique. Tous nos patients ont bénéficié d’un traitement chirurgical sous anesthésie générale suivi d’un traitement médical adapté en fonction des résultats de l’antibiogramme. Le drainage médiastinal a été fait par voie cervicale dans trois cas et par thoracotomie dans cinq cas. Six de nos patients ont nécessité une reconstruction de la perte de substance par des lambeaux pédiculés et/ou avec une greffe de la peau totale. Nous avons déploré 3 cas de décès dans un tableau de sepsis et un décès suite à une médiastinite ; alors que le reste de nos cas ont bien évolué.

Conclusions : Les CCE avec extension médiastinale sont des urgences infectieuses mettant en jeu le pronostic vital des patients. Le diagnostic clinique d’atteinte médiastinale est difficile. La TDM thoracique doit être systématique. Le drainage médiastinal est optimal par thoracotomie. La mortalité élevée est liée à la septicémie, les emboles septiques et les médiastinites. L’acharnement thérapeutique tant médical que chirurgical nous a permis d’obtenir des résultats satisfaisants (environ 90,6 % de guérison).
Syndrome d'Eagle. à propos de cas et revue de littérature.

B.Toufik*(1), D.Fouad(1), M.Bencheikh(1), N.Rous(1), S.Kalafate(1), A.Bendimerad(1)

(1)Hôpital Frantz Fanon, Blida, Algeria

**Introduction :** Eagle syndrome est une pathologie rare qui se manifeste par une symptomatologie variée et trompeuse.

**L'objectif :** l'objectif de cette présentation est d'exposer les difficultés de diagnostique de cette pathologie.

**Patients et méthodes :** Nous exposons 3 cas clinique. Nous décrivons leur symptomatologie variée, le retard de diagnostique et la difficulté de leur prise en charge.

**Résultats :** Nous exposons 3 cas clinique, 2 hommes et une femme, différents de leur symptomatologie

Le premier cas est un homme de 37 ans qui a présenté des douleurs pharyngées bilatérale intenses aggravées par la rotation de la tête. Dans les antécédents on a noté une fente labio-vélo-palatine, opérée en 2 temps au jeune âge. Le diagnostic d’amygdalite bilatérale a été posé chez lui et une amygdalectomie unilatérale fut pratiquée. Le patient a été opéré par voie externe.

Le deuxième cas, est une femme de 35 ans qui a consulté plusieurs médecins ORL pour otalgies bilatérales, prédominantes à droite, exagérées par la rotation de la tête. Plusieurs traitements ont été prescrits mais sans résultats. Une TDM de la base du crâne fut demandé pour suspicion d’une tumeur du cavum, a mis en évidence une apophyse styloïde longue. La patiente a refusé l’intervention.

Le troisième cas est un jeune de 28 ans, célibataire, sans antécédents particulier, qui a consulté plusieurs médecins pour des céphalées et de douleurs pharyngées orientant le patients chez un psychiatre ou un traitement à base d’antalgiques et d’anxiolytiques fut prescrits chez lui. Une TDM a posée le diagnostic d’une styloïde longue et le patient a été opéré par voie endobuccale.

**Conclusion :** Eagle syndrome est une pathologie assez rare et on doit y penser devant toute symptomatologie pharyngée et otologique rebelle et trainante.

**Auteurs :** Pr Bentebbiche T, Dr Daoud F, Dr Bendimerad E, Dr Bencheikh M, Pr Rous Y.

Service ORL& CCF, Hôpital Frantz Fanon, Blida ; Algérie.
Adénome ectopique de la parathyroïde: le rôle de la scintigraphie parathyroïdienne au MIBI du technétium-99m parathyroïde (A propos de trois cas)

S.Choukry*(1)

(1)CHU Ibn Rochd, Casablanca, Morocco

S. Choukry1, G. Cherkaoui1, J. Benouhoud1, A. Guensi1
S. Anajar2, K. Choukry2, R. Abada2, S. Rouadi2, M. Roubal2, M. Mahtar2
1: Service de médecine nucléaire du CHU Ibn Rochd Casablanca
2 : Service d’ORL de l’hôpital 20 Aout Casablanca

Introduction:
L’adénome ectopique parathyroïdien est l’étiologie la plus fréquente de l’hyperparathyroïdie. La recherche de son emplacement constitue une source de difficultés notamment pour les explorations habituelles purement morphologiques notamment l’échographie et la TDM.

But du travail :
Le but de ce travail est de souligner l’importance de la scintigraphie parathyroïdienne pour le diagnostic et la localisation de l’adénome ectopique parathyroïdien et guider ainsi une éventuelle chirurgie.

Matériels et méthodes :
Nous rapportons trois cas d’hyperparathyroïdie chez trois patientes présentant des adénomes parathyroïdiens ectopiques.

Résultats :
La première patiente est âgée 45 ans, traitée pour hypercalcémie de découverte fortuite lors d’un bilan de routine. Un dosage de la parathormone a montré une hyperparathyroïdie. La deuxième patiente âgée de 42 ans, ayant bénéficié d’une parathyroïdectomie ¾ pour hyperparathyroïdie avec persistance de son hyperparathyroïdie six mois plus tard. La troisième est une patiente de 34ans suivi pour une hypercalcémie associée à une hyperthyroïdie.

Ces patientes ont été adressées au service nucléaire de l’hôpital universitaire IBN ROCHD pour une scintigraphie parathyroïdienne au sesta-MIBI .

Cette imagerie fonctionnelle est acquise à l’aide de la technique à double phase isotopique (99mTc-MIBI) et de la technique d’imagerie à double isotopie (99mTc-pertechnetate et 99mTc-MIBI), elle a montré pour la première patiente une absorption focale dans le médiastin supérieur avec un whashout retardé conduisant à la conclusion d’un adénome parathyroïdien médiastinal ectopique.

Pour la deuxième patiente, nous avons eu une absorption focale sous-maxillaire avec un whashout retardé en faveur de l’adénome sous-maxillaire parathyroïdien

La troisième patiente présentait également une absorption médiastinale supérieure avec un whashout en faveur d’un adénome parathyroïdien médiastinal supérieur.
Les thyroides éctopiques: à propos de 3 cas

M.Benfdil*(1)

(1)CHU Mohamed VI service d'oto-rhinolaryngologie, Marrakech, Morocco

Objet: L'éctopie thyroidienne est une pathologie rare, elle se caractérise par la présence de tissu thyroidien en dehors de sa localisation prétrachéale normale. C'est une malformation qui résulte de troubles apparus lors de l'organogenèse des viscères cervico-thoraciques. Le but de ce travail est de montrer le profil épidémiologique, clinique, paraclinique et thérapeutique de ce groupe de pathologies.

Matériels et méthodes: Il s'agit d'une étude transversale rétrospective établie sur une période de 3 ans (Janvier 2013 à Janvier 2016) à propos de 3 cas.

Résultats: L'âge moyen des patients est de 26 ans, de sexe féminin. Les signes cliniques étaient représentés par la gène à la déglutition et des crachats hémoptoïques pour 2 cas de thyroïde basilinguale et une dyspnée inspiatoire aigue pour 1 cas de thyroïde éctopique endotrachéale. Tous les patients ont bénéficié d'une tomodensitométrie, et d'une scintigraphie objectivant l'absence de fixation au niveau de la loge thyroidienne. La prise en charge consistait en une extraction chirurgicale complète précédée d'une trachéotomie de sécurité et suivie d'une antibiothérapie de 48 heures. Les bons résultats étaient corrélés à la performance de l'imagerie et la prise en charge précoce.

Conclusion: l'éctopie thyroidienne doit être toujours évoquée devant la présence d'une masse cervicale. L'imagerie offre une meilleure évaluation des rapports de la thyroïde éctopique avec les structures environnantes. La prise en charge chirurgicale reste la mieux préconisée.
Enorme métastase cérébelleuse initiale révélatrice d'un carcinome papillaire de la thyroïde : cas rare

S.Anajar*(1), R.Abada(2), Z.Chafiki(3), S.Rouadi(2), M.Roubal(4), M.Mahtar(2)

(1)CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (2)Chu Ibn Rochd Hôpital 20 août, Casablanca, Morocco, (3)Chu Ibn Rochd Hôpital 20 août, Csablanca, Morocco, (4)Chu Ibn Rochd 20 août, Casablanca, Morocco

Introduction: Le carcinome papillaire est le néoplasme thyroïde malin différencié le plus fréquent, Les métastases se produisent fréquemment dans les ganglions lymphatiques régionaux et les métastases à distance sont tardives et rares, seulement 16 cas de métastase cérébelleuses initiales ont été rapportés dans la littérature

Résultats: Nous rapportons un cas rare de métastase cérébelleuse révélatrice d’un carcinome papillaire de la thyroïde chez un patient âgé 35 ans qui se présente au urgence avec des vertiges progressifs, trouble d’équilibre, céphalées et vomissements persistant évoluant depuis 1 mois, un scanner cérébral a objectivé une énorme masse de 40 -57- 46 mm au niveau de la fosse cérébrale postérieur, avec œdème péri lésionnel. Cette masse était hypervascularisée et prenait le contraste, le patient a été adressée au service de neurochirurgie ou une biopsie scannoguidée a été réalisé révélant à l’examen anatomopathologique un carcinome papillaire compatible avec une origine thyroïdienne

Discussion Conclusion : Les métastases cérébrales du cancer thyroïden sont rares et les métastases cérébelleuses initiale révélatrices du carcinome papillaire sont exceptionnelles, seulement 16 cas ont été rapportés dans la littérature, et en raison de leurs raretés et du manque relatif des données sur leur prise en charge, il n’existe pas d’algorithme de traitement clairement défini
LESIONS ORL ET CERVICO-FACIALES : PROFIL HISTOLOGIQUE

D.Samaké*(1), S.Timbo(2), F.Koné(2), K.Singaré(2), B.Guindo(2), M.Keïta(2)

(1)Centre de Santé de Référence de la Commune V du District de Bamako. Mali, Bamako, Mali, (2)CHU Gabriel Touré, Bamako, Mali

Objet :
Les lésions oto-rhino-laryngologiques (ORL) et cervico-faciales sont riches et variées; l'examen histologique est l'examen princeps des lésions ORL. Il permet de dresser le diagnostic et guide l'attitude thérapeutique.

Notre objectif était d'étudier leur profil histologique et démographique et en fonction du siège.

Matériels et Méthode :
Il s'agit d'une étude rétrospective allant de 1995 à 2014 portant sur 450 patients colligés dans le service d'ORL et Chirurgie cervico-faciale du CHU Gabriel TOURE (Bamako-Mali).

Le résultat histologique a été obtenu après l'analyse des pièces opératoires fixées par du formol à 10%.

Résultats :
Les tumeurs bénignes ont été les plus fréquentes (165 cas soit 36,66%). On les a observées à tous les âges avec une fréquence plus élevée dans la tranche d'âge 20-29 ans. Une prédominance féminine de ces tumeurs bénignes dominées par l'adénome colloïdal de la thyroïde a été observée.

Les cancers ont représenté 48,11% (soit 153 cas) de l'ensemble des tumeurs et 34% des lésions. Ils ont été dominés par les carcinomes (81,04 % des cas) devant les lymphomes (13,72 %) et les sarcomes (5,22 % des cas). Nous les avons observés à tous les âges avec une fréquence plus élevée (31 cas soit 20,26%) dans la tranche d'âge 50-59 ans. Le Carcinome épidermoïde a représenté 67,32% de l'ensemble des cancers et dans 72,72%, il s'agit des hommes.

Parmi les 140 cas (31,11%) de pseudotumeurs inflammatoires, nous avons retrouvé 12 cas de tuberculoses et 15 cas de rhinosclérome.

Trois (3) cas de dysplasies ont été observés.

Conclusion
Au vu de cette diversité des lésions, l'intérêt doit être porté sur l'histologie afin de mettre en route une thérapie appropriée.
Profil épidémiologique des cellulites cervico-faciales d’origine dentaire

K. Djilali alad*(1), A. Lahmer(2), E. Saadaoui(3)

(1) Chu sidi bel abbes, Sidi bel abbes, Algeria, (2) service d’épidémiologie chu de Sidi Bel abbes, Sidi bel abbes, Algeria, (3) service orl chu sidi bel abbes, , Algeria

Objet de la présentation: les cellulites cervicales sont des affections graves, qui se définissent comme des infections sévères, parfois nécrosantes des espaces celluleux du cou, propagées par contiguïté à partir d’une inoculation septique, ces situations infectieuses sont désignées par les auteurs anglo-saxons sous le terme de fasciite nécrosante.

Materiels et méthodes utilisées: une étude prospective descriptive et analytique a été réalisée sur une période de 5ANS à propos de 51 cas de cellulites dentaires.

Résultats: 63% sont de sexe masculin, l’âge moyen est de 34,71 ans±13ans, plus de 50% des patients sont sans profession, 90% ont un niveau socio-économique au-dessous de la moyenne, 58% sont tabagiques et 36% sont alcooliques, la mauvaise hygiène bucco-dentaire a été constaté chez 84% des patients, 31% sont diabétiques, 84% ont été traités par antiinflammatoires non stéroïdiens, les germes responsables sont des germes anaérobies, 11% avaient une mediastinite, le taux de mortalité est de 7%.

En étude analytique: un âge supérieur ou égal à 21 ans est associé, ce facteur âge augmente le risque d’atteinte par 3,4 avec un p = 0,05.

L’incidence des cellulites d’origine dentaire en absence d’hygiène bucco-dentaire est de 84,31%, elle est le double de celle des cellulites d’origine dentaire en présence d’hygiène bucco-dentaire, le OR est de 6,7. p=0,002, le risque est presque de 7 fois plus élevé chez le sujet ayant une mauvaise hygiène bucco-dentaire, par rapport à celui qui a une bonne hygiène bucco-dentaire.

Sur le plan clinique: en étude analytique, seulement les douleurs cervicales sont associées d’une façon significative avec les cellulites d’origine dentaire, le P= 0,005 et le OR= 7,47, le risque de voir les douleurs cervicales est 7 fois plus dans le groupe ayant des cellulites dentaires que dans les cellulites non dentaires, les autres signes cliniques sont associés sans différence significative avec les cellulites non dentaires.

Sur le plan bactériologique, on ne retrouve pas de liaison entre les bactéries usuelles cocci à gram positif (streptocoque et staphylocoque) et la cellulite, l’incidence de cette dernière est plus faible en présence de ces deux germes.

CONCLUSION : Les cellulites cervico-faciales d’origine dentaire sont des Infections polymicrobiennes, elles se manifestent par un tableau clinique bruyant, les facteurs de risque de passage de l’infection initiale à la cellulite sont de type habituel.

Les germes responsables sont mixtes aérobies est anaérobies, Son taux de mortalité est relativement élevé.
Les cancers de l'hypopharynx sont relativement rares mais redoutables. Situés au carrefour des voies aéro-digestives, la prise en charge est souvent compliquée. Selon le registre des cancers Nord Tunisie de 2006, l'incidence du cancer de l'hypopharynx standardisé sur la population mondiale est de 0.4/100000 hommes et de 0.46/100000 femmes. Selon ce même registre, le cancer de l'hypopharynx représente 0.3% du total des cancers de l'homme et 0.47% de ceux de la femme.

Nous rapportons 400 patients traités pour carcinome épidermoïde de l'hypopharynx à l'institut Salah Azaiez (ISA) entre 1977 et 2008.

L'âge moyen était de 55,44 ans. L'âge moyen variait en fonction de la sous localisation. Le sex-ratio était de 1.04. A la différence des cancers du SP, une prédominance féminine variable était notée dans les autres sous localisations. Par sous localisation cancéreuse, l'atteinte touchait le sinus piriforme (SP), la région rétro-crico-aryténoidienne (RCA), la paroi postérieure de l'hypopharynx (PPP) et la bouche œsophagienne (BO) dans 37%, 22.25%, 15.5% et 6.25% des cas, respectivement. Elle touchait tout l'hypopharynx dans 19% des cas.

Notre étude n'a pas montré, ainsi, un changement de la répartition par sous localisation cancéreuse rapportée dans la littérature. Le rôle de l'intoxication alcool-tabagique était vérifié dans les cancers du SP. Le rôle de l'anémie ferriprive, dont le syndrome de Plummer Vincent, était aussi vérifié dans les cancers de la RCA et de la BO. Anémie ferriprive et intoxication alcool-tabagique partageaient les facteurs de risque dans les deux autres sous localisations cancéreuses : PPP et atteinte hypopharyngée totale (HPT).

L'atteinte était localement évoluée (T3-T4) dans 73.25% des cas. L'atteinte ganglionnaire était présente dans 60% des cas. Elle était plus fréquente dans les cancers du sinus piriforme et dans les atteintes hypopharyngées globales. Des métastases synchrones étaient présentes dans 23 cas.

En somme, le cancer de l'hypopharynx reste doté d’un mauvais pronostic malgré le progrès du panel thérapeutique. Le stade tumoral et l’état général restent les principaux facteurs pronostiques.
Évaluation de la qualité de vie chez les patients porteurs de carcinome différencié de la thyroïde

M. Sellami* (1), M. Mnejja (2), A. Ben said (2), F. Maalej (2), A. Chakroun (2), B. Hammami (2), I. Charfeddine (2), A. Ghorbel (2)

(1) Service d’ORL et de chirurgie cervico faciale. CHU Habib Bourguiba. Sfax, Tunisie, (2) Service ORL du CHU Habib Bourguiba, Sfax, Tunisie

Objet de la présentation :
Evaluer la qualité de vie chez les patients suivis pour carcinome différencié de la thyroïde.

Patients et méthodes :
Il s’agit d’une étude portant sur 118 patients ayant eu une chirurgie de la loge thyroidienne (lobeisthmectomie ou thyroidectomie totale avec ou sans évidement médiastino-récurrentiel) entre 2010 et 2015. Une évaluation de la qualité de vie des patients a été réalisée par la version Tunisienne officielle du questionnaire de qualité de vie « EuroQuol-5D-3L » au minimum 6 mois après la chirurgie. Le questionnaire de qualité de vie « EuroQuol-5D-3L » comporte 5 domaines qui sont notés de 1 à 3 selon la sévérité des symptômes : la mobilité, soins autonomes, activités habituelles, douleurs / malaises et Inquiétude / dépression. Le questionnaire comporte également une évaluation globale de la qualité de vie par une échelle visuelle analogique (0 à 100).

Nous avons étudié la qualité de vie selon l’histologie et divisé les patients en deux groupes: groupe carcinome différencié (G1) et groupe lésions bénignes (G2)

L’étude statistique a été réalisé en utilisant le test de chi deux et le test de Student. Une valeur p< 0.05 a été considérée comme statistiquement significative.

Résultats :
Notre étude a comporté 103 femmes et 15 hommes âgés en moyenne de 47 ans (17-83 ans). Les groupes G1 et G2 comportaient respectivement 40 et 78 patients.

La mobilité était normale chez 52% des patients du groupe G1 et 69% des patients du groupe G2 (p=0,1). Les soins étaient autonomes dans 90% des patients du groupe G1 et 91% des patients du groupe G2 (p=0,2).

Les activités habituelles étaient normales chez 72% des patients du groupe G1 et 66,7% des patients du groupe G2 (p=0,).

L’absence de douleurs a été noté chez 34 % des patients du groupe G1 et 30% des patients du groupe G2 (p=0,1).

L’absence d’inquiétude dépression été noté chez 42% des patients du groupe G1 et 39,7% des patients du groupe G2 (p=0.9).

L’évaluation globale de la qualité de vie était de 70 % chez les patients du groupe G1 et de 64% chez les patients du groupe G2 (p=0,4).

Conclusion :
Le cancer différencié de la thyroïde est un cancer de bon pronostic et n’est pas associé à une altération significative de la qualité de vie des patients.
Anévrisme de la veine jugulaire externe avec thrombus présentant comme masse cervicale : (cas rare)

S.Anajar*(1), R.Abada(2), M.Tatari(2), S.Rouadi(2), M.Roubal(2), M.Mahtar(2)

(1)CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (2)Chu Ibn Rochd Hôpital 20 août, Casablanca, Morocco

INTRODUCTION: L'anévrisme de la veine jugulaire externe avec thrombose est une entité clinique rare et rarement rencontrée dans la pratique clinique de routine en otorhinolaryngologie.

MATERIEL ET METHODES: Nous présentons un cas d'une femme agée 52 ans présentant un anévrisme de la veine jugulaire externe qui se manifeste comme une masse laterocervicale gauche d'apparition progressive évoluant depuis 3 ans. Il n'y avait pas d'antécédents de traumatisme antérieur, ni de prise de voie veineuse ni de perfusion pendant une longue période. Il n'y avait aucun antécédent de dysphagie, ou de dysphonie, L'examen physique a révélé une masse indolor fluctuant de 4 × 3 cm, rond, non pulsatile, dans la région du sternocleidomastoidien gauche. La peau en regarde était d'aspect normal. La masse était mobile dans le plan horizontal. Avec légère augmentation de la taille après manœuvre de Valsalva et pendant le rire, la masse était légèrement compressible. Aucun souffle n'a pu être détecté à l'auscultation. Il n'y avait aucun autre masse palpable associé dans le cou ou sur d'autres parties du corps, L'échographie cervicale et la tomodensitométrie ont montré une dilatation sacculaire de la veine jugulaire externe avec thrombose dans l'anévrisme.

RESULTAT ET CONCLUSION: L'anévrisme sacculaire de la veine jugulaire externe est très rare et peut entraîner des complications thrombotiques avec des conséquences graves.
CARCINOME PAPILLAIRE DE LA THYROIDE DANS SA VARIANTE VESICULAIRE: INTERÊT DU CD56 ET DE LA CYTOKERATINE 19

A.Zehani*(1), A.Bani(2), J.Marrakchi(3), I.Chelly(2), G.Besbes(2), S.Haouet(2), N.Kchir(2)

(1)hôpital la rabta, Tunis, Tunisia, (2)hopital la rabta, Tunis, Tunisia, (3)hoiptal la rabta, Tunis, Tunisia

Objet de la présentation :

Le carcinome papillaire de la thyroïde dans sa variante vésiculaire (CPTV) représente 18 à 40 % des carcinomes papillaires. Il s’agit d’une tumeur constituée exclusivement de vésicules bordées de cellules comportant des caractéristiques nucléaires de carcinome papillaire. Le diagnostic morphologique pose souvent des problèmes diagnostiques notamment dans les formes où ces anomalies nucléaires sont focales. L’étude immunohistochimique n’est souvent pas d’un grand apport dans ces cas difficiles.

Le but de notre travail était d’étudier l’apport de l’étude immunohistochimique avec les anticorps anti CD56 et anti Cytokératine 19 dans le diagnostic positif du CPTV et de le comparer avec la forme classique (CPTC) et les adénomes de la thyroïde (AT).

Matériels et méthodes :


Résultats :

L’âge moyen de nos patients était de 47,15 ans avec un sex-ratio (H/F) de 1/7. Une négativité avec l’anti-CD56 était notée dans 16 cas : 9 cas de CPTV et 7 cas de CPTC. Un marquage diffus était noté dans 14 cas des AT (93,3 %). Le score du marquage, attribué selon l’intensité et le pourcentage des cellules marquées, était « haut grade » dans 21 cas : 15 AT, 4 CPTV et 2 CPTC. Pour la CK19, on a observé une positivité dans 38 cas : 14 cas des CPTV (93,3%) et 100% des CPTC. Une négativité était notée dans 1 cas d’AT (6,6 %). Le score du marquage était « haut grade » dans 30 cas : 10 CPTC (100%), 14 CPTV (93,3%) et 6 AT (40%). L’analyse des courbes de ROC (Receiver Operating Characteristic) a montré qu’un seuil de 15% des cellules tumorales négatives à la CD56 et un seuil de 40% de positivité des cellules tumorales à la CK19 étaient des indicateurs de malignité.

Conclusion :

Considérant la forte sensibilité et spécificité du CD56, il est possible d’appliquer l’immunohistochimie pour le diagnostic définitif de CPTV et de le différencier des lésions bénignes. La Cytokératine 19 n’est pas d’un grand apport pour faire la part entre lésion bénigne et maligne.
INTRODUCTION :
Le mélanome de la muqueuse buccale constitue 0,2 à 8 % de l’ensemble des tumeurs mélaniques, et 0,5% des tumeurs malignes de la cavité buccale.
On rapporte un cas de mélanome gingival tout en objectivant les particularités de cette localisation après une revue de la littérature.

OBSERVATION :
Patiente de 49 ans, sans antécédent médical ou chirurgical notable, qui se présente pour une tuméfaction gingivale supérieure droite apparue 2 mois auparavant, douloureuse. L’examen endobuccal montre une tumeur bourgeonnante, de couleur noirâtre, siégeant sur la crête alvéolaire, avec extension des côtés vestibulaire et palatin.
Le scanner cervico-facial objective un processus tissulaire de 31 x 27 mm de la gencive droite avec extension vers les parties molles et présence d’adénopathies cervicales homolatérales mesurant 67 × 33 mm. L’examen anatomopathologique est en faveur d’un mélanome.
Un traitement conservateur est proposé à la patiente. Notre malade est actuellement encore en traitement.

DISCUSSION :
Les mélanomes buccaux sont des tumeurs agressives dont la physiopathologie reste mal connue. Macroscopiquement, il s’agit le plus souvent d’une lésion œdématisée, plus ou moins pigmentée avec un dégradé de coloration centrifuge.
Le bilan d’extension comporte un scanner ou au mieux une IRM cervicofaciale, un scanner thoraco-abdomino-pelvien et une scintigraphie osseuse. Seule l’étude anatomopathologique avec analyse immunocytochimique peut confirmer le diagnostic.
Le traitement n’est pas consensuel. Quel que soit le traitement proposé, le pronostic est mauvais.

CONCLUSION :
La cavité buccale est une localisation exceptionnelle des mélanomes.
La très haute malignité, l’agressivité et le sombre pronostic du mélanome en font une entité dont le diagnostic précoce permet d’améliorer de façon considérable le taux de survie des patients.
Carcinomes basocellulaires à localisation cervicale : difficultés thérapeutiques.
S.Kedous*(1), S.Jbali*(2), S.Dhambri(1), N.Halila(1), M.Mahjoub(1), Z.Attia(1), S.Gritli(1)  
(1)Institut Salah Azaiez, Tunis, Tunisia, (2)Institut Salah Azaiez de Tunis, Tunis, Tunisia

Le carcinome basocellulaire (CBC) est la tumeur cutanée la plus fréquente. Il représente 80% des tumeurs cutanées non mélaniques. Il est secondaire à une longue exposition solaire. Invasive localement, le traitement repose essentiellement sur la chirurgie d'exérèse passant en zones saines. C'est la réparation de la perte de substance qui est, souvent, problématique. 

Nous proposons une étude rétrospective de 36 cas de carcinomes basocellulaires de la face traités à l'institut Salah Azaiez sur une période de 2 ans (2013-2015). La surveillance post thérapeutique était clinique. 

L'âge moyen de nos patients était de 63 ans. La prédominance masculine était notée avec un sex-ratio de 1.7. Certains facteurs de risque ont été notés comme l'exposition solaire dans 56% des cas et une irradiation antérieure dans 5.5% des cas. L'examen physique trouvait une tumeur de diamètre moyen de 2.43 cm (0.5-5cm). L’aspect bourgeonnant était prédominant ; noté dans 52% des cas. Cette tumeur touchait la région jugale dans 30% des cas, la région nasale dans 25% des cas et la région frontale dans 19% des cas. Une TDM n’a été demandée que dans 6 cas sans montrer de lyse osseuse. Le type histologique était confirmé par une biopsie pré-thérapeutique. 6 patients ont eu une contacthérapie première dont 5 ont nécessité une exérèse chirurgicale secondairement. Les autres patients ont eu une chirurgie d’exérèse d’emblée avec des marges variant entre 3 et 10 mm et des recoupes dans tous les cas. Une reconstruction par lambeau local était pratiquée dans 21 cas. Des complications post-opératoires ont été notées dans 6 cas. Les limites latérales étaient envahies à l’histologie définitive dans 8 cas. Une ré-excision chirurgicale était faite dans 1 seul cas seulement. Une récidive locale, n’a été notée que dans 1 cas traité par chirurgie. 

En somme la chirurgie reste la meilleure solution thérapeutique pour les CBC. La localisation cervico-faciale pose essentiellement un problème de plastie pour les tumeurs de grande taille.
Les schwannomes à localisation cervico-faciale

B.Jalila*(1), R.Hejjouji(2), S.Rokhssi(3)

(1)CHU IBN SINA Rabat, Rabat, Morocco, (2)hôpital des spécialités, Rabat, Morocco, (3)hopital des spécialités, Rabat, Morocco

Objectif de la présentation :

Le schwannome est une tumeur mésenchymateuse bénigne, bien encapsulée, qui naît des cellules de la gaine de Schwann du système nerveux périphérique. La localisation au niveau de la tête et du cou représente 25 à 45% des cas. Le but de ce travail est d'étudier les particularités cliniques et thérapeutiques de cette entité en fonction du siège de développement.

Matériel et méthodes :

Il s'agit d'une étude rétrospective portant sur 7 cas de schwannomes cervico-faciaux pris en charge dans notre service d'ORL et de CCF de l'hôpital des spécialités de Rabat sur une période de 4 ans allant du Janvier 2013 jusqu'au Décembre 2016.

Résultat :

Notre série comportait 2 hommes et 5 femmes avec une sex-ratio de 0,4. L'âge moyen de nos patients était de 39 ans (29–53 ans). Le délai moyen de consultation était de 2,8 ans. La symptomatologie dépendait de la localisation tumorale. La localisation était cervicale dans 3 cas, laryngée au dépens de la loge hyo-thyro-épiglottique dans un cas et au niveau de la cavité buccale dans 3 cas : linguale (n = 2), labiale (n = 1). L'examen neurologique était normal dans tous les cas. Une échographie cervicale était pratiquée dans 2 cas avec une sensibilité à 40%. La TDM cervicale a été réalisée (n = 4) et avaient une sensibilité à 50%. L'IRM cervicale était pratiquée chez 3 malades dont la sensibilité était à 70%. Tous les patients ont bénéficié d'une exérèse chirurgicale complète, compatible avec la localisation tumorale. A l'examen anatomopathologique définitif, le schwannome était bénin dans tous les cas. L'évolution était favorable chez tous les patients avec absence de récidive sur un recul moyen de 2,5 ans.

Conclusion :

Les schwannomes sont des tumeurs bénignes à croissance très lente et de localisations multiples. L'imagerie (TDM et IRM) est indispensable pour le bilan préopératoire, surtout pour la localisation cervicale. Leur pronostic est favorable sous réserve d'une exérèse chirurgicale complète.

une hypoacousie révélant une carcinome épidermoide du conduit auditif externe chez une patiente irradiée pour un carcinome nasopharyngé: à propos d'un cas

M. Boutaina*(1)

(1) HOSPITAL UNIVERSITY 20th AUGUST, Casablanca, Morocco

Objectif/Méthodes: Le carcinome primaire du CAE est une maladie assez rare qui représente moins de 2% des cancers de la tête et du cou. Ce carcinome est de mauvais pronostique vu son comportement agressif. Chez les patients irradiés pour NPC, il a une incidence d’environ 0,15%. La symptomatologie étant non spécifique ce qui rend le diagnostic difficile et la gestion chirurgicale plus risquée. L’anatomie complexe de la région et la susceptibilité d’extension de la tumeur aux tissus de voisinage dans un espace aussi limité rendent difficile d’obtenir des marges de résection saines. Une chirurgie agressive associée à une radiothérapie adjuvante restent le traitement habituel. Dans cette étude, nous rapportons un cas rare du CE du CAE chez une femme antérieurement irradiée révélée par une hypoacousie qui en fait une présentation inhabituelle.

Résultats: Une femme de 47 ans ayant un antécédent de carcinome nasopharyngé traité par chimioradiothérapie, s'est présentée pour des otorrhées purulentes et une hypoacousie gauche progressive. L'examen otoscopique a révélé une masse tissulaire comblant le CAE. La TDM des rochers a objectivé un comblement du CAE de densité tissulaire rehaussé après injection du produit de contraste, le processus tissulaire bombe dans la cavité tympanique et entre en contact avec le manche du marteau sans lyse ossiculaire ni érosion décelable des parois du conduit. La biopsie était compatible avec un CE du CAE. La patiente a subi une résection latérale de l'os temporal avec une parotidectomie superficielle et un curage homolatérales. L'examen anatomopathologique a confirmé un carcinome spinocellulaire infiltrant du conduit avec des limites de résection atteintes et des recoupes de parotide saines. La prise en charge a été complétée par une radiothérapie adjuvante.

Conclusion: Le CE du CAE chez les patients irradiés a une symptomatologie et une extension semblables à celles du CE primaire. Cette entité est habituellement découverte à un stade précoce chez les patients post-irradiés comparés à ceux avec un CE primaire. Un traitement chirurgical agressif est fortement recommandé, et une radiothérapie adjuvante pour le CE à stade précoce doit être administrée avec précaution afin de prévenir d'autres complications induites par les irradiations.

Dr Merzouqi Boutaina: résidente en ORL de casablanca, merzouqiboutaina@gmail.com
Dr Chafiki Zakaria : résident en ORL, Zakaria.chafiki@gmail.com
Dr Salama Khadija: résidente en ORL, khadijasalama39@gmail.com
Pr Rouadi Sami: professeur agrégé en ORL. merzouqiboutaina@gmail.com
Pr Abada Arabi : professeur agrégé en ORL.
Pr Roubal Mohamed: professeur d'enseignement supérieur d'ORL.
Pr Mahtar Mohamed: professeur d'enseignement supérieur d'ORL.
Particularités radiologiques des carcinomes adénoïdes kystiques cervico faciaux

R.Bouatay*(1), K.Harrathi(2), A.Elkorbi(2), N.Kolsi(3), A.Zrig(4), J.Koubaa(2)

(1)Hôpital universitaire Fattouma Bourguiba de Monastir, , Tunisia, (2)hôpital universitaire Fattouma Bourguiba de Monastir, Service d’ORL et de CCF, , Tunisia, (3)hôpital Fattouma Bourguiba de Monastir, service d’ORL et de CCF, , Tunisia, (4)hôpital universitaire Fattouma Bourguiba de Monastir, service de Radiologie, , Tunisia

Le carcinome adénoïde kystique (CAK) est une tumeur épithéliale maligne rare représentant 4 à 15% des tumeurs malignes des glandes salivaires. Elle représente le premier type histologique parmi les tumeurs malignes des glandes salivaires accessoires.

Objectif :
Décrire et illustrer l’apport de l’imagerie dans le diagnostic des carcinomes adénoïdes kystiques de localisation cervico faciale

Matériel et méthodes :
Etude rétrospective ayant colligé 10 observations de carcinome adénoïde kystique. Le site tumoral primitif était les glandes salivaires principales dans 3 cas (Parotide: 1 cas, submandibulaire: 2 cas), la cavité buccale dans 3 cas (palais, amygdales), le massif facial pour 2 patients (sinus maxillaire, région ptérygo-palatine), trachée et larynx dans 2 cas. Tous les patients ont été explorés par une imagerie (TDM +/-IRM). La confirmation était histologique dans tous les cas.

Résultats :
L’âge moyen de nos patients était de 49 ans (23-73 ans) avec un sex ratio de 0,5 (3H/6F). Le délai moyen de consultation était de 17 mois. Les motifs de consultation étaient variables selon le site tumoral primitif.

A l’imagerie, Une extension sous muqueuse circonférentielle a été notée pour les 2 localisations laryngo trachéales. L’extension péri neurale était objectivée dans 2 cas. La tumeur était classée T4 dans 50% des cas, T3 dans 20%, T2 etT1 dans 30% des cas (2 patients). Une atteinte ganglionnaire était notée dans 1/3 des cas.

Le traitement était chirurgical suivi d’une radiothérapie externe dans 60% des cas. Un curage ganglionnaire était effectué dans 2 cas. Une radiothérapie exclusive a été indiquée dans 1 cas et une radio chimiothérapie concomitante dans 3 cas. Un suivi moyen de 36 mois était obtenu pour 8 malades. L’évolution était favorable avec absence de récidive locale pour 7 patients.
Chimiothérapie d’induction de type schéma EXTREME chez des patients fragiles avec des cancers des voies aero-digestives supérieures avancés.

V. Cochin*(1)

(1) CHU Saint André, Service oncolgie médicale, Bordeaux, France

Introduction. La chimiothérapie d’induction (IC) dans les cancers des voies aéro-digestives supérieures (VADS) localement avancés (LA) est débattue et repose sur une chimiothérapie de type TPF (docetaxel, cisplatine, 5FU) nécessitant des patients (pts) en bon état général. Nous avons réalisé une étude rétrospective sur une IC de type schéma EXTREME (cisplatine, 5-FU, cetuximab) chez des pts fragiles avec cancers des VADS LA.

Méthodes. De 2008 à 2015, tous les pts consécutifs avec cancers des VADS LA traités par IC de type EXTREME ont été inclus. L’objectif primaire était la faisabilité de cette séquence thérapeutique complète (au moins 2 cycles d’IC et radiothérapie terminée). La tolérance, l’efficacité, la survie sans progression (SSP) et la survie globale (SG) étaient évaluées.

Résultats. 34 pts ont été inclus, de 56 ans en moyenne. Les sites primitifs étaient : oropharynx (67%, n=23, HPV négatifs), hypopharynx (21%, n=7), cavité orale (12%, n=4). Les pts présentaient : 76,5% (n=26) de lésions T4, 41% (n=14) d’atteinte ganglionnaire N2c, 26% (n=9) N3, 62% (n=21) de stade IVa, 38% (n=13) IVb, 38% (n=13) de PS 2, 74% (n=25) de dénutrition sévère (perte de poids de 10% en un mois ou de 15% en six mois), 76% (n=26) de douleurs, 82% (n=28) de gastrostomie, 15% (n=5) de trachéostomie et fistule, 41% (n=14) d’hypoalbuminémie et 12% albumine<25g/l.

Six pts (18%) n’ont pas reçu de 5FU (antécédents cardio-vasculaires). Les toxicités grade 3 étaient de 53%, principalement dues au cisplatine.

La séquence thérapeutique complète a été réalisée chez 76% des pts (N=26) avec 80% de réponse clinique objective. Six pts (17%) ont progressé sous IC, un pt (3%) a arrêté après un cycle (infection) mais a réalisé la radiothérapie, un pt (3%) est décédé durant la radiothérapie (perforation d’ulcère gastrique). La radiothérapie a été potentialisée par cetuximab dans 82% des cas (en moyenne 6 cycles).

La TEP-FDG à 3 mois a montré 9% (N=3) de pts en réponse complète, 44% (N=15) de pts en poursuite évolutive (PD). La SSP et la SG étaient de 5,7 mois et 15,5 mois. Les pts en PD à 3 mois avaient une SG inférieure : 13,6 mois contre 21,9 mois (p=0,01).

Conclusion. Cette étude est la première à évaluer l’utilisation d’un schéma de type EXTREME en induction. Cette étude permet d’ouvrir des perspectives de traitement chez des patients fragiles au diagnostic avec cancers des VADS localement avancés.
Intérêt de l’IRM dans l’approche diagnostique des tumeurs parotidiennes

K. Salhi*(1)

(1) hôpital militaire AIN NAADJA, Alger, Algeria

But de la présentation

Evaluer la corrélation entre d’une part le diagnostic à l’IRM et à la cytoponction à l’aiguille fine et d’autre part le diagnostic définitif posé par l’examen histopathologique de la pièce opératoire quant à la nature bénigne ou maligne de la tumeur.

Matériels et méthode


Une fiche synoptique préalablement établie a permis le recueil des données.

20 dossiers ont été retenus et concernent les patients ayant bénéficié à la fois d’une IRM (2 TDM), d’une cytoponction et d’une parotidectomie (2 patients non opérés : une contre indication à l’AG et une tumeur très évoluée) avec disponibilité du résultat de l’examen anatomopathologique de la pièce opératoire.

Une partie des IRM et des cytoponctions a été pratiquée dans le privé.

Certsains patients ont bénéficié de la technique de diffusion en IRM (04).

L’examen anatomopathologique des pièces opératoires a été fait exclusivement à l’Hôpital Central de l’Armée.

Résultats

Sur les 4 tumeurs classées malignes par l’examen histologique de la pièce opératoire, l’IRM en a dépisté 4, soit une sensibilité de 100% ( x 100)

Sur les 16 lésions bénignes à l’examen histologique, 14 l’étaient à l’IRM, soit une spécificité de 87,5%. ( x 100)

La cytoponction a dépisté 3 lésions malignes sur 4, soit une sensibilité de 75%;

Sur les 16 lésions bénignes à l’examen histologique, 14 l’étaient à la cytoponction soit une spécificité de 87,5%.

Conclusion

L’IRM, par son approche multi planaire et son excellente résolution spatiale et de contraste est incontestablement le meilleur examen d’imagerie pour détecter, localiser, apprécier les rapports et caractériser une lésion parotidienne.

Ceci grâce aux séquences morphologiques, complétées par l’étude dynamique du rehaussement, l’étude du coefficient apparent de diffusion (ADC) et le transfert de magnétisation.
Le lymphangiome kystique intraparotidien chez l'enfant : A propos de deux cas

R.Hejjouji*(1), S.Rokhssi(2), B.Regragui(2)

(1)centre hospitalier universitaire de Rabat, Casablanca, Morocco, (2)chu de Rabat, , Morocco

Les lymphangiomes kystiques de la parotide sont des tumeurs vasculaires bénignes qui apparaissent rarement chez l’adulte ; ils sont en général détectés dans les deux premières années de la vie. Buts : A travers deux cas de lymphangiomes kystiques intraparotidiens apparus chez deux enfants, nous discuterons le rapport bénéfice/risque de la chirurgie qui rend la décision thérapeutique plus complexe.

Matériels et Méthodes : Il s’agit d’un garçon de onze ans et un nourrisson de 4 mois qui ont été admis pour une masse isolée et rénitrante indolore de la région parotidienne unilatéralement évoluant depuis la naissance avec notion dépoussées inflammatoires répétitives.

Résultats : Le diagnostic d’un lymphangiome kystique intraparotidien a été évoqué cliniquement, appuyé par l’échographie et la tomodensitométrie et confirmé par un examen histologique de la pièce d’exérèse chez l’enfant et une IRM a été demandé chez le nourrisson. L’enfant a bénéficié d’une parotidectomie totale mais il a présenté une paralysie faciale périphérique post opératoire. Aucune récidive n’a été détectée. Cependant le nourrisson a bénéficié d’un traitement médical.

Conclusion : La localisation parotidienne du lymphangiome kystique rend leur chirurgie difficile du fait du développement du lymphangiome entre les ramifications du nerf facial. La question du rapport bénéfice/risque rend la décision thérapeutique plus complexe car l’agressivité de l’exérèse tumorale radicale se heurte à une origine tumorale bénigne.

AFFILIATIONS ET AUTEURS : R.Hejjouji, S.Rokhssi, B.Regragui, J.Benayad, A. ayoubi, R Bencheikh, MA Benbouzid, L Essakallli

Service d’Orl et chirurgie maxillo-faciale de l'Hôpital des Spécialités de Rabat

D.Abed*(1)

(1) EPH Kouba, Alger, Algeria

INTRODUCTION

La Maladie de Kimura ou lymphogranulome éosinophile est une maladie inflammatoire chronique idiopathique, très fréquente en orient (Chine – Japon).

Par ailleurs, elle est décrite de façon sporadique, voire exceptionnelle dans le reste du monde.

L’atteinte des glandes salivaires est peu fréquente, son association à une atteinte lacrymale est exceptionnelle.

Matériels et méthodes :

nous rapportons le cas d’un Algérien de souche, âgé de 45 ans et qui présente une maladie de Kimura à localisation intra-parotidienne et lacrymale associée à une atteinte rénale.

Discussion :

La Maladie de Kimura est une affection asiatique idiopathique probablement d’origine immunologique qui rentre dans le cadre des dermatoses éosinophliques; 200 cas ont été décrits dans la littérature, dont 40 cas d’atteinte parotidienne.

Cliniquement, elle se présente sous forme de nodules sous cutanés intéressant la région cervico-faciale, les glandes salivaires principales peuvent être concernées. L’atteinte orbitaire est exceptionnelle et l’atteinte rénale est décrite dans 6% des cas à ce jour.

L’évolution est chronique et est rythmée par les poussées tumorales; les récidives après traitement chirurgical sont de l’ordre de 15%-40%. Le pronostic bénin de la maladie est conditionné par la possible atteinte rénale.

Le cas présent reste atypique par sa double localisation salivaire et lacrymale et par son absence d’atteinte cutanée.

Conclusion :

La maladie de Kimura est une affection asiatique qui affecte usuellement les tissus cutanés, la double atteinte parotidienne et lacrymale est exceptionnelle. Elle doit rester à l’esprit de l’ORL devant toute masse cervico-faciale.
CARCINOME ADENOÏDE KYSTIQUE DES GLANDES SALIVAIRES DU PALAIS A PROPOS D'UN CAS

M.Chouai*(1)

(1) CHU MOHAMMED VI ; OUJDA ; MAROC, Oujda, Morocco

INTRODUCTION : carcinomes adénoïdes kystiques sont des tumeurs épithéliales malignes à croissance lente, se développant aux dépens des glandes salivaires accessoires.

OBSERVATION : Patient âgé de 48 ans, alcool-tabagique chronique, présente depuis 6 mois une tuméfaction du palais dur de découverte fortuite, augmentant progressivement de volume ; À l'examen clinique une masse occupant l'hémipalais gauche jusqu'au sillongingivale recouvert d'une muqueuse saine ; À la TDM facial : processus tumoral centré sur le sinus maxillaire gauche ; À la biopsie objective : carcinome adénoïde kystique du palais, une maxillectomie gauche a été réalisée suivi de radiothérapie, l'évolution a été favorable.

DISCUSSION : Le traitement repose sur une exérèse chirurgicale large complétée par une radiothérapie. Le taux de survie à 5 ans est de plus de 60%, cela ne reflète pas le taux réel de guérison, du fait de l'évolution lente de la tumeur et des métastases.

CONCLUSION : tumeur épithéliale relativement rare ; l'étiologie exacte n'ait pas encore déterminer la surveillance étroite sera nécessaire du fait du risque de récidive ou de poursuite évolutive.
ADENOME PLEOMORPHE PARAPHARYNGE GEANT A PROPOS D’UN CAS

M.Mouzouri*(1), A.Lachkar(2), A.Khannoussen(2), A.Eabdenbitsen(2), F.Elayoubi elidrissi(2), M.Ghailan(2)

(1)Centre hospitalier universitaire mohammed VI Oujda MAROC, , Morocco, (2)Centre hospitalier universitaire Mohammed VI, Oujda, Morocco

OBJET :

L’adénome pléomorphe est une tumeur bénigne des glandes salivaires, mais qui possède des caractères de malignité clinique. La localisation parapharyngée est rare. 

Nous rapportons le cas original d’un adénome pléomorphe géant de l’espace parapharyngé développé au dépends des glandes salivaires accessoires.

OBSERVATION :

Nous rapportons le cas d’un patient âgé de 45 ans, tabagique chronique 18P/année, qui consulte pour une dysphagie haute évoluant depuis dix ans, avec paresthésies pharyngées et voix oropharyngée, depuis deux ans l’installation d’une dysphonie avec dyspnée, sans limitation de l’ouverture buccale.

L’examen cervical objective une tuméfaction sus-phyoïdienne latérale gauche mesurant environ quatre cm dans son grand diamètre, ferme, homogène, mobile par rapport au plan superficiel et fixée par rapport au plan profond, indolore.

L’examen endobuccal trouve une tuméfaction parapharyngée gauche refoulant en dedans et en avant l’amygdale et le voile du palais, comblant toute la lumière oropharyngée, recouverte d’une muqueuse saine, de consistance ferme, homogène et indolore.

La TDM a objectivée une grosse image kystique de 7x4x4,5cm hypodense hétérogène bien encapsulée contenant des calcifications, venant au contact avec le prolongement profond de la Parotide dont elle est séparée par un liseré graisseux, jouxtant la base du crane en haut et le rachis cervical en arrière.

Le patient a bénéficié d’une exérèse chirurgicale complète sans effraction capsulaire avec sous maxillectomie gauche par voie cervicale.

CONCLUSION :

L’adénome pléomorphe est une tumeur bénigne, constituée par une double prolifération cellulaire, des Cellules épithéliales et des cellules myoépithéliales.

L’adénome pléomorphe des glandes salivaires accessoires se localise surtout au niveau du palais, des joues, et de la lèvre supérieure, la localisation préstylienne est rare.

Dans la plupart des cas la symptomatologie est pauvre et la tumeur n’est découverte qu’à l’apparition d’une dysphagie.

La TDM et l’imagerie par résonance magnétique sont nécessaires pour connaître la nature et l’extension de la tumeur.

Dans notre cas l’abord chirurgical était par voie cervicale, il a permis une exérèse complète de la tumeur.
CANCERS DU LARYNX: ÉTUDE ÉPIDÉMILOGIQUE, CLINIQUE, PARACLINIQUE ET THÉRAPEUTIQUE CHU-MOHAMED VI-Oujda, MAROC ; A PROPOS DE 70 CAS

M.Chouai*(1)

(1)CHU MOHAMED VI ; OUJDA ; MAROC, Oujda, Morocco

INTRODUCTION: fréquents, Directement liés au tabagisme et l'alcoolisme, ils touchent majoritairement l'homme, souvent diagnostiqués à un stade avancé; Le bilan d'extension repose sur l'endoscopie et l'imagerie.

MATÉRIEL ET MÉTHODES: Étude rétrospective intéressant 70 cas de tumeurs malignes du larynx hospitalisés au service d'ORL, CHU MOHAMED VI -Oujda, MAROC ; sur une période de 6ans.

OBJECTIF: discuter les caractéristiques et les particularités épidémiologique, clinique, thérapeutique et pronostique de nos patientes en se référant à la littérature.

RÉSULTAT: La moyenne d’âge est de 54ans, 65%des cas appartiennent à la région du rif du Maroc et 35%à la région de l’oriental; 60% vient du milieu urbain et 40% du milieu rural, 95%sont des tabagiques chroniques et 90%alcooliques, La dysphonie était le signe révélateur dans 90%des cas, L'endoscopie et l'imagerie ont été réalisé systématiquement, Le traitement été une association radio-chirurgicale dans tous nos cas(60 Laryngectomie totale + 10 Laryngectomie partielle)

CONCLUSION: meilleur pronostic d’ensemble au sein des cancers des VADS; l’immense majorité sont liés au tabagisme chronique, qu’à côté des efforts d’amélioration diagnostique et thérapeutique, il est indispensable d’intensifier les campagnes de sensibilisation sur le mode de vie.

SYNDROME DE LEMIERRE : A PROPOS DE 2 CAS

Y.Moussaoui*(1), A.Saheb(2)

(1)EPH Tiziouzou, Algeria, (2)CHU TZO, Algeria

1. Objet de la présentation:
Le syndrome de Lemierre est une thrombophlébite septique de la VJI à l’origine d’emboles septiques, consécutive à une infection ORL par une bactérie anaérobie, le plus souvent le Fusobactérium necrophorum. Pathologie rare, ce qui explique sa relative méconnaissance par de nombreux médecins, cause d’un retard diagnostic et donc d’une morbidité et d’une mortalité accrues. Il se présente par un tableau clinique de sepsis et/ou des douleurs latéro-cervicales disproportionnées par rapport aux anomalies décelées à l’examen clinique de l’oropharynx et de la région cervicale. Le scanner est l’examen de choix pour confirmer le diagnostic.

2. Matériel et méthodes:
Nous rapportons 2 cas, survenant chez une jeune femme de 22 ans sans antécédents et un homme de 76 ans diabétique et cardiopathe. Le début était marqué par une angine fébrile et une odynophagie traités par l’Ampicilline et les AINS dans les 02 cas. En moyenne 10 jours plus tard ils sont hospitalisés pour aggravation des symptômes avec trismus, cellulite cervicale, thrombophlébite septique de la VJI confirmée par l’échodoppler veineux cervical dans les 2 cas et métastases septiques pulmonaires à l’angioscanner dans 1 cas. La biologie avait objectivé une hyperleucocytose à PNN et un syndrome inflammatoire majeur. L’étude bactériologique avait isolé un Streptocoque Alpha Hémolytique dans 1 cas et Klebsiella Pneumonie dans l’autre cas.

3. Résultats:
Les 2 patients avaient reçu une association d’antibiotique à base de métronidazole pendant 2 semaines et du Tienam® pendant 4 semaines, après un relai par l’Augmentin pendant 2 semaines dans les 2 cas. Le traitement médical était associé à un traitement chirurgical consistant en une incision drainage de la cellulite sous anesthésie générale dans les 2 cas et une ligature de la VJI et une résection de la thrombose jugulaire interne de 6 centimètres de longueur dans l’autre cas, à l’origine d’un sepsis avec micro abcès du parenchyme pulmonaire. Anticoagulation efficace par une HBPM relayée par les AVK pendant 3 mois pour les 2 cas.

L’évolution était favorable dans les 2 cas.

3. Conclusion:
Le syndrome de Lemierre est une affection peu connue et potentiellement mortelle chez des patients jeunes, pour lesquelles une antibiothérapie bien ciblée est salutaire. Il faut savoir y penser devant tout sepsis dont l’origine est inexpliquée, le foyer ORL passant souvent inaperçu. La scanner avec injection de produit de contraste reste l’examen de choix pour le diagnostic et le bilan d’extension des complications.
Facteurs de risque locaux et généraux exposant au carcinome épidermoïde de la muqueuse de la cavité orale : étude cas témoins sur 109 patients

N.Zouhair*(1), A.Elbousadani*(2), R.Abada(2), S.Rouadi(2), M.Roubal(2), M.Mahtar(2)

(1)Service d’ORL et de Chirurgie Cervico-faciale, Hôpital 20 Août 1953, CHU Ibn Rochd, Casablanca, Morocco, (2)Otho-rhino-Laryngology Unit. University Hospital of Casablanca, morocco.

L’objectif est d’étudier les facteurs d’exposition locaux et généraux au carcinome épidermoïde de la muqueuse de la cavité orale(CEMCO) et secondairement évaluer la survie de nos patients à 2 ans de recul.

Matériel et méthodes : Nous avons mené une étude analytique cas témoins analysant les facteurs d’exposition au CEMCO. Les facteurs d’exposition recherchés sont, entre autres, le tabagisme gingival (Kala au Maroc) et respiratoire, l’alcoolisme, le port de prothèses dentaires, l’hygiène buccodentaire, chewing-gum, usage de substances locales de soins (Swak au Maroc)… La période de l’étude est étalée entre janvier 2011 et décembre 2013. L’analyse statistique uni et multi-variée sont réalisées grâce au logiciel Epi-info version 2000.

Résultats : Nous avons inclus 49 cas de CEMCO versus 60 témoins comparables aux critères démographiques des cas. Les facteurs de risque confirmés avec un p très significatif (p < 10−3) sont le tabagisme dans ses deux formes, l’alcoolisme, le port de prothèses dentaire adjointe, dent manquante, mauvaise hygiène buccodentaire. D’autres facteurs suspect à l’analyse univariée notamment usage de substances locales de soins « Swak », Chewing-gum et le tabac gingival ont été confirmé grâce à l’analyse multivariée dans les localisations gingivale et labiale avec un p significatif < 0,05. Nous avons élaboré la courbe de survie Kaplan Mieir avec une survie globale à 2 ans de 65 % (survie de 80 % chez les hommes versus 50 % chez les femmes).

Conclusion : Nous avons pu confirmer des facteurs de risques exposant au CEMCO et nous insistons sur la nécessité de la prévention des facteurs évitables.
La tuberculose ganglionnaire cervicale à propos de 60 cas
A.Lachkar*(1), A.Aabach(2), M.Chouai(2), F.Elayoubi(2), M.GhaiIan(3)
(1)Service d’ORL et de chirurgie cervico-faciale CHU Mohammed VI d’Oujda, , Morocco, (2)CHU Mohammed VI Oujda, , Morocco, (3)Chef de service d’ORL et de chirurgie cervico-faciale d’Oujda, , Morocco

Objets de la présentation: la tuberculose ganglionnaire cervicale représente la localisation extra pulmonaire la plus fréquente.

Elle pose des difficultés diagnostique et thérapeutique surtout dans les pays endémiques tel que le Maroc. Le but de ce travail est d’apprécier les aspects épidémiologiques, cliniques, thérapeutiques et évolutifs de la tuberculose ganglionnaire cervicale.

Matériels et méthodes : étude rétrospective incluant tous les cas de tuberculose ganglionnaire cervicale colligés entre janvier 2013 et décembre 2015 au service d’ORL et de chirurgie cervico-faciale du CHU Mohammed VI d’Oujda.

Nous avons retenus tous les malades présentant une tuberculose ganglionnaire confirmée histologiquement.

Les données anamnestiques, cliniques, paracliniques et thérapeutiques ont été reportées sur des fiches d’exploitation préalablement rédigées.

Résultats:
Il s’agit de 35 hommes et 25 femmes, la moyenne d’âge était de 25 ans.

5 patients étaient diabétiques. La notion de contagé tuberculeux a été rencontrée chez 10 patients. 4 patients ont été déjà traités pour tuberculose pulmonaire.

Le délai moyen de consultation était de 5 mois.

Des signes généraux associés à type de fébricule, d’asthénie et d’amaigrissement ont été retrouvés chez 9 patients.

Les adénopathies étaient jugulocarotidiennes supérieure (II) ans 40 % des cas, jugulocarotidiennes moyennes (III) dans 25 % des cas, et submandibulaires dans 15 % des cas, les autres localisations étaient spinales et sus claviculaires. Elles étaient bilatérales dans 50 % des cas. Ces adénopathies étaient fermes dans 80 % des cas, inflammatoires dans 10 % des cas et fistulisées dans 10% des cas.

Le bilan paraclinique a comporté une échographie cervicale chez tous les patients et une radiographie du thorax qui était anormale chez les deux patients déjà traités pour tuberculose pulmonaire.

Tous les malades avaient subi une cervicotomie exploratrice avec adénecтомie dans un but diagnostic, avant de démarrer le traitement antituberculeux. L’évolution était favorable dans 60 % des cas. Des adénopathies résiduelles sont notées dans 10 % des cas ayant nécessité une cellulolymphadénectomie.

Conclusion : La tuberculose ganglionnaire demeure un important problème de santé publique au Maroc. La cervicotomie avec examen anatomopathologique conserve une place importante de diagnostic de tuberculose ganglionnaire, les formes résistantes peuvent nécessiter un évidement ganglionnaire, cependant le traitement est avant tout médical.
LES LYMPHOMES PAROTIDIENS : A PROPOS DE TROIS CAS

S. Anajar*(1), J. Hassnaoui(2), R. Abada(3), S. Rouadi(4), M. Roubal(4), M. Mahtar(5)
(1) CHU IBN ROCHD HÔPITAL 20 AOÛT, Casablanca, Morocco, (2) Chu Ibn Rochd Hôpital 20 août, Casablanca, Morocco, (3) Chu Ibn Rochd Hôtel 20 août, Casablanca, Morocco, (4) Chu Ibn Rochd Hôpital 20 août, Casablanca, Morocco, (5) CHU Ibn Roch Hopital 20 août, Casablanca, Morocco

INTRODUCTION : La localisation parotidienne des lymphomes est rare, l'examen clinique et l'imagerie ne sont pas évocateurs, Seule la parotidectomie exploratrice avec examen anatomopathologique et l'examen extemporané, devant toute masse parotidienne, confirment le diagnostic. La prise en charge est chimio et / ou de radiothérapie.

MATERIELS ET METHODES : Notre travail est une étude rétrospective comportant deux femmes et un homme, la moyenne d'âge était de 65 ans, la durée moyenne d'évolution était de quatre ans, la masse était non douloureuse dans tous les cas et son volume moyen était de 8cm/7cm. Un cas présentait une paralysie faciale partielle. Deux cas présentaient des adénopathies cervicales palpables. À la TDM, la tumeur a été mal limitée dans tous les cas, et des adénopathies cervicales étaient présentes dans tous les cas. Deux cas ont bénéficié d'une parotidectomie exofaciale, et un cas d'une parotidectomie totale avec curage ganglionnaire. Deux patients ont présenté une paralysie faciale totale postopératoire. L'examen anatomopathologique a conclu à un LMNH dans tous les cas, dont deux de type MALT et un de type folliculaire. Deux cas ont bénéficié d'une chimiothérapie exclusive et un cas d'une radiochimiothérapie. Deux cas sont actuellement en rémission complète, et un cas perdu de vue au cours de sa chimiothérapie.

RESULTATS CONCLUSION : Devant une masse parotidienne non douloureuse dont l'examen clinico-radiologique montre un caractère diffus avec présence d'adénopathies cervicales multiples, le diagnostic de lymphome doit être évoqué, et une démarche diagnostique visant à confirmer le lymphome (biopsie ganglionnaire, examen extemporané) et guider la thérapeutique (chimio et/ou radiothérapie).
LES LYMPHOMES EN ORL : 6 CAS, 6 LOCALISATIONS

M.Chouai*(1)

(1)CHU MOHAMMED VI ; OUJDA ; MAROC, Oujda, Morocco

INTRODUCTION : Les lymphomes de la tête et du cou représentent plus du tiers des localisations lymphomateuses extra ganglionnaires. La difficulté principale réside dans l’absence de spécificité des signes cliniques révélateurs. Ceci conduit souvent à un retard de consultation et donc un diagnostic à un stade avancé de la maladie.

OBJECTIF : Le but de l’étude est de définir les caractéristiques cliniques, paracliniques, la PEC et le pronostic des lymphomes extraganglionnaires a localisation orl.

PATIENTS ET MÉTHODES : nous rapportant dans cette étude 6 cas de lymphome a révélation orl. Qui sont successivement : un lymphome thyroïdien, parotidien, des fosses nasales, du cavum, de l’amygdale et de la mandibule(osseuse).

- CAS 1 : Thyroïde /56ans /sexe :M / Dyspnée / L’échographie : GMHN ; TDM : masse tumorale avec compression trachéale et médiatinsale + ADP / lymphome B diffus à grandes cellules

- CAS 2 : Protide /45ans /sexe :F /Tuméfaction parotidienne/ IRM : masses en isosignale T1 T2 et prenant de façon hétérogène le contraste/lymphome B diffus à grandes cellules

- CAS 3 : Fosses nasales/33ans /sexe :M / Obstruction nasale, exophtalmie, Anosmie / TDM nasosinusienne : masse de FN avec lyse des parois du sinus max et plancher de l’orbite/ lymphome T/NK

- CAS 4 : Cavum /42ans/sexe :F / hypoacousie / TDM : masse de la paroi post du rhinophaynx / LMNH B a grandes cellules

- CAS 5 : Amygdale /43ans/sexe :F / odynophagie, dysphagie, halène fétide / LMNH B a grandes cellules

- CAS 6 : Mandibule/49ans/sexe :M/ Tuméfaction Mandibulaire /TDM Massif Faciale : masse lytique Kystique de la branche horizontale dte / LMNH diffus B à grande cellules de type centro germinatif

DISCUSSION : La sphère ORL est un site de prédilection de l’envahissement tumoral ganglionnaire dans la pathologie lymphomateuse. L’atteinte extraganglionnaire cervicale est rare. Parmi les atteintes extraganglionnaires on trouve majoritairement les envahissements de l’anneau de Waldeyer. Les autres localisations (nasale, mandibulaire, parotidienne, thyroïdienne...) sont rares

CONCLUSION : la précocité du diagnostic de la maladie lymphomateuse permettant d’améliorer le pronostic de cette pathologie agressive. Le traitement de la maladie lymphomateuse étant principalement médical, il nécessite également une collaboration étroite entre chirurgien ORL et hématologue, radiologue, anatomopathologiste, et oncologue.
Tumeurs malignes du conduit auditif externe : prises en charge et résultats : une étude REFCOR

B.Esteban*(1), B.Baujat(2), P.Herman(3), P.Ceruse(4), J.Mérol(5), C.Righini(6), S.Morinière(7), E.Babin(8), L.De gabory(9), M.Makeieff, M.Makeieff


Objectif :

Les cancers du conduit auditif externe (CAE) sont des tumeurs rares avec une prévalence de un à six cas pour un million. La prise en charge est basée sur une chirurgie parfois très mutilante. Du fait de leur rareté, il est difficile de définir une conduite à tenir concernant les modalités de leur prise en charge.

L’objectif de cette étude était de rapporter les caractéristiques cliniques, anatomo-pathologiques et radiologiques de patients consécutifs atteints de tumeurs malignes du CAE, et de rapporter leur modalités de traitements et leurs résultats, grâce à la base REFCOR (Réseau d’Expertise Français des Cancers ORL Rares)

Matériels et méthodes :

Il s’agit d’une étude rétrospective multicentrique nationale étudiant l’ensemble des patients inclus prospectivement dans la base REFCOR.

La base de données REFCOR a été constituée en 2008 sous l’impulsion de la Société Française d’ORL et regroupe la plupart des centres français spécialisés dans les cancers de la tête et du cou. Son objectif est d’inclure prospectivement tous les patients atteints de cancer ORL.

Etaient exclus tous les cancers de l’oreille moyenne ainsi que l’ensemble des cancers cutanés du pavillon de l’oreille.

Les variables qualitatives ont été exprimées en fréquences et comparées par le test du Chi2. Les variables quantitatives ont été exprimées en médiane et comparées selon le test de Mann-Whitney. Les différents types de survie ont été étudiées et exprimées par des courbes de Kaplan-Meier.

Résultats :

119 patients ont été inclus, 48 hommes (40%) et 71 femmes (60%). L’âge moyen était de 66 ans. Les médianes de survies globales, sans récidive et sans métastases tout stade confondu étaient respectivement de 19, 16 et 18 mois. Les caractéristiques épidémiologiques et cliniques de l’ensemble des patients sont présentées, ainsi que les caractéristiques radiologiques et anatomo-pathologiques des tumeurs. Les modalités thérapeutiques sont détaillées et les survies globales, sans récidive et sans métastase sont comparées entre chaque groupe de modalité de traitement et pour chaque stade tumoral.

Conclusion :
A notre connaissance, il s’agit de la plus grosse série mondiale de cas de cancers du conduit auditif externe. Ces tumeurs rares répondent à un double challenge : diagnostic et thérapeutique. La chirurgie reste à ce jour la pierre angulaire du traitement, en association à la radiothérapie post-opératoire. La chimiothérapie et autres thérapies ciblées n’ont pas encore été évaluées. Des études prospectives par l’intermédiaire du REFCOR seraient nécessaires afin d’évaluer leur place dans la stratégie thérapeutique.
Prise en charge chirurgicale des carcinomes différenciés de la thyroïde : Expérience du service

A. Bouayed*(1)

(1) centre hospitalo-universitaire, Tlemcen, Algeria

Objectif : Analyser les aspects diagnostiques, anatomopathologiques, thérapeutiques et les résultats évolutifs (morbilité – récidives – survie) et évaluer l’atteinte ganglionnaire dans le but de contribuer à la meilleure prise en charge possible des cancers différenciés de la thyroïde dans notre contrée.


Résultats : L’examen anatomo-pathologique trouvait un carcinome papillaire (74,1%), vésiculaire (16,5%) ou papillaire à composante vésiculaire (9,4%). Trente patients ont eu un curage fonctionnel systématique uni ou bilatéral, une métastase ganglionnaire a été notée chez 9 d’entre eux. Quarante-six patients ont eu un prélèvement ganglionnaire uni ou bilatéral, un curage fonctionnel a été pratiqué chez 6 d’entre eux devant un examen extemporané positif. Les taux de rémission, de récidive et de métastases étaient respectivement de 83,3%, 6,7% et 10% dans le premier groupe, et de 89,3%, 4,3% et 6,4% dans le deuxième groupe. Par ailleurs, un décès a été observé chez deux patients du deuxième groupe (1,4%). Aucune différence statistiquement significative n’a été retrouvée entre les différents taux.

Conclusion : Les résultats dans notre série mettent en évidence l’intérêt du prélèvement sus-claviculaire et jugulaire inférieur permettant d’éviter le curage fonctionnel systématique.
Prise en charge des troubles de l’olfaction, du goût et de la déglutition des patients atteints d’un cancer ORL

A. Guillemaud*(1)

(1) CH Valence, Valence, France

Introduction :
Les troubles de l’olfaction, du goût ainsi que les atteintes des fonctions de mastication et de déglutition, fréquemment rencontrés chez les patients souffrant de cancer ORL, sont sources de dénutrition. La prise en charge nutritionnelle de ces patients n’est souvent abordée que d’un point de vue thérapeutique en ne se concentrant uniquement sur les valeurs quantitatives des ingestas (nombre de calories, de protéines, nécessité de compléments oraux, de nutrition entérale...). Cependant, particulièrement en France, se nourrir ne répond pas seulement à des besoins primaires. Manger est un plaisir ainsi qu’un élément central de la vie sociale et familiale d’un individu.

Objectif :
L’objectif de cette étude était d’établir un consensus, national, sur la prise en charge intra-hospitalière et à domicile des troubles de l’olfaction, du goût et de la déglutition engendrés par le cancer, en maximisant le versant plaisir de l’alimentation, afin de lutter contre la dénutrition de ces patients.

Méthode:

Résultats:
Premièrement, les définitions, physiologies et physiopathologies concernant l’odorat, le goût et la déglutition sont exposées. Secondairement, la prévention ainsi que la prise en charge de chacun de ces troubles sont présentées. Des messages pratiques simples, par exemple concernant les ingrédients à utiliser, les recettes de cuisine à adopter en fonction des différentes atteintes du patient, sont répertoriées pour offrir à ce dernier ainsi qu’à sa famille et aux professionnels de santé l’entourant des stratégies concrètes de prise en charge.

Conclusion:
Au final, ce travail a abouti à un consensus national sur la gestion et les stratégies d’adaptation des troubles de l’alimentation, au domicile ainsi qu’en centre de soins, à mettre en place afin de lutter, avec plaisir, contre la dénutrition des patients atteints de cancer ORL.
prise en charge des modifications des capacités olfactive, gustative et de la déglutition dans les cancers ORL

A.Guillemaud*(1)

(1)CH Valence, Valence, France

Introduction :
Les troubles de l’olfaction, du goût ainsi que les atteintes des fonctions de mastication et de déglutition, fréquemment rencontrés chez les patients souffrant de cancer ORL, sont sources de dénutrition. La prise en charge nutritionnelle de ces patients n’est souvent abordée que d’un point de vue thérapeutique en ne se concentrant uniquement sur les valeurs quantitatives des ingesta (nombre de calories, de protéines, nécessité de compléments oraux, de nutrition entérale...). Cependant, particulièrement en France, se nourrir ne répond pas seulement à des besoins primaires. Manger est un plaisir ainsi qu’un élément central de la vie sociale et familiale d’un individu.

Objectif :
L’objectif de cette étude était d’établir un consensus, national, sur la prise en charge intra-hospitalière et à domicile des troubles de l’olfaction, du goût et de la déglutition engendrés par le cancer, en maximisant le versant plaisir de l’alimentation, afin de lutter contre la dénutrition de ces patients.

Méthode :

Résultats :
Premièrement, les définitions, physiologies et physiopathologies concernant l’odorat, le goût et la déglutition sont exposées. Secondairement, la prévention ainsi que la prise en charge de chacun de ces troubles sont présentées. Des messages pratiques simples, par exemple concernant les ingrédients à utiliser, les recettes de cuisine à adopter en fonction des différentes atteintes du patient, sont répertoriées pour offrir à ce dernier ainsi qu’à sa famille et aux professionnels de santé l’entourant des stratégies concrètes de prise en charge.

Conclusion :
Au final, Ce travail a abouti à un consensus national sur la gestion et les stratégies d’adaptation des troubles de l’alimentation, au domicile ainsi qu’en centre de soins, à mettre en place afin de lutter, avec plaisir, contre la dénutrition des patients atteints de cancer ORL.
Prise en charge des cellulites necrosantes de la région cervicofaciale; notre expérience

A. Daoudi*(1), S. Zitouni(2), S. Kharoubi(3)

(1) Service ORL CHU Annaba, Faculté de médecine Annaba, Annaba, Algérie, (2) Service ORL CHU Annaba, Annaba, Algérie, (3) Service ORL CHU Annaba, Annaba, Algérie

OBJET DE LA PRÉSENTATION:

Les cellulites cervico faciales extensives sont des infections graves résultant d'une inoculation habituellement trans muqueuse (rarement cutanée) du cou avec extension progressive à la quasi totalité des loges anatomiques du cou, de la face et du médiastin.

Le but de ce travail est de rappeler l'urgence diagnostique et thérapeutique de cette affection et souligner les problèmes liés à sa prise en charge.

MATÉRIELS ET MÉTHODES:

C'est une étude rétrospective portant sur 97 patients âgés entre 19 et 85 ans pris en charge entre 1998 et 2015 pour cellulite grave extensive.

RÉSULTATS:

Notre série est composée de 45 femmes et de 52 hommes soit un sex ratio de 1,3. L'âge moyen est de 40 ans. La porte d'entrée est dentaire dans la majorité des cas.

Le diabète apparaît comme le premier facteur de risque, la prise d'anti inflammatoire a été rencontrée chez 30 malades.

La tomodensitométrie élément incontournable du diagnostic de gravité a été réalisée chez tous les malades. La durée moyenne d'hospitalisation est de 15 jours.

Le traitement a consisté dans tous les cas en un large drainage chirurgical associé à une tri thérapie antibiotique.

CONCLUSION:

Les cellulites cervico faciales extensives sont des pathologies graves, à prise en charge thérapeutique lourde dont l'issue fatale est toujours d'actualité. Une prise en charge multidisciplinaire avec la collaboration de l'ORL, l'anesthésiste réanimateur et le chirurgien thoracique permet l'amélioration du pronostic. La fréquence de la porte d'entrée dentaire souligne l'intérêt d'une action préventive passant par une bonne hygiène bucco dentaire, un suivi régulier chez le dentiste mais surtout une antibio prophylaxie adaptée pour tout acte effectué sur un foyer potentiellement septique.
METASTASE MANDIBULAIRE D’UN ADENOCARCINOME COLORECTAL A PROPOS D’UN CAS

L.Beddar*(1), H.Hammoud(2), O.Metrouh(2), F.Guedouar(3), K.Seddiki(2), Y.Ghedada(2)

(1)HOPITAL CENTRAL DE L’ARMEE, Alger, Algeria, (2)HOPITAL CENTRAL DE L’ARMEE, Alger, Algeria, (3)HOPITAL CENTRAL DE L’ARMEE, Alger, Algeria

1. Objet de la présentation:
Le cancer colorectal est le plus fréquent des tumeurs malignes du tractus gastro-intestinal. Cette tumeur peut se propager vers les ganglions lymphatiques puis vers le foie et ensuite à d’autres parties du corps formant des métastases. Les métastases touchent habituellement le foie et le poumon. La cavité buccale est rarement voir exceptionnellement touchée (des rares cas dans la littérature). Le diagnostic de ces métastases est souvent difficile et fait recours à l’analyse histopathologique et aux marqueurs tumoraux.

2. Matériels et méthodes:
Nous rapportons une observation de métastase mandibulaire droite d’un adénocarcinome colique.

3. résultats:
Il s’agit d’une patiente âgée de 35 ans, sans antécédents particuliers, qui consulte pour une masse doureuse massétero-parotidienne droite qui évolue depuis 6 mois augmentant assez rapidement de volume, avec signes inflammatoires en regard. Les aires ganglionnaires cervicales étaient libres. Une TDM cervico-faciale retrouvant une masse ostéolytique et la biopsie de la masse avec analyse histopathologique et immuno-marquage révélant une localisation mandibulaire d’un adénocarcinome moyennement différencié d’origine colique. Une coloscopie a montré une lésion tumorale dont la biopsie a confirmé qu’il s’agissait d’une tumeur primitive: adénocarcinome colique. Le bilan d’extension a montré une métastase hépatique et la décision du RCP a été prise (une chimiothérapie + radiothérapie). Malheureusement, la patiente est décédée après 11 mois.

4. Conclusion:
Les métastases buccales, et particulièrement mandibulaires, du cancer colorectal sont extrêmement rares ce qui explique la difficulté lors de la suspicion diagnostique pour les cliniciens et les pathologistes.
La valeur des techniques d’immunohistochimie ainsi que les marqueurs tumoraux est primordiale en clinique pratique pour redresser et aider dans le diagnostic
Le pronostic reste toujours sombre et la mortalité est élevée.
Ostéosarcome mandibulaire: à propos de deux cas et revue de la littérature


(1) Service de carcinologie médicale, CHU Habib Bourguiba, Sfax, Tunisie, (2) Service ORL et de chirurgie cervico faciale, CHU Habib Bourguiba, Sfax, Tunisie, (3) Service de chirurgie maxillofaciale, CHU Habib Bourguiba, Sfax, Tunisie, (4) Service ORL du CHU Habib Bourguiba, Sfax, Tunisie, (5) Service de radiothérapie, CHU Habib Bourguiba, Sfax, Tunisie

Objet de la présentation:

Etudier deux observations d’ostéosarcome de la mandibule et discuter son traitement ainsi que son pronostic.

Matériel et méthodes :

Nous rapportons deux observations de patients atteints d’ostéosarcome mandibulaire traités dans notre service.

Résultats :

Observation 1 :

Patient âgé de 26 ans consulte pour un processus tumoral bourgeonnant en regard de la 35ème. Le scanner du massif facial a révélé une lésion ostéolytique de la branche horizontale gauche de la mandibule. La biopsie a confirmé le diagnostic d’ostéosarcome chondroblastique grade 3. Le bilan d’extension à distance était négatif. Le patient a eu 6 cures de chimiothérapie néoadjuvante type API avec une bonne réponse clinique et une régression radiologique de la masse tumorale. Il a eu une hémimandibulectomie gauche avec une reconstruction par un péroné libre. La limite chirurgicale était tumorale au niveau des parties molles interne et externe avec une nécrose tumorale de 30%. En cours de la chimiothérapie adjuvante le patient a présenté une évolutivité locale et des métastases pulmonaires 1 mois après la chirurgie non rattrapée par une chimiothérapie de type ifosfamide et étoposide. Le patient était décédé après 6 mois de la chirurgie.

Observation 2 :

Patient âgé de 39 ans consulte pour une tuméfaction génienne droite évoluant depuis 6 mois. La tomodensitométrie a montré une tumeur lysant les deux corticales de la branche horizontale de la mandibule droite avec une collection en regard de 5 cm qui évoque une ostéite avec un abcès para mandibulaire.

La biopsie chirurgicale a montré une infiltration de la muqueuse gingivale par un ostéosarcome de grade 4. Le bilan d’extension à distance était négatif. Le patient a eu 6 cures de chimiothérapie néoadjuvante type API avec une réponse clinique et une stabilité radiologique. Il a eu une hémimandibulectomie gauche avec une reconstruction par un péroné libre. L’examen anatomopathologique a montré une nécrose tumorale de 60%. Le patient a eu une radiothérapie locorégionale à la dose de 64 Gray et une chimiothérapie adjuvante type ifosfamide et étoposide compliquée d’une insuffisance rénale aigue. Actuellement, il est à 6 ans de rémission complète.

CONCLUSION :

Le diagnostic d’ostéosarcome mandibulaire est parfois difficile. Par analogie au traitement des ostéosarcomes des os longs ; le traitement actuel se base sur la chimiothérapie néoadjuvante,
la chirurgie suivie d’une radiothérapie qui est exclusive en cas de tumeur non résécable et une chimiothérapie adjuvante adaptée selon la réponse histologique.
les Médiastinites compliquant une cellulite cervical-faciale extensive : À propos 10 cas et revue de la littérature

A.Aabach*(1), A.Lachkar(2), A.Sbai(3), M.Chouai(4), F.El ayoubi(3), R.Ghailane(3)

(1)CHU Mohmmed VI oujda, Oujda, Morocco, (2)CHU Mohmmed VI, Oujda, Morocco, (3)CHU Mohammed VI, Oujda, Morocco, (4)CHU Mohamed VI, Oujda, Morocco

0bjectif : analyse les circonstances de diagnostic et la prise en charge thérapeutique des affections médiastinales à point de départ cervical.

Introduction : Les médiastinites sont souvent une complication grave des cellulites cervicales, sont des affections rares qui engagent le pronostic vital par la survenue de complications régionales et générales secondaire à une diffusion des infections développées à partir d’un foyer dentaire ou pharynge vers le médiastin qui s’explique par la continuité anatomique de ces deux régions ;

Les signes cliniques sont parfois frustres et peuvent conduire à un retard diagnostique.

L’examen clé est la tomodensitométrie cervicale et thoracique.

Sont traitement consiste en une excision tissulaire large associée à une antibiothérapie dirigée contre les germes aéro-anaérobies.

Patients et méthodes :

Nous avons mené une étude descriptive longitudinale pro et rétrospective dans le service d’ORL du CHU MOHMED VI OUJDA et qui a concerné les dossiers des patients traité pour médiastinite compliquant une cellulite cervico-faciale de janvier 2011 à Décembre 2015.

Résultats

10 patients ont répondu à nos critères d’inclusion. L’âge médian était de 31 ans, l’écart type était de 14,26ans avec des extrêmes de 18 et 63 ans. La porte d’entrée a été dentaire huit cas. Le délai médian de consultation était de 9 jours . sept patients étaient diabétiques, huit patients avaient eu des antiinflammatoires non stéroïdiens avant leur admission dans le service .

Le scanner a permis d’orienter diagnostic, en montrant des signes en faveur de médiastinite.,

Tous les patients ont bénéficié d’un drainage du médiastin par voie de cervicotomie, associées a une thoracotomie dans un seul cas . Nous avons eu deux décès.
Adénopathies cervicales métastatiques d’un primitif non trouvé.

S.Jbali*(1), S.Dhambri(2), S.Kedous(2), M.Dhaha(2), F.Hedhili(2), S.Touati(2), S.Gritli(2)

(1)Institut Salah Azaiez de Tunis, Tunis, Tunisia, (2)Institut Salah Azaiez, Tunis, Tunisia

Les adénopathies cervicales métastatiques d’un carcinome non retrouvé représentaient 3 à 5% des cancers de la tête et du cou. Cette entité pose aux cliniciens des problèmes : nosologique, diagnostique, d’examens complémentaires, mais surtout un problème difficile de décision thérapeutique.

On se propose de revoir la définition de cette entité en carcinologie et de proposer un premier bilan paraclinique. Nous allons, aussi, essayer de dresser un algorithme décisionnel tout en dégageant les principaux facteurs pronostiques régissant le contrôle local et surtout la survie.

Notre étude, rétrospective, a colligé une série de 80 cas d’adénopathies cervicales métastatiques primitives traités à l’institut Salah Azaiez sur une période de 27 ans (1980 – 2007).

L’âge moyen de nos patients était de 56 ans (22 – 88 ans) et le sexe ratio était de 3,44. La topographie sous digastrique prédominait (61% des cas). Les adénopathies étaient de classe N3 dans 40% des cas.

Le bilan initial comportait : un examen clinique complet, une pan-endoscopie des Voies aérodigestives supérieures (VADS) avec des biopsies systématiques et un bilan d’imagerie médicale. Une cytoponction à l’aiguille fine était réalisée chez 65% de nos malades.

Le carcinome épidermoïde était retrouvé dans 70 % des cas bien différenciées dans 60% des cas. 17,5% des malades avaient un carcinome indifférencié, 11% avaient un adénocarcinome et 1,5% avait un mélanome.

Après chirurgie ganglionnaire, le pourcentage de ganglions envahis était précisé chez 30% des malades dont 43% avaient une rupture capsulaire.

Une radiothérapie post opératoire à dose curative (45 - 70Gy) était appliquée pour 13 de nos malades. Une radiothérapie exclusive (30 – 45Gy) était indiquée chez 4 patients présentant des lésions tumorales inextirpables. Une radiothérapie palliative (10 – 17Gy) était adoptée pour 20 patients.

Le protocole associant à la radiothérapie, une chimiothérapie néo-adjuvante était indiqué chez 27 malades. La survie globale calculée était estimé à 43% à 6 mois, à 31% à 1 an et à 30% à 5 ans.

En conclusion le pronostic était significativement aggravé par : l’âge supérieur à 65 ans, la localisation basse des adénopathies, l’envahissement ganglionnaire avec rupture capsulaire. L’amélioration des résultats du traitement serait dépendante d’une étroite collaboration multidisciplinaire.
la biologie moléculaire peut elle etre prédictif dans le pronostic du traitement du cancer du larynx

S.Benyahia*(1)

(1) faculte de medecine d’alger chu mustapha service orl et ccf, Algeria

objet de la présentation : étudier les facteurs biologiques tell que l’HPV , la P53 , l’EGFR comme facteurs pronostic lors du traitement des cancers pharyngolaryngés dans le cadre du protocole de préservation laryngée

matériels et méthodes : 37 patients algériens ont bénéficié d’un protocole de préservation par protocole TPF suivie de radiothérapie potentialisée, durant la période 2011 - 2015 avec recherche des facteurs biologiques et leurs impact sur le taux de préservation , l’HPV a été étudié par PCR a l’institut pasteur d’Algérie , l’EGFR , la P53 ont été recherchés par immuno histochemie au service d’anatomie- pathologie du centre pierre et marie curie

résultats: le type histologique retrouvé a été dans plus de 54 % le carcinome épidermoïde bien différenciés , 40,5 % pour le type moyennement différencié , et 5,4% pour le type peu différencié . 100% des biopsies analysées par PCR avaient un statut HPV négatif, pour l’EGFR, 8,4 % des biopsies analysées en IHC avaient une absence de marquage , 32,4% avaient une intensité très forte et surexprimés l’EGFR 59,4% avaient une intensité modéré a faible,40,5 % des biopsies analysées par IHC avaient une intensité forte , la P53 était surexprimée, dans 37,8% elle n’était pas du tout exprimé , contre 21,7% ou elle était faible ,l’étude croisée entre taux de préservation laryngée qui était de 53, 6% et les différents facteurs biologiques n’a pas trouver de corrélations entre la surexpression de l’EGFR , de la P53 et le taux de préservation laryngée, en effet 37 % des larynx en mauvais état surexprimait l’EGFR contre 23,8% ( p 0,7 non significatif ) , la surexpression de la P53 na pas été un facteur de mauvais pronostic pour la préservation d’organe ( p 0,7 non significatif ) , l’HPV na pas été détecté suggérant la rareté du virus HPV dans les cancers du pharyngo larynx .

conclusion : contrairement a d’autres localisations cancéreuses ,on ne dispose pas actuellement pour les cancers du pharyngo larynx de marqueurs biologiques ou thérapeutiques utilisable en pratique clinique , la recherche d’autres facteurs moléculaires pourrait aider le l’orl l’oncologue a potentialiser la thérapeutique afin d’améliorer le pronostic de ce type de cancers .
CANCER DU NASOPHARYNX PROFIL EPIDEMIOLOGIQUE ASPECTS CLINIQUES ET MODALITÉS THÉRAPEUTIQUES A PROPOS DE 214 CAS

K.Hamizi*(1), S.Aouidane(2)
(1)Centre Anti Cancer Batna service de Radiothérapie Algerie, Batna, Algeria, (2)CHU BATNA ALGERIE, Batna, Algeria

OBJECTIFS/ MÉTHODES
De janvier 2015 à décembre 2016 Pour une population d’environ 5.9 million habitants ; nous avons traité dans notre service de Radiothérapie CAC Batna Algérie 346 tumeurs ORL dont 214 tumeur du nasopharynx pour un total de de 3067 patients traités ( 6.7% de toutes les tumeurs traitées et 61.8 % des tumeurs ORL )

RESULTATS
C’est le premier cancer ORL loin devant le cancer du Larynx ( 71cas ; 20,2%) et le cinquième toute tumeurs confondu, avec une incidence brute de 1.81 N CAS/100000 Habt / an

Le sexe- ratio = 0.47(145 hommes pour 69 femmes ). L’âge moyen est de 46 ans (6 ans a 88 ans) ; la tranche d’âge la plus touchée est 40-50 ans

Les facteurs de risques variables classiques : alimentation riche en nitrosamine, niveau socio-économique modeste sont quasi constants. La notion de cas familiaux est signalée dans 3 cas seulement

Le carcinome épidermoïde indifférencié type 3 (UCNT) représente à lui seul 91, 3 % ; les type 1et 2 :7% ; et 1,1% de lymphome.

Les tumeurs des parois latérales sont majoritaires (68,6%) souvent associées à des adénopathies cervicales ; contre 29,8% de la paroi postéro-superieure avec atteinte neurologique

Les T3N1/2 (33.7%) sont les plus fréquent suivi des T4N1/2 (29.6% des T2N0/N1/(16.2%) puis N3MO (6.9%) ; les M+ 13% (89.4% os ) ; reflétant un retard diagnostique et thérapeutique estimé à 8.7 mois

La modalités thérapeutique adopté vu l’importance des cas localement évolués SONT souvent une chimiothérapie néoadjuvante ( TPF ou CDDP/DOXO) suivie d’une RCC ( CDDP 100 J1/J22)selon les techniques 3D (50gy prophylactique/70gy GTV T/N ) avec un suivi hebdomadaire

La tolérance au traitement était acceptable grâce aux mesures préventives et à l’utilisation de dosimétrie prévisionnelle épargnant au mieux les organes a risques , avec des mucites grade II dans 95 % des cas .

Les résultats : 92% de contrôle locorégional a 3 mois puis a 6 mois sur scanner et biopsie cavaire ; seulement 17 cas d ’échec avec 9 reliquat ganglionnaire rattrapé par curage cervicale

CONCLUSION :
Le cancer du cavum s’y y vie à l’état endémique moyen dans notre région ; touche l’adulte jeune actif ; c est un cancer curable grâce à l’association RADIOCHIMIOTHERAPIE moderne avec des toxicité tolérées . Reste a améliorer les délais diagnostique /thérapeutique
Localisations nasopharyngées de carcinome à petites cellules : à propos de deux cas


(1)Service de carcinologie médicale, CHU Habib Bourguiba, Sfax, Tunisie, (2)Service d’ORL et de chirurgie cervico faciale, CHU Habib Bourguiba, Sfax, Tunisie, (3)Service de radiothérapie, Sfax, Tunisie, (4)Service ORL du CHU Habib Bourguiba, Sfax, Tunisie, (5)Service de radiothérapie, CHU Habib Bourguiba, Sfax, Tunisie

Objet de la présentation :

Etudier deux observations rares de localisation nasopharyngée de carcinome à petites cellules. Nous discutons la prise en charge et le pronostic de cette localisation tumorale rare.

Patients et méthodes.

Nous rapportons deux cas de localisation nasopharyngée de carcinome à petites cellules

Résultats :

Observation1 :

Patient âgé de 65 ans, a consulté pour des douleurs osseuses lombaires non améliorées par le traitement symptomatique. Le bilan radiologique a conclu à des métastases osseuses diffuses. La biopsie de l’aile iliaque a objectivé une métastase osseuse d’un carcinome neuroendocrine à petites cellules pulmonaire. Un scanner thoraco-abdomino-pelvien a montré un épaississement pleural médio thoracique postérieur droit prenant un aspect pseudo nodulaire. Il a eu 6 cures de chimiothérapie type Cisplatine-Etoposide avec une réponse clinique et une stabilité radiologique. Deux ans après la fin de la chimiothérapie, il a présenté une progression osseuse et ganglionnaire. Il a eu 5 cures de chimiothérapie type Carboplatine- Etoposide marquée par une réponse clinique et une toxicité hématologique amenant à arrêter la chimiothérapie. L’évolution a été marquée par la survenue d’épistaxis récidivantes six mois après. L’endoscopie nasale a révélé une tumeur bourgeonnante du nasopharynx dont la biopsie a montré un carcinome à petite cellules. La tomodensitométrie cérébrale a montré des métastases et le patient a eu une radiothérapie cérébrale. Le patient était décédé après 46 mois du diagnostic.

Observation 2:

Un homme âgé de 31 ans initialement traité pour carcinome du nasopharynx (sans immuno-histochimie) classé T1N1M0 par radiothérapie et chimiothérapie concomitante. L’évolution a été marquée par une progression osseuse, hépatique et du scalp huit mois après la fin de la radiothérapie. La biopsie de la lésion du scalp a révélé un carcinome neuroendocrine à petite cellules. Une relecture de la biopsie cutanée et de celle du nasopharynx avec étude immuno-histochimie a montré un carcinome neuroendocrine à petites cellules. Le patient a reçu une chimiothérapie (taxotère-cisplatine) et biphosphonates donnant lieu à une stabilité de la tumeur nasopharyngée. L’évolution a été marquée par la progression cérébrale pour laquelle il a eu une radiothérapie et une progression péritonéale apparaissait en fin d’irradiation. Le patient était décédé en cours de chimiothérapie (VP16-Carboplatine) deux ans après le diagnostic initial de sa tumeur nasopharyngée.

Conclusion :
Nous rapportons deux cas rares de localisation métastatique et primitive nasopharyngée de carcinome neuroendocrine à petites cellules. Cette localisation est caractérisée par sa présentation clinique agressive et son mauvais pronostic.
Tuberculose du nasopharynx, à propos de deux observations

M.Bellakhdhar*(1), A.Cheniti(1), M.Mejbri(1), W.Kermeni(1), M.Abdelkefi(2)

(1)CHU Farhat Hached, Sousse, Tunisia, (2)chu Farhat Hached, Souse, Tunisia

but: Nous discutons, à travers deux observations de tuberculose primitive du nasopharynx les différents aspects cliniques et les difficultés diagnostiques de cette localisation

Matériel et méthodes :
Nous rapportons deux observations de tuberculose pseudo-tumorale du nasopharynx colligées au service d’ORL de l’hôpital Farhat Hached de Sousse.

Observations :
Observation 1 :
Un patient âgé de 15 ans, sans antécédents pathologiques notables, a consulté pour une épistaxis unilatérale droite à répétition évoluant depuis trois mois.
L’examen a retrouvé des poly adénopathies cervicales bilatérales jugulocarotidiennes et spinales, peu sensibles, fermes et mobiles à la palpation. L’IDR à la tuberculine était positive à 20 mm.
La nasofibroscopie a objectivé une lésion suspecte, ulcéro-bourgeonnante du cavum.
La tomodensitométrie du cavum et du cou a objectivé un épaississement diffus de la muqueuse nasopharyngée associé à de multiples adénopathies spinales et jugulocarotidiennes bilatérales et sus claviculaire gauche.
Une biopsie du cavum a été réalisée. L’étude anatomopathologique a retrouvé un processus granulomateux spécifique épithéloïde et giganto-cellulaire, avec nécrose caséeuse, compatible avec une origine tuberculeuse.
Un traitement anti tuberculeux a été mis en route pendant neuf mois et l’évolution était favorable sur le plan clinique.

Observation 2 :
Un patient âgé de 21 ans, sans antécédents pathologiques notables, a consulté pour une masse latéro cervicale gauche associée à des épisodes d’épistaxis récidivants.
L’examen cervical a objectivé une adénopathie latéro-cervicale gauche et l’endoscopie du cavum a montré une formation bourgeonnante de la paroi postérieure du cavum.
L’IDR à la tuberculine était positive à 30 mm.
La biopsie du cavum était en faveur d’une tuberculose du cavum.
Un traitement anti tuberculeux a été mis en route pendant six mois mais l’évolution a été marquée par l’apparition d’autres adénopathies cervicales. Une adénectomie a confirmé de nouveau le diagnostic de tuberculose ganglionnaire. Un antibiogramme ainsi qu’une étude PCR sont demandés à la recherche d’une souche résistante aux traitements anti tuberculeux.

Conclusion :
Bien qu’il s’agisse d’une affection rare, la tuberculose primitive du cavum mérite d’être rappelée. La présence de nombreuses similitudes cliniques, endoscopiques et radiologiques
avec les affections malignes du cavum pose souvent un problème de diagnostic différentiel. Son pronostic sous traitement antibacillaire est généralement bon, les échecs sont surtout liés à l’émergence de souches multi résistantes aux traitements.
Tumeur neuroectodermique du massif facial à propos de 2 cas

Y.Yassine*(1), H.Yassine*(1), S.Touati(2), M.Ben hjal(1)

(1)Polyclinique les berges du lac, , Tunisia, (2)Institut Salah Azaiz de tunis, , Tunisia

Il s’agit de la présentation de deux cas rares de tumeur neuroectodermique du massif facial (progonome mélanotique)

Le premier cas est celui d’un enfant de 10 ans qui présentait une déformation de la joue gauche et une exophtalmie avec à l’imagerie une tumeur envahissant le sinus maxillaire gauche, l’ethmoïde antérieur gauche, et refoulant le globe oculaire en dehors.

Le deuxième cas est celui d’un nourrisson de 18 mois qui présentait une tuméfaction de la joue droite avec un bombement du palais obstruant en grande partie la cavité buccale et chez qui l’imagerie a montré une tumeur qui se développe au dépens du sinus maxillaire droit, s’étendant en dedans vers la fosse nasale droite et le palais osseux (6 cm).

Les 2 enfants ont eu une chirurgie large par voie externe avec succès. Ils sont suivis régulièrement à la consultation et aucune récidive n’a été constaté. Il s’agit d’un type histologique rare, 380 cas ont été rapporté dans la littérature, ce sont des tumeurs certes bénignes mais localement très agressives. Le pronostique est conditionné par un geste chirurgical complet souvent délicat vu le jeune âge des patients avec un massif facial en pleine croissance et un risque donc de séquelles esthétiques. Il existe par ailleurs un taux de récidive élevé et le risque de transformation maligne bien qu’exceptionnel existe. Une surveillance à long terme est recommandé. A la lumière de ces deux observations de progonome mélanotique survenue chez deux enfants, nous allons rappeler les aspects cliniques, radiologiques, anatomopathologiques et la prise en charge pour ce type de tumeur rare.
Nævus nævo-cellulaire jonctionnel non pigmenté de la gencive. Localisation exceptionnelle. A reconnaître

K. Oqbani*(1), A. Moumni(2), N. Harchichi(3), M. Chraibi(4), S. Abbaoui(4)

(1) CHU Mohammed VI d’Oujda, Morocco, (2) Hopital Al Farabi, Morocco, (3) Hôpital Al Farabi, Morocco, (4) CHU Mohammed VI, Morocco


*Service d’anatomie et de cytologie pathologiques, CHU Mohammed V, Oujda, Maroc.
**Service d’anatomie et de cytologie pathologiques, Hôpital Al Farabi, Oujda, Maroc

Introduction:
Le nævus nævo-cellulaire (NC) est une tumeur bénigne pigmentée de la peau et des muqueuses. Il est rarement observé au niveau de la cavité buccale: 0,1 % de la population générale. La variante de nævus jonctionnel (NCJ) est exceptionnelle et représente 5% seulement des nævus de la muqueuse buccale. Les formes non pigmentées sont observées dans 15% des cas seulement. But : mettre le point sur les aspects épidémiologiques et anatomocliniques de cette entité rare.

Observation:
Une patiente âgée de 55 ans, consulte pour une lésion gingivale papuleuse mesurant 0,6 cm. Elle est ferme, arrondie, non pigmentée et indolore évoluant depuis 18 mois. L’examen clinique évoque le diagnostic d’une éventuelle épulis gingivale. Une exérèse complète de la lésion est réalisée. L’étude histologique confirme le diagnostic de NCJ de la gencive en montrant une prolifération tumorale bénigne du chorion, se disposant en nids et en thèques. Elle est focalement pigmentée en surface et faite de nævocytes arrondis au noyau volumineux à chromatine clarifiée et au cytoplasme abondant. Une connexion des thèques avec les crêtes épidermiques est notée.

Discussion/ Conclusion: Le nævus nævo-cellulaire est divisé en 3 types histologiques: NC intramuqueux, NCJ et NC composé. La localisation gingivale représente 10% des nævus intrabuccaux. Cette lésion est 2 fois plus fréquente chez la femme que chez l’homme et est généralement découverte tardivement entre l’âge de 20 et 40 ans. Cliniquement, cette lésion est pigmentée dans 85% des cas alors que les formes non pigmentées sont observées dans 15% des cas seulement. Elle est indolore et inférieure à 1 cm notamment dans la forme de NCJ, comme c’est le cas de notre patiente.

Les nævus non pigmentés de localisation gingivale sont occasionnellement rapportés dans la littérature internationale. Le diagnostic différentiel du nævus non pigmenté se pose notamment avec l’épulis, le fibrome et le papillome. Le diagnostic de certitude est anatomopathologique. L’exérèse complète est le traitement adéquat. Le pronostic des nævus oraux est excellent. Les nævus congénitaux présentent un risque accru de transformation maligne en mélanome. Toutefois, ils sont rarement observés dans la cavité buccale.
Les tumeurs oncocytaires de la thyroïde: difficultés diagnostiques et approches thérapeutiques

M. Mejbri *(1)

(1) CHU Farhat Hached, Sousse, Tunisia

* Objet de la présentation:
La distinction entre tumeur oncocyttaire bénigne et maligne constitue une difficulté sur le plan anatomopathologique engendrant des contraintes dans la prise en charge chirurgicale de ces lésions. Les objectifs de ce travail sont d’exposer les difficultés diagnostiques anatomopathologiques, de dégager l’attitude thérapeutique à adopter et dévaluer les facteurs prédictifs de malignité.

* Matériels et méthodes:
Etude rétrospective portant sur 35 cas de tumeurs oncocytaires de la thyroïde colligées sur une période de neuf ans (2007-2015) opérées au service d’ORL de l’hôpital La Rabta de Tunis et dont les pièces opératoires de thyroïdectomie ont été adressées au service d’anatomopathologie du même hôpital. L’analyse des résultats a été menée moyennant un test statistique type chi-deux (p significatif <0.05).

* Résultats:
L’âge moyen des patients a été de 52,3 ans. Une tuméfaction basi-cervicale antérieure a été le motif de consultation de tous nos patients sauf un qui a été adressé pour exploration d’un magma d’adénopathies cervicales. La cytoponction thyroïdienne a été réalisée dans quatre cas. L’examen extemporané a été réalisé dans 34 cas. L’examen définitif a confirmé 26 adénomes oncocytaires (AO), six carcinomes papillaires à cellules oncocytaires (CPO) et trois carcinomes vésiculaires à cellules oncocytaires (CVO). Parmi les 26 patients présentant un AO, 22 ont eu une loboisthmectomie, trois ont eu une thyroïdectomie totale d’emblée et un patient a eu une totalisation pour nodule sur lobe restant. Une thyroïdectomie totale a été réalisée chez sept patients porteurs de carcinome oncocytaire (CO). Une chirurgie de propreté a été réalisée dans deux cas en raison d’un envahissement locorégional. Parmi les patients présentant un CO, six ont eu un curage médiastino-récurentiel. Deux d’entre eux ont eu un curage latéral. Les facteurs prédictifs de malignité retrouvés étaient l’âge supérieur à 55 ans, la dyspnée et la consistance dure à l’examen ; les limites floues, la vascularisation (centrale et/ou périphérique), le caractère hypoechogène, la présence de microcalcifications et d’adénopathies suspectes à l’échographie ; la présence d’une colloïde sombre et dense, une capsule nodulaire épaisse et une thyroïdite associée à l’examen anatomopathologique.

Conclusion :
L’analyse des facteurs épidémiologiques et échographiques oriente le traitement. La thyroïdectomie totale associée à un CMR bilatéral avec complément d’irathérapie semble être la meilleure conduite thérapeutique à adopter pour les carcinomes oncocytaires.

Auteurs et affiliations:


service d’ORL et de Chirurgie maxillo-faciale la Rabta, Tunis

* service d’anatomopathologie la Rabta, Tunis
MÉLANOME DE LA MUQUEUSE BUCCALE : A PROPOS D’UN CAS ET REVU DE LA LITTÉRATURE

K.Salama*(1), M.Lezrag(2), S.Anejjar(3), A.Lekhbal(3), S.Rouadi(3), M.Mahtar(3)
(1) , Morocco, (2)Orl et chirurgie cervico-faciale, CHU Ibn Rochd, Casablanca, Maroc, Casablanca, Morocco,
(3)Orl et chirurgie cervico-faciale, CHU Ibn Rochd, Casablanca, Maroc, , Morocco

Introduction : Le mélanome malin présente un intérêt particulier en raison de son mauvais pronostic. La localisation au niveau de la cavité buccale est rare. Environ 2 % des mélanomes sont muqueux 55 % d’entre eux sont cervico-faciaux. La muqueuse orale est le siège de moins de 1 % de l’ensemble des mélanomes

Objet du travail : discuter les aspects épidémiologique ; clinique thérapeutique et pronostic de cette entité pathologique à travers un cas vécu au service ainsi qu’une revue de la littérature

Observation : il s'agit d’une femme, de 43 ans, sans antécédents familiaux de mélanome, La patiente a consulté son chirurgien dentiste, pour une douleur dentaire sur l’arcade inférieure gauche. L’examen clinique mettait en évidence, au niveau de la muqueuse gingivale gauche une lésion pigmentaire noirâtre de 2 cm de grande axe mal limitée indolore a 1 cm de la base de la langue a 1cm du pilier antérieur aucune autre pigmentation inhabituelle n’était présente sur la muqueuse buccale ou sur les lèvres, le reste de l’examen est normal , une biopsie gingivale a été réalisée et l’examen anatomopathologique a confirmé le diagnostic de mélanome. Un scanner réalisé en préopératoire était normal .La patiente a bénéficiée d’une exérèse chirurgicale large, et a l’examen anatomopathologique définitive : mélanome nodulaire avec large marge muqueuse saine. l’évolution était bonne avec un recul de 2 mois.

Conclusion : Bien que rare, Le diagnostic de mélanome malin doit être évoqué devant toute lésion pigmentée de la muqueuse buccale, notamment palatine ou gingivale supérieure. La TDM est indispensable pour le bilan d’extension. Le diagnostic précoce de la tumeur est d’une extrême importance et pourrait déterminer un meilleur pronostic pour le patient.
Résultats de la parathyroïdectomie dans le traitement de l'hyperparathyroïdie d'origine rénale

S.Zitouni*(1), G.Arouche(2), A.Saidia(2), A.Daoudi(2), S.Kharoubi(2), M.Medjabri(3)

(1)SERVICE ORL, Annaba, Algeria, (2)SERVICE ORL CHU ANNABA, Annaba, Algeria, (3)FACULTE DE MEDECINE D'ANNABA, Annaba, Algeria

Objet de la présentation

L'hyperparathyroïdie secondaire (HPS) est une complication grave de l'insuffisance rénale chronique, ayant un impact négatif sur la morbidité et la mortalité. Malgré les progrès enregistrés dans la prise en charge médicale de l'HPS, l'échec est observé chez un nombre significatif de patients. La parathyroïdectomie (PTX) trouve alors toute son indication.

Le but de ce travail est de présenter les résultats de la parathyroïdectomie dans le traitement de l'hyperparathyroïdie d'origine rénale au sein d'une population n'ayant pas accès aux calcimimétiques et dont les chances de transplantations rénale sont très faibles.

Matériaux et méthodes

Etude d'une série de cas consécutifs opérés entre janvier 2002 et décembre 2015. Étaient inclus tous les patients présentant une HPS prouvée biologiquement, remplissant les critères d'opérabilité.

Résultats

La série était composée de 78 patients. Le sex-ratio était de 1, la moyenne d'âge était de 41,3 ans. La tranche d'âge la plus touchée était comprise entre 30 et 50 ans. Sur le plan clinique, le tableau était dominé par les signes osseux et cutanés. La présentation biologique était sévère avec des taux de PTH moyens de 1971 pg/mL. Les radiographies du squelette montraient un retentissement osseux de l'hyperparathyroïdie très prononcé. La résorption osseuse était observée dans 71% des cas. L'imagerie de localisation basée sur le binôme échographie-scintigraphie avait affiché une sensibilité de 31% et 36,6% respectivement pour l'échographie et la scintigraphie. Sur le plan chirurgical, 67 patients (85,9% des cas) avaient subi une parathyroïdectomie subtotale, 11 patients (13%) avaient subi une parathyroïdectomie totale dont 9 avec auto transplantation et 2 sans autotransplantation. L'hypocalcémie dominait les suites post opératoires. Le taux de succès de la chirurgie était de 93%.

Conclusion

Les résultats de cette étude suggèrent que la parathyroïdectomie est un moyen efficace pour le traitement de l'hyperparathyroïdie chez l'hémodialysé chronique.
Carcinome papillaire de la thyroïde chez la femme enceinte

I.Zgolli*(1), H.Hachicha*(2), C.Halouani(3), S.Mezri(2), R.Benmhamed(2), K.Akkari(4)

(1)military hospital in Tunisia, Tunis, Tunisia, (2)military hospital in tunisia, , Tunisia, (3)military hospital in tunisia, , Tunisia, (4)military hospital of tunisia, , Tunisia

Objectifs :
Prise en charge du carcinome papillaire de la thyroïde chez la femme enceinte et étude du pronostic chez la mère et le fœtus.

Matériel et Méthodes :
Etude rétrospective portant sur 4 patientes présentant un carcinome papillaire de la thyroïde diagnostiqué durant la grossesse.

Résultats :

Conclusion :
Le cancer différencié de la thyroïde représente le second cancer retrouvé chez la femme enceinte après le cancer du sein. La prise en charge est multidisciplinaire et a pour but le contrôle carcinologique et la prévention des complications maternelle et fœtale secondaire à l’hypothyroïdie. Le pronostic est habituellement favorable.

Objectives:
Management of papillary carcinoma of the thyroid in pregnant women and prognosis in mothers and fetuses.

Material and methods :
Retrospective study of 4 patients with papillary carcinoma of the thyroid gland diagnosed during pregnancy.

Results:
The average age of our patients was 35 years. All consulted during pregnancy for anterior basi-cervical swelling. Thyroid cytopathy was suspect in all patients. Three patients were operated during pregnancy and the last in postpartum. All patients underwent total thyroidectomy and central lymph node dissection. lateral lymph nodes dissection was performed in two patients. metastatic Ganglion from the central area were found in 3 patients. Lymph node metastases from the lateral area were found in 2 patients. Three patients benefited in postpartum irradiation. The progression was favorable in all patients without recurrence.

Conclusion:
Differentiated cancer of the thyroid is the second cancer found in pregnant women after breast cancer. The management is multidisciplinary and aims at carcinological control and the prevention of maternal and fetal complications secondary to hypothyroidism. The prognosis is usually favorable.
Carcinome papillaire sur kyste du tractus thyroéoglosse: à propos de deux cas

F. Abdala*(1), H. Haoufadi(2), H. Nouri(2), Y. Rochdi(2), L. Aderdour(2), A. Raji(2)

(1) CHU Mohammed VI - hopital Arrazi - Université Cadi-Ayyad, Marrakech, Morocco, (2) service ORL-CCF - CHU Mohamed VI - Université Cadi Ayyad, Marrakech, Morocco

Objectif du travail :

L’objectif de ce travail est de présenter deux nouveaux cas de carcinome papillaire sur kyste du tractus thyroéoglosse (KTT) et d’exposer notre attitude thérapeutique.

Matériel et Méthodes :

Il s’agit de deux patientes, une âgée de 30 ans et l’autre âgée de 45 ans, sans antécédents pathologiques particuliers qui consultaient dans notre formation pour une tuméfaction cervicale antérieure médiane ad-hyoidienne, sans signes de compression ou de dysthyroidie, l’échographie cervicale a mis en évidence un aspect compatible avec un kyste du tractus thyroéoglosse avec une glande thyroïde d’aspect normal et il n’y avait pas d’adénopathies cervicales. Une ablation chirurgicale selon la technique de Sistrunk et une étude anatomopathologique sont réalisées.

Résultats

L’étude anatomopathologique des deux pièces opératoires avait objectivé un carcinome papillaire sur KTT. Une thyroidectomie totale a été réalisée chez les deux patientes, l’étude anatomopathologique retrouvait un microcarcinome papillaire chez la patiente âgée de 30 ans qui a bénéficié d’une irathérapie et d’une hormonothérapie freinatrice avec une évolution favorable pour un recul de 4 ans ; pour la deuxième patiente, l’examen anatomopathologique de la pièce de thyroidectomie totale avait objectivé une dystrophie thyroïdienne sans signes de malignité, une hormonothérapie freinatrice était donc préconisée, l’évolution chez cette patiente est favorable avec absence de récidive après deux ans de suivi.

Conclusion :

Le carcinome papillaire sur KTT est une pathologie rare, il est généralement de découverte fortuite suite à l’examen anatomopathologique de la pièce d’exérèse.

Le traitement est actuellement bien codifié, permet un excellent pronostic, qui semble être meilleur que celui du carcinome sur thyroïde.

La thyroïdectomie totale après exérèse complète du KTT est le traitement recommandé pour le carcinome papillaire sur KTT.
**Prise en charge thérapeutique du microcarcinome papillaire de la thyroïde**

M. Mejbri*(1)

(1) CHU Farhat Hached, Sousse, Tunisie

**Objet de la présentation :**

La prise en charge thérapeutique des microcarcinomes papillaires de la thyroïde (MCP) reste controversée. Les objectifs de notre travail étaient de discuter les différentes attitudes chirurgicales en fonction des facteurs pronostiques et d’analyser les indications de l’irathérapie.

**Matériels et méthodes :**

Etude rétrospective portant sur 50 patients pris en charge pour MCP de la thyroïde sur une période de sept ans entre Janvier 2007 et Décembre 2013 au service d’ORL du CHU la Rabta, Tunis.

**Résultats :**

L’âge moyen de nos patients était de 46 ans avec un sex Ratio de 0,11.

Les circonstances de découverte étaient : un nodule thyroïdien suspect dans un cas, une adénopathie cervicale métastatique dans un cas. La découverte était fortuite à l’examen histologique chez 48 patients.

Le geste chirurgical consistait en une thyroïdectomie totale dans tous les cas. Elle était pratiquée en un seul temps opératoire dans 68% des cas. Son indication était pré-opératoire dans 82% des cas. La totalisation était guidée par le résultat de l’examen extemporané dans 17% des cas. Une thyroïdectomie totale en deux temps a été pratiquée dans 32% des cas, la totalisation était indiquée devant la présence de critères histologiques ou échographiques dans 73% des cas. Elle était prophylactique dans 27% des cas.

Un curage ganglionnaire central a été réalisé dans 56% des cas. La taille moyenne du MCP était de 4,6 mm. Le MCP était multifocal dans 16% et bilatéral dans 10% des cas. Un envahissement de la capsule thyroïdienne a été retrouvé dans 4% des cas. Une atteinte ganglionnaire a été notée dans 14% des cas.

Le traitement par l’iode 131 a été indiqué chez 42 patients. La dose reçue était en moyenne de 102 mci. Le recul moyen était de 52 mois. Une rémission complète a été notée dans tous les cas. On n’a pas rapporté de cas de récidive ou de métastases à distance.

**Conclusion :**

Les MCP sont le plus souvent de découverte histologique fortuite. La totalisation chirurgicale et l’irathérapie ne devraient être indiqués qu’en présence de facteurs de mauvais pronostic vu le potentiel peu évolutif de ces tumeurs.

**Auteurs et affiliation :**


service D’ORL et de chirurgie cervico-faciale la Rabta, Tunisie

* service d’anatomopathologie la Rabta, Tunisie
Papillome de la face interne de la joue : à propos d’un cas et revue de la littérature.

R.Hejjouji*(1), O.Lachhab(2), J.Benayad(2)

(1)centre hospitalier universitaire de Rabat, Casablanca, Morocco, (2)chu de Rabat, Morocco

Les papillomes buccaux sont des lésions virales exophytiques peu fréquentes mais en augmentation, dues au virus du papillome humain.

Objet de la présentation : Si le diagnostic clinique est en général aisé, la confirmation étiologique et de bénignité exige une analyse anatomopathologique.

Matériels et Méthodes : Ce rapport présente un cas de papillome de la face interne de la joue droite dont l’évolution remonte à environ un an, suite à l’apparition et la progression d’une tuméfaction bourgeonnante allant de la commissure labiale droite en avant jusqu’à la commissure inter-maxillaire droite en arrière, l’étude anatomopathologique de la pièce biopsique objective un papillome, sans signes de malignité.

Résultats : Après traitement chirurgical (exérèse complète avec utilisation d’un lambeau sus hyoïdien) et médical adjuvant (antibio-corticothérapie par voie générale et antiseptique par voie locale), les suites cliniques furent simples. Des conseils pratiques ont été donnés à la patiente à sa sortie.

Conclusion : Les papillomes buccaux requièrent une ablation chirurgicale, geste recommandé par la plupart des auteurs au regard du risque de transformation maligne, et une surveillance clinique à long terme.

Summary:

Endobucal Papillomas (EBP) are exophytic viral lesions due to the human papilloma virus. Although they are considered rare, their frequency has gradually increased during the recent years.

OBJECTIVES: If the clinical diagnosis of EBP is easy to make, however ascertain the etiology and that it is a benign process require histopathologic studies.

MATERIAL AND METHODS: Herein we report about one case of endobucal papilloma, appeared one year ago and gradually progressed until now, located from the right labial commissure forward to the right inter-maxillary commissure back. Histopathologic studies of the biopsic fragments objected a papilloma, with no malignant findings.

RESULTS: After treatment (surgery: ablation of the entire tumor and positioning of a sus-hyoide muscle flap; adjuvant therapy: general antibiotiotherapy and corticotherapy; local antisepsis), the course was uneventful. The patient then lived the hospital with some practical recommendations.

Conclusion.

Due to the risk of malignant transformation, endobucal papillomas require surgical ablation and long-term follow-up.


Service d’Oto-rhino-laryngologie de l’HSR, Maroc
PAPILLOMATOSE ORALE FLORIDE A LOCALISATION LINGUALE : à propos d'un cas

N.Mahiou*(1), O.Lachhab(2), S.Nitassi(2), A.Ayoubi(2), R.Bensheikh(2), A.Oujilal(2), A.Benbouzid(2), L.Essakalli(1)

(1)Hôpital des spécialités rabat, Rabat, Morocco, (2)hopital des specialites rabat, Rabat, Morocco

INTRODUCTION : La papillomatose Orale Floride (POF) est une lésion précancéreuse d'origine virale dû au virus HPV (HPV-13 ; HPV-32 ). Elle constitue un problème diagnostique et thérapeutique majeur.

Nous rapportons un cas de POF à localisation linguale.

OBSERVATION : IL s’agit d’un homme de 60 ans ayant comme antécédent un diabète type 2 sous ADO et un tabagisme sevré il y a 20 ans, qui présente depuis un an une lésion verruqueuse au niveau de la face antérieure de l’hémi langue droit faisant 3 cm du taille, blanchâtre, indolore, non saignante au contacte, une base non indure ; associe a une glossodynie, sans d’autres signes associes.

Une biopsie a été faite et qui était en faveur d’une POF de la langue. Vue la bénignité de la lésion, aucun bilan d’extension n’a été réalisé.

Une exérèse chirurgicale sous anesthésie générale a été réalisée avec une bonne évolution post opératoire sur un recul de 6 mois.

Le résultat histologique définitif de la pièce opératoire confirme le diagnostic initial.

COMMENTAIRE : La particularité de notre observation réside dans la rareté de la POF, l’atypie de sa présentation clinique et la difficulté diagnostique. Elle survient principalement chez les sujets âgés, et siège essentiellement au niveau de la joue, muqueuse alvéolaire et la gencive. Le diagnostic est difficile, surtout si la biopsie n’a pas ramène qu’un fragment superficiel ou l’intérêt de multiplier les biopsies. Prise à temps, son pronostic est bon.

CONCLUSION : La prise en charge thérapeutique de la POF est difficile et encore mal élucidée. L’exérèse chirurgicale complète reste la meilleure alternative thérapeutique.
Adénome Parathyroïde et Hyperparathyroïdies Primaire - Rapport de cas

M. Fidelis solla*(1), F. Fruet*(1), C. Amaral(1), A. Pithon curi(1), B. De mello mencaroni(1), M. Zampieri(1), M. Moron(2)

(1) Pontificia Universidade Católica de São Paulo, Sorocaba, Brazil, (2) Pontificia Universidade Católica de São Paulo, Sorocaba, Brazil

Objectifs: Nous rapportons un cas d’un patient du Complexe Hospitalier de Sorocaba (CHS) qui a subi l’ablation chirurgicale de l’adénome parathyroïde provoquant PPH. 

Materiels et méthodes: Les informations contenues dans cette étude ont été obtenus en analysant les dossiers médicaux et revue de la littérature. 

Résultat: Monsieur G.M.R, 28 ans, présentait en août 2015 une fracture du fémur droit et bras gauche et à droite après une chute et de soutien à soulever. Il a une histoire de néphrolithiase 9 ans, 6 ans et 1 an et demi; 11 mois il y a côte droite fracturée après son compagnon de regarder votre poitrine et trois mois de l’humérus gauche il y a une fracture pour soutien l’enquête. 

Les tests de laboratoire ont montré: calcium total = 15,8 mg / dL; calcium ionique = 2,59 mg / dL; phosphatase alcaline = 494 U / L; = 3,6 g d’albumine / dL; créatinine = 3,2 mg / dL; l’hormone de parathyroïdienne intacte (PTH) = 1369 pg / ml. 

L’échographie de la thyroïde a révélé la présence d’un nodule hypoéchogène solide dans le lobe inférieur droit de la glande parathyroïde. Le patient a subi une parathyroïdectomie subtotale un (à gauche). des tests de laboratoire de postopératoires présenté: calcium total = 7,7 mg / dL; calcium ionique = 1,2 mg / dL; Phosphatase alcaline = 636 U / L; = 4,1 g d’albumine / dL; créatinine = 1,9 mg / dL; PTH = 29,8 pg / ml. 

L’examen anatomopathologique de la pièce opératoire a montré l’histologie compatible avec adénome parathyroïde. Conclusion: Le diagnostic de l’HPP dépend des niveaux de calcium sérique et l’évaluation d’autres présentations atypiques, tels que des calculs rénaux. Le traitement est retiré de la parotide par. 

La normalisation de la PTH et de calcium après la chirurgie et améliore la fonction rénale, de l’appareil locomoteur et du système cardiovasculaire peuvent être réalisées par 95%. Les complications les plus fréquentes sont les blessures de nerf laryngé récurrent, hypo- ou hyperparathyroïdie, saignement ou stridor.
Adénome parathyroïdien : diagnostic et stratégie chirurgicale

K.Khaloua*(1), K.Laouamri(2), S.Deradj(2)

(1)CHU Sétif - Algérie,  , Algeria, (2)CHU de Sétif - Algérie, , Algeria

Objectifs : Le but de cette publication est de parvenir à une meilleure compréhension de la manipulation des adénomes parathyroïdiens, et de souligner l’importance des explorations préopératoires pour adapter au mieux la stratégie chirurgicale.

Matériel et méthodes : C’est une patiente âgée de 43 ans, sans antécédents pathologiques. Le début remonte à 4 ans, où elle commence à se plaindre de douleurs osseuses au niveau du bassin et des membres inférieurs. L’examen clinique est pauvre. La biologie retrouve une parathormone très élevée (2671pg/mL) avec une calcémie à la limite supérieure de la normale. La Rx du rachis lombosacré objective une déminéralisation osseuse diffuse ainsi qu’un tassement vertébral ostéoporotique. La scintigraphie au sestami montre une hyperfixation rétro thyroïdienne inférieure gauche, tandis que l’échographie cervicale ne retrouve qu’un petit goitre nodulaire bilatéral, sans image parathyroïdienne anormale.

Résultats : La stratégie chirurgicale employée était une exploration unilatérale gauche complète, retrouvant une glande parathyroïde inférieure P3 hypertrophiée (environ 3 cm), qui est enlevée, avec une lobo-isthmectomie thyroïdienne gauche de principe. L’étude anatomopathologique était en faveur d’un adénome parathyroïdien. L’évolution postopératoire était favorable (normalisation de la parathormone et amélioration de la qualité de vie de la patiente).

Conclusion : L’adénome parathyroïdien peut avoir divers modes de révélation, et qui ne sont pas toujours manifestes. Les explorations préopératoires ont un grand intérêt, pour la localisation et pour l’ajustement de la stratégie chirurgicale. Le couple échographie-scintigraphie a une haute sensibilité et permet une stratégie chirurgicale simple, qui se veut de plus en plus ciblée et moins invasive.
Cancer de la parotide de découverte fortuite lors d'une scintigraphie myocardique au sesta-MIBI

S. Choukry*(1)

(1) CHU Ibn Rochd, Casablanca, Morocco

S. Choukry1, J. Benouhoud1, G. Cherkaoui, A. Guensi1
S. Anajar2, K. Choukry2, R. Abada2, S. Rouadi2, M. Roubal2, M. Mahtar2

1: Service de médecine nucléaire du CHU Ibn Rochd Casablanca
2: Service d’ORL de l’hôpital 20 Aout Casablanca

Introduction :
Les tumeurs des glandes salivaires sont peu fréquentes et représentent moins de 3% de l’ensemble des tumeurs. Ce sont principalement des tumeurs bénignes, dominées par l’adénome pléomorphe.

Les tumeurs malignes sont plus rares. Le type histologique prédominant est le carcinome muco-épidermoïde.

Le sesta-MIBI, marqué au 99mTc (technétium métastable), est un traceur utilisé en médecine nucléaire pour l’exploration de certains organes (essentiellement les parathyroïdes et le myocarde), c’est un complexe qui s’accumule par diffusion passive. Il fut utilisé antérieurement comme marqueur de malignité.

But du travail :
Le but de notre travail est de rapporter un cas de cancer de la parotide de découverte fortuite lors de la réalisation d’une scintigraphie myocardique au sesta-MIBI.

Matériel et méthode :
Une patiente de 59 ans, suivie depuis plus de 20 ans pour maladie de Behçet, et depuis 5 ans pour diabète type 2 sous insulinothérapie, admise au service de médecine nucléaire pour la réalisation d’une scintigraphie myocardique suite à l’apparition d’un angor d’effort.

Résultat :
L’examen scintigraphique ne révèle aucune anomalie myocardique, cependant une hypercaptation en regard de la glande parotide droite a été retrouvé sur les images.

L’examen clinique de la patiente retrouve une tuméfaction indolore de la joue droite, avec une peau saine en regard, une turgescence des vaisseaux du cou du côté homolatéral, sans adénopathies cervicales.

La patiente rapporte des céphalées rebelles au traitement symptomatique et des bourdonnements de l’oreille droite.

Une échographie des parotides réalisée était non concluante.

Une TDM cérébrale et cervicale ont été réalisées, ne retrouvant aucune anomalie au niveau cérébral, cependant une hypertrophie parotidienne droite a été signalée.
A l'IRM, on retrouve une lésion mal limitée, infiltrant la parotide droite, avec un hyposignal en T1 et T2, et une prise de contraste hétérogène après injection du Gadolinium.

L'indication d'une exérèse chirurgicale a été posée, la patiente a bénéficié d'une parotidectomie droite, dont l'examen anatomopathologique retrouve un carcinome épidermoïde.
LES CANCERS DE LA PAROTIDE : ETUDE RETROSPECTIVE AU SERVICE D’ORL DU CHNU DE FANN à propos de 20 CAS

A.Dieye*(1)

(1)CHNU FANN DAKAR SENEGAL, Dakar, Senegal

Introduction : Les cancers de la parotide sont peu fréquents. Ils sont caractérisés par une grande diversité histologique. Nous livrons à travers cette étude notre expérience sur la prise en charge des tumeurs malignes de la parotide.

Objectifs: Evaluer les aspects cliniques, histologiques et thérapeutiques des cancers de la parotide.

Matériel et Méthodes : Il s’agit d’une étude rétrospective réalisée sur une période de 8 ans dans le service d’ORL du CHNU de FANN (de janvier 2008 à Décembre 2015), et 20 cas de cancers de la parotide ont été colligés.

Résultats: L’âge moyen au moment du diagnostic était de 44 ans avec un sex ratio (H/F) de 1,5. Le temps d’évolution des symptômes était d’environ de 10 mois.

La tuméfaction parotidienne était présente chez tous les patients et était localisée à gauche dans 14 cas soit 70%; la douleur locale était notée chez 3 malades soit 15%.

Un aspect de peau d’orange ou de perméation cutanée étaient retrouvé dans 6 cas soit 30%. Des adénopathies suspectes étaient notées chez 5 patients soit 25%. Une paralysie faciale périphérique était retrouvée chez 25% des patients.

L’échographie de la région parotidienne a été réalisée chez 6 patients soit 30% et la tomodensitométrie chez 9 patients soit 45%. Une imagerie par résonance magnétique a été réalisée.

Les cancers parotidiens représentaient 20,40% de l’ensemble des tumeurs parotidiennes. Le carcinome épidermoïde était le type histologique le plus fréquent (30%), Soixante-dix pourcent des patients ont bénéficié d’un traitement chirurgical. La reconstruction des défects cutanés s’était faite aux moyens de lambeaux musculo-cutanés. Les tumeurs étaient classées de 65% de T4. Une radio-chimiothérapie a été instituée chez 40% des patients. Les suites opératoires ont été dominées par les nécroses (25%) et surinfections (25%) du site opératoire. Un cas de récidive et un cas de décès ont été notés.

Conclusion: Les cancers de la parotide sont peu fréquents, ils représentent plus d’un quart des tumeurs de la parotide, dans notre contexte. De nos jours, les indications chirurgicales sont orientées par l’IRM et surtout par la cytoponction systématique de toute masse parotidienne qui est insuffisamment pratiquée. La chirurgie et la radiothérapie complémentaire constituent le traitement de base.

Mots clés : parotide, cancer, parotidectomies, lambeaux
METASTASES PAROTIDIENNES D’UN MELANOME MALIN

L.Beddar*(1), K.Seddiki(2), O.Aouiche(3), O.Metrouh(2), Y.Ghedada(2), C.Mateus(4)

(1)HOPITAL CENTRAL DE L’ARMEE, Alger, Algeria, (2)HOPITAL CENTRAL DE L’ARMEE, Alger, Algeria, (3)EPH BELFORT, Alger, Algeria, (4)GUSTAVE ROUSSY, Villejuif, France

1. Objet de la présentation:

Les métastases situées au niveau de la glande parotide sont relativement rares. Le primitif étant le plus souvent situé au niveau de la tête et du cou. Les tumeurs cutanées sont le plus souvent mises en cause, et le mélanome malin en est l’étiologie la plus fréquente.

1. Matériaux et méthodes:

Nous rapportons une observation de métastase parotidienne droite de mélanome malin, le primitif reste inconnu.

2. Résultats:

Il s’agit d’une patiente âgée de 52 ans, ayant consulté pour une masse parotidienne droite évoluant depuis deux mois, sans signes inflammatoires. Une échographie cervicale et une IRM parotidienne ont objectivé un processus intra parotidien droit bien limité évoquant un adénoïde pléomorphe. Une parotidectomie partielle était réalisée.

L’étude histopathologique est revenue en faveur d’une métastase parotidienne d’un mélanome malin. La patiente rapporte la notion d’un nevus au niveau du pavillon de l’oreille droite mesurant environ 0,5 cm et évoluant depuis plusieurs années, opéré depuis 10 ans mais sans suite. Le bilan d’extension fait d’une IRM cérébrale montre la présence d’un rehaussement méningé focal (localisation méningée cérébrale). Une TDM thoraco- abdomino-pelvienne et une panendoscopie étaient négatives.

La patiente a refusé la parotidectomie totale (risque de paralysie faciale). Cependant, un évidement radical modifié droit a été réalisé avec une chimiothérapie au Deticène.

Un échec thérapeutique (reprise évolutive ganglionnaire cervicale et parotidienne droite) a motivé le recours à l’immunothérapie (la tumeur présente une mutation V600 du gène BRAF).

Le contrôle régulier par IRM de la parotide et TEP scanner retrouve une excellente réponse morphologique avec une réponse métabolique complète des lésions cibles cervicales, de même pour le rehaussement méningé qui a complètement disparu.

Nous avons actuellement un recul de 05 ans, sans récidive, ni seconde localisation.

4. Conclusion:

Les métastases parotidiennes des mélanomes malins sont rares et de mauvais pronostic. Nous rapportons une observation avec un recul de 5 ans (fait rare voire spectaculaire) grâce à la prise en charge multidisciplinaire et à la thérapie ciblée.
tumeurs parotidiennes à propos de 45 cas

K. Karim*(1)

(1) service ORL et chirurgie cervico-faciale, hôpital des spécialités de rabat, Rabat, Morocco


INTRODUCTION : Les tumeurs de la glande parotide sont rares, représentant 3 % de l'ensemble des tumeurs de la tête et du cou. Leurs formes bénignes sont prédominantes avec comme chef de file l'adénome pléomorphe.

BUT : le but de ce travail est d'analyser les différents aspects épidémiologiques, radiologiques et histologiques de ces tumeurs.

MATERIELS ET METHODES : Il s'agit d'une étude rétrospective portée sur 45 patients colligés au service d'oto-rhino-laryngologie de l'hôpital des spécialités de rabat durant une période s'étalant de janvier 2015 à janvier 2016.

Une fiche d'exploitation a été élaborée pour recueillir les données concernant chaque patient en se basant sur l'étude des dossiers.

RESULTATS : Dans notre étude, 15 hommes, et 30 femmes ont présenté une tumeur parotidienne, le sexe ratio était de 0,5.

La moyenne d'âge de nos patients a été de 42,5 ans avec des extrêmes allant de 20 et 65 ans.

En plus de l'examen clinique tous nos patients ont bénéficié d'une échographie cervicale, un complément d'imagerie a été demandé pour tous les malades : TDM cervicale dans 40 cas et IRM cervicale dans 05 cas.

Tous nos patients avaient bénéficié d'une cervicotomie, avec examen extemporané chez 41 malades. Il s'agissait, d'une parotidectomie exo-faciale dans 23 cas (51,1%), une parotidectomie totale conservatrice dans 10 cas (22,2%), une parotidectomie totale non conservatrice dans 2 cas (4,4%).

A l'examen anatomopathologique les tumeurs bénignes représentent 33 cas soit 71,11 %, dont 30 cas (90%) adénome pléomorphe, et 3 cas (9%) tumeur de Warthin.

Les tumeurs malignes représentaient 12 cas (28 %), 4 cas de carcinomes adénoïdes kystiques (12%), 3 carcinomes mucoépidermoides (9,1%), deux cas de lymphome malin non hodgkinien, un cas de carcinome à cellules claires, un carcinome à cellules acineuses et un cas d'adénocarcinome.

En post opératoire, 2 cas d'infection de la plaie opératoire et 3 cas d'hématome, 1 cas de parésie faciale transitoire ayant régressé sous traitement médical avec kinésithérapie, le syndrome de Frey est survenu chez 1 patient.

CONCLUSION :

L'IRM constitue, l'examen de choix dans l'exploration des masses tumorales parotidiennes avec une bonne valeur diagnostique de malignité ou de bénignité. La cervicotomie exploratrice avec examen anatomopathologique extemporané demeure la clé du diagnostic positif.
tumeurs parotidiennes à propos de 45 cas

K.Karim*(1), S.Rokhssi(2)

(1)service ORL et chirurgie cervico-faciale, hôpital des spécialités de rabat, Rabat, Morocco, (2)service d ORL et chirurgie cervico faciale, Rabat, Morocco

INTRODUCTION : Les tumeurs de la glande parotide sont rares, représentant 3 % de l’ensemble des tumeurs de la tête et du cou. Leurs formes bénignes sont prédominantes avec comme chef de file l’adénome pléomorphe.

BUT : le but de ce travail est d’analyser les différents aspects épidémiolo-cliniques, radiologiques et histologiques de ces tumeurs.

MATERIELS ET METHODES : Il s’agit d’une étude rétrospective portée sur 45 patients colligés au service d’oto-rhino-laryngologie de l’hôpital des spécialités de rabat durant une période s’étalant de janvier 2015 à janvier 2016.

Une fiche d’exploitation a été élaborée pour recueillir les données concernant chaque patient en se basant sur l’étude des dossiers.

RESULTATS: Dans notre étude, 15 hommes, et 30 femmes ont présenté une tumeur parotidienne, le sexe ratio était de 0,5.

La moyenne d’âge de nos patients a été de 42,5 ans avec des extrêmes allant de 20 et 65 ans.

En plus de l’examen clinique tous nos patients ont bénéficié d’une échographie cervicale, un complément d’imagerie a été demandé pour tous les malades : TDM cervicale dans 40 cas et IRM cervicale dans 05 cas.

Tous nos patients avaient bénéficié d’une cervicotomie, avec examen extemporané chez 41 malades. Il s’agissait, d’une parotidectomie exo-faciale dans 23 cas (51,1%), une parotidectomie totale conservatrice dans 10 cas (22,2%), une parotidectomie totale non conservatrice dans 2 cas (4,4%).

A L’examen anatomopathologique les tumeurs bénignes représentent 33 cas soit 71,11 %, dont 30 cas (90%) adénome pléomorphe,et 3 cas (9%) tumeur de Warthin.

Les tumeurs malignes représentaient 12 cas (28 %), 4 cas de carcinomes adénoïdes kystiques (12%),3 carcinomes mucoépidermoïdes (9,1%),deux cas de lymphome malin non hodgkinien,un cas de carcinome à cellules claires, un carcinome à cellules acineuses et un cas d’adénocarcinome.

En post opératoire, 2 cas d’infection de la plaie opératoire et 3 cas d’hématome, 1 cas de parésie faciale transitoire ayant régressé sous traitement médical avec kinésithérapie, le syndrome de Frey est survenu chez 1 patient.

CONCLUSION:

L’IRM constitue, l’examen de choix dans l’exploration des masses tumorales parotidiennes avec une bonne valeur diagnostique de malignité ou de bénignité. La cervicotomie exploratrice avec examen anatomopathologique extemporané demeure la clé du diagnostic positif.
PHARYNGOSTOME : FACTEURS DE RISQUES (Expérience d’un centre de référence Tunisien)

S.Kedous*(1), F.El hedhili*(2), S.Jbali(3), S.Dhambri(3), S.Touati(4), S.Grtili(5)

(1)Institut d’Oncologie Salah Azaiez, Tunis, Tunisie, (2)Faculté de Médecine de Tunis, Ariana, Tunisie, (3)Institut d’Oncologie Salah Azaiez de Tunis, Tunis, Tunisie, (4)Institut d’Oncologie Salah Azaiez de Tunis, Tunis, Tunisie, (5)Institut d’Oncologie Salah Azaiez de Tunis, Tristan da Cunha

Objet de la présentation: Le pharyngostome est la complication la plus fréquente et la plus redoutée de la laryngectomie totale. Les facteurs de risque paraissent multiples et non spécifique en parcourant les différentes séries publiées. Nous nous sommes intéressés à travers ce travail aux facteurs de risque présentés dans notre centre de référence et leurs particularités.

Méthodes : notre étude est rétrospective portant sur 68 patients ayant eu une laryngectomie ou une pharyngolaryngectomie totale entre les années 2011 et 2015 dans notre centre de 3ème ligne d’oncologie Salah Azaiez. Une étude statistique univariée puis multivariée a été faite en utilisant le test χ², en considérant la corrélation positive si p<0.05.

Résultats : L’âge moyen de nos patients est de 62 ans avec une prédominance masculine. La fréquence du pharyngostome était de 20.58%. L’étude univariée des différents facteurs de risque a montré que le taux de CRP post opératoire et le taux de protidémie post opératoire avaient une corrélation franchement positive avec p=0.000 et p=0.022 respectivement. La classification TNM était franchement corrélée avec p=0.039. Le type de l’incision et le type de chirurgie influayaient aussi sur le risque de survenue du pharyngostome avec des p=0.044 et p=0.039 respectivement. En outre, un sacrifice cutanée et une cicatrice sous tension était préjudiciable de pharyngostome avec des p= 0.004 et p=0.000 respectivement. Le type du curage ganglionnaire présentait un p=0.065, reflétant l’influence positive de ce facteur sur la survenue de pharyngostome même si le p n’est pas significatif. De l’étude multivariée ressortait les facteurs sacrifice cutanée, taux de la protéine C réactive et de la protidémie en post opératoire avec des p =0.001, p=0.000 et p=0.022 respectivement.

Conclusion : Cette étude montre la diversité de ces facteurs de risque du pharyngostome. Elle montre l’importance des mesures préventives se basant sur ces facteurs afin de limiter cette complication, améliorer les suites opératoires et la qualité de vie des patients et diminuer le cout de prise en charge du pharyngostome et de l’hospitalisation prolongée.
PLACE DU SCANNER DANS LE DIAGNOSTIC DES ATTEINTES CARTIALGINEUSES AU COURS DU CANCER DU LARYNX

B. Souissi*(1)

(1) CHU Habib Bourguiba Sfax TUNISIE, Tunisia

Objet:

Illustrer les différents aspects tomodensitométrique de l’atteinte des cartilages thyroïde et arythénoides au cours du cancer du larynx

Corrêler les résultats tomodensitométriques et anatomopathologiques dans l’atteinte cartilagineuse

Matériel et Méthodes:

il s’agit d’une série rétrospective de 70 patients opérés pour cancer du larynx. tous les patients ont été explorés par un scanner préopératoire.

Résultat:

l’âge moyen de nos patients a été de 63 ans avec une prédominance masculine (97%). L’atteinte du cartilage thyroïde a été notée dans de 79 % avec une sensibilité de 61,5 % et une valeur prédictive négative de 83,8 %.

L’atteinte des cartilages arythénoides a été retrouvée dans 79 % avec une spécificité de 82 %, une sensibilité de 75 % et une valeur prédictive négative de 97 %.

l’atteinte cartilagineuse a été à type de condensation chez . la lyse cartilagineuse a été notées dans 35% des cas avec une spécificité de 96 %

l’extension aux parties molles extra-laryngées a été diagnostiqué au scanner chez 4 patients sur 6.

Conclusion:

La tomodensitométrie est l’examen clé dans le bilan d’extension des tumeurs cartilagineuses permettant de guider le geste chirurgical et l’attitude thérapeutique. Sa place est primordiale dans l’évaluation de l’atteinte cartilagineuse qui a un impact important dans le choix du geste opératoire avec une spécificité qui peut atteindre les 95%.
Imagerie post thérapeutique des cancers du larynx

M. Amira*(1), B. Souissi(2), I. Achour(3), O. Kammoun(4), S. Haddar(5), K. Ben mahfoudh(6)

(1) CHU HBIB BOURGUIBA SFAX, Sfax, Tunisia, (2) service de radiologie@yahoo.fr, Sfax, Tunisia, (3) service ORL Hbibbourguiba, , Tunisia, (4) service radiologie chu hbib bourguiba, , Tunisia, (5) service de radiologie hbib bourguiba, , Tunisia, (6) service de radiologie hbib bourguiba sfax, , Tunisia

Objectifs:
Reconnaitre les aspects caractéristiques en tomodensitométrie des différents types de chirurgie totale ou partielle.
Savoir différencier un aspect post opératoire normal d'une récidive tumorale.
Illustrer les différents aspects en TDM après radio-chimiothérapie.

Matériels et méthodes :
Des patients suivis au service ORL CHU HBIB BOURGUIBA pour cancer du larynx, ont bénéficié en post thérapeutique d'un scanner cervical d'emblée après injection de produit de contraste en double imprégnation au service de radiologie CHU HBIB BOURGUIBA.

Résultats:
Les tumeurs du larynx stade I et II bénéficient d'une chirurgie partielle préservant le fonctionnement laryngé.
Les tumeurs plus étendues bénéficient d'une laryngectomie totale ou d'un traitement par radio-chimiothérapie.
La connaissance des différents aspects post opératoires normaux est indispensable pour pouvoir détecter une récidive tumorale.
La réalisation d'une TDM 3 à 4 mois après la chirurgie servira de référence pour la surveillance ultérieure. 

Cette récidive peut apparaître sous forme d'une prise de contraste nodulaire ou d'une destruction du cartilage après chirurgie partielle.

Lorsqu'un traitement par radio-chimiothérapie est décidé, l'imagerie joue un rôle important dans la surveillance permettant de juger l'efficacité du traitement envisagé et la conduite ultérieure: poursuivre le même traitement en cas d'une bonne réponse, faire un curage ganglionnaire dans certains cas ou bien changer de protocole thérapeutique en cas d'échec.

Conclusion:
La connaissance des aspects post opératoires normaux du larynx est indispensable pour détecter une récidive tumorale.
L'imagerie est indispensable pour juger l'efficacité ou l'échec d'un traitement par radio-chimiothérapie des cancers du larynx.
FACTEURS PREDICTIFS DE GRAVITE DES CELLULITES CERVICO-FACIALES A PROPOS DE 180 OBSERVATIONS

C.Halouani*(1), I.Zoghlami(2), S.Dalléji(3), H.Hachicha(2), R.Ben mhammed(2)
(1)HOPITAL MILITAIRE DE TUNIS, Tunis, Tunisia, (2)hôpital militaire de Tunis, Tunisia, (3)hopital militaire de Tunis, Tunisia

Introduction: la cellulite cervico-faciale est une urgence ORL grave qui peut mettre en jeu le pronostic vital.

But de la présentation: ressortir, à travers une analyse statistique, des facteurs de risque de gravité de cette pathologie qui nous inciterons à une attention particulière dans la prise en charge et la surveillance des patients qui en sont atteints.

Matériel et méthodes: étude rétrospective portant sur 180 observations de cellulites cervico-faciales colligées au service ORL de l'hôpital militaire de Tunis (Tunisie) sur une période de 13 ans.

Résultats: durant la période d'étude 180 patients ont été pris en charge pour une cellulite cervico-faciale. L'âge moyen était de 33 ans avec 68% de patients de sexe masculin. La cellulite était d'origine dentaire dans 74% des cas. Tous les patients ont été traités dans notre service, 18 d'entre eux ont nécessité un séjour en réanimation et 20 ont nécessité une trachéotomie. L'analyse statistique uni variée a permis de ressortir plusieurs facteurs de risque de gravité des cellulites. La régression logistique a permis de dégager des facteurs pronostiques qui sont l'hyperleucocytose importante, la présence de bulle d'air au scanner, la récidive et la durée d'hospitalisation prolongée.

Conclusion: la prise en charge précoce et adaptée des cellulites cervico-faciale permet une amélioration significative de leur pronostic. Toutefois la recherche de facteurs prédictifs de gravité et leur prise en considération dans la prise en charge de ces patients permet de prévenir une évolution vers l'aggravation et la complication de leur tableau clinique initial.
FACTEURS PREDICTIFS DE MORTALITE DES CELLULITES CERVICO-FACIALES

K.Djilali alad*(1)

(1)Chu sidi bel abbes, Sidi bel abbes, Algeria

Objet de la présentation: La cellulite cervico-faciale est une infection grave qui intéresse les espaces anatomiques délimités par les aponévroses, ces dernières recouvrent les différents organes du cou.

Le taux de mortalité de cette pathologie grave varie de 6% à 76%

Le pronostic des cellulites cervico-faciales dépend de plusieurs paramètres, le plus important est la précocité de la prise en charge du patient.

Materiels et méthodes utilisées: Il s’agit d’une étude descriptive prospective dans le cadre de l’épidémiologie clinique étudiant la mortalité des cellulites cervico-faciales suivie d’une étude analytique pronostique.

Notre étude concerne tous les cas de cellulites cervico-faciales, vues en urgence, soit au service d’ORL du centre hospitalo-universitaire de sidi bel abbés, soit au service des urgences médico-chirurgicales (UMC) au cours de la période allant du 1 avril 2008 au 1 avril 2013, concernant 69 patients, cinq cas de mortalité ont été enregistrés.

On a inclus dans l’étude tous les patients présentant une cellulite cervico-faciale, de tout âge, des deux sexes, au stade suppuré nécessitant une incision et drainage, nous avons exclu tous les cas de cellulites cervicales sèches, les cellulites orbitaires, cellulites faciales isolées, abcès superficiels bien limités.

L’analyse statistique était réalisée par un test de Khi2 ou un test de Fischer, le résultat était significatif pour un p < 0,05.

Résultats:

Parmi les 69 cas de cellulites cervico-faciales nous avons enregistré 5 cas de décès, soit 7,25% des patients.

L’âge moyen de nos patients décédés est de 40,8 ans, 80% des patients décédés sont de sexe masculin, de niveau socio-économique bas, presque tous alcoolo-tabagiques et toxicomanes, de mauvaise hygiène bucco-dentaire, et d’hygiène bucco-dentaire défectueuse, la majorité sont diabétiques, tous ont été traité par anti-inflammatoires non stéroïdiens et antibiotiques.

En étude analytique, ceux qui sont liés significativement à la mortalité sont : l’absence d’occupation, le niveau socio-économique bas, l’alcoolisme, ainsi que la toxicomanie dont le risque de mortalité est multiplié par 15 chez les sujets toxicomanes.

Le diabète, le type gazeux de la cellulite, le siège bilatéral, quand il s’agit du germe bacteroides

La présence de la dyspnée et du choc septique sont deux signes cliniques prédictifs de la mortalité.

Conclusion : La cellulite cervico-faciale est une pathologie grave, La mortalité dans notre étude est de 7%, le pronostic vital selon l’étude que nous avons réalisée est en fonction est de plusieurs facteurs.
Facteurs prédictifs des récidives dans la chirurgie d’adénomes pléomorphes (AP) de la parotide

Y. Moussaoui*(1), A. Saheb(2)

(1) EPH Tiziouzou, Algeria, (2) CHU TZO, Algeria

1. Objet de la présentation: L’adénome pléomorphe constitue une tumeur bénigne fréquente de la parotide. Le traitement chirurgical standardisé n’est pas établi, mais de rigoureuses techniques sont à respecter sous peine de récidive. Nous vous proposons une analyse de 24 cas de récidives d’adénomes pléomorphes afin d’identifier d’éventuels facteurs prédictifs.

2. Patients et méthodes: Étude rétrospective sur 24 patients réopérés pour AP, sur un total de 145 parotidectomies pour le même type histologique sur une période de dix ans. Les critères étudiés étaient : l’âge, la cytologie, l’imagerie (échographie, TDM, IRM), le type d’intervention, l’expérience du chirurgien (senior, junior), les données du compte rendu opératoire, antécédents chirurgicaux, le type histologique définitif, l’existence de complications constatées au décours de la première intervention et le délai de la récidive.

3. Résultats : Population majoritairement féminine avec une moyenne d’âge de 32 ans. Chirurgie réalisée 15 fois par un junior (moins de deux ans de pratique). Cytologie retrouvée chez 12 patients, dont un patient ayant subit deux ponctions. L’imagerie a été orientée pour préciser le siège exact de la tumeur et sur le plan d’anatomie chirurgicale, seuls 15 patients ont pu bénéficier d’exploration de qualité. Au total, nous avons recensé six cas d’AP d’expression parapharyngée, neuf cas de siège parotidien superficiel (le ramus mandibulaire est pris comme repère), un cas était superficiel jugal (ectopie tissulaire ?), les autres cas sont considérés comme appartenant au lobe superficiel. Deux énucléations résections réalisées par des chirurgiens non-ORL avec incision sur la tumeur, neuf parotidectomies superficielles, sept parotidectomies totales. Pour les localisations parapharyngées deux par voie mixte trans-vélaire (dont une incomplète) et le reste par voie combinée trans-submandibulaire, avec une notion de dix cas de rupture accidentelle de la capsule de la tumeur, les rapports avec le nerf facial n’ont pu être exploités. Un cas fut multi-opéré (trois reprises). Dans la majorité des cas, il s’agissait de formes mixtes et hypocellulaires. Les complications retrouvées furent, une paralysie faciale lors de l’énucléation, et deux syndromes de FREY. Après analyse, les facteurs les plus incriminés sont l’effraction capsulaire, le siège parapharyngé avec voie d’abord exclusive vélaire ou même combinée et enfin l’expérience semble jouer un rôle dans la genèse des récidives (surtout dans les formes « simples » exofaciales).

Conclusion .— Si l’adénome pléomorphe reste une tumeur bénigne, sa chirurgie doit répondre à des impératives techniques rigoureuses qui doivent être maîtrisées par le chirurgien cervicofacial.
Prévalence des adénopathies cervicales d’origine tuberculeuse

I. Ezekari*(1), S. Nitassi(2), A. Benbouzid(2), R. Bencheikh(2), L. Essakalli(2), A. Oujilal(2)

(1) hopital des spécialités, Morocco, (2) HOPITAL DES SPECIALITES, Morocco

Introduction :

les adénopathies cervicales constituent l’une des manifestations les plus fréquentes de tuberculose extrapulmonaire.

Objectif :

Faire le point sur les aspects épidémiologiques, diagnostiques et thérapeutiques des adénopathies cervicales étiquetées d’origine tuberculeuse.

Matériel et méthodes :

une étude prospective menait dans notre service du novembre 2016 au mars 2017, et qui concerne les patients ayant présenté une tuberculose ganglionnaire cervicale.

Nous allons étudier les paramètres épidémiologiques comme l’âge, le sexe, les habitudes alimentaires, notion de contagion tuberculeux ou antécédent de tuberculose ganglionnaire, la sérologie HIV des patients qui est réalisée systématiquement dans notre étude, l’intradermorréaction à la tuberculine et le rôle de genexpert dans le diagnostic de la tuberculose ganglionnaire et l’étude de la résistance.

Une lymphadénectomie est réalisée systématiquement chez tous nos patients avec étude anatomopathologique et bactériologique.

Discussion et conclusion :

La tuberculose est un problème de santé publique, affectant un tiers de la population mondiale et représentant la quatrième cause de décès. La tuberculose ganglionnaire est la forme de tuberculose extra pulmonaire la plus fréquente, son association fréquente à l’infection à VIH indique la recherche systématique de cette infection chez tout sujet avec une adénite tuberculeuse.

auteurs et affiliations: I. EZEKARI, I. SAOUD, N. BELHAJ, S. NITASSI, A. EL AYOUBI, R. BENCHEIKH, A. BENBOUZID, A. OUJILAL, L. ESSAKALLI.

Introduction:

Cervical adenopathies are one of the most frequent manifestations of extrapulmonary tuberculosis.

Aim:

The purpose of this study is to take stock of the epidemiological, diagnostic and therapeutic aspects of cervical adenopathies labeled with tuberculosis.

Material and methods:

This is a prospective study conducted in our department from November 2016 until March 2017, and which concerns patients with cervical lymph node tuberculosis.

We will study the epidemiological parameters such as age, sex, eating habits, the notion of tuberculous contagion or a history of lymph node tuberculosis, the HIV serology of the
patients which is systematically carried out in our study, tuberculin intradermal reaction and the role Of genexpert in the diagnosis of lymph node tuberculosis and the study of resistance.

A lymphadenectomy is performed systematically for all our patients with anatomopathological and bacteriological study.

Discussion and conclusion:

Tuberculosis is a public health problem affecting one third of the world’s population and is the fourth leading cause of death. Tuberculosis is the most frequent form of extra-pulmonary tuberculosis, and its frequent association with HIV infection indicates the systematic search for this infection in any patient with tuberculous adenitis.
Hyperparathyroïdie primaire : localisation exceptionnelle d'un adénome parathyroïdien

S.Turki*(1), A.Hachicha(2), A.Mardassi(3), M.Abouda(4), S.Sahtout(5)

(1)SERVICE ORL hopital des FSI, Tunis, Tunisia, (2)service d'ORL Hopital des FSI, Tunis, Tunisia, (3)centre d'expertise et de médecine aéronautique, Tunis, Tunisia, (4)service de pneumologie hopital des FSI, Tunis, Tunisia, (5)cabinet privé, Tunis, Tunisia

Introduction :
La prise en charge de l'hyperparathyroïdie primaire est souvent difficile en cas de localisation ectopique des adénomes.

Objectif de l'étude:
A travers ce cas clinique les auteurs soulignent l'importance des explorations radiologiques pré ou per opératoire dans la prise en charge des adénomes parathyroïdiens.

Observation :
Nous rapportons l'observation d'une patiente âgée de 46 ans, adressée à notre service pour une hyperparathyroïdie primaire révélée par des douleurs osseuses associées à des taux élevés de calcémie et de Parathormonémie. L'échographie cervicale était sans anomalies et la scintigraphie parathyroïdienne Technetium-Sestamibi a conclu à un adénome médiastinal. La patiente a été opérée par voie de thoracotomie avec un curage emportant l'ensemble du tissu cellulo-graisseux du médiastin. Néanmoins, l'examen anatomopathologique du prélèvement n’a pas retrouvé d’adénome parathyroïdien avec persistance en postopératoire des signes cliniques et biologiques d'hyperparathyroïdie. Une réintervention chirurgicale par la même voie a été réalisée. Le geste a été guidé par une scintigraphie peropératoire et a permis de retrouver un adénome parathyroïdien de 5 cm au niveau de la fenêtre aortico-pulmonaire. Les suites opératoires ont été simples.

Conclusion :
L’apport du bilan morphologique et notamment du couple scintigraphie – TDM est considérable dans l’approche diagnostique des glandes parathyroïdes ectopiques permettant une caractérisation appropriée du tissu parathyroïdien e. L’utilisation de la scintigraphie per opératoire donne une meilleure garantie au geste opératoire.
Le carcinome neuroendocrine à petites cellules de l’ethmoïde : à propos d’un cas

S.Turki*(1), A.Hachicha(2), A.Merdassi(3), M.Abouda(1), S.Sahtout(4)

(1)Hôpital des Forces de Sécurité Intérieure de La Marsa, Tunis, Tunisia, (2)Hôpital des Forces de Sécurité Intérieur de La Marsa, Tunis, Tunisia, (3)Centre d'expertise et de médecine aéronautique, Tunis, Tunisia, (4)Cabinet privé, Tunis, Tunisia

Les carcinomes neuroendocrines à localisation sinusienne primitive sont rares et classés histologiquement en fonction de leur degré de différenciation. Le carcinome neuroendocrine à petites cellules, extrêmement rare, en représente le type le moins différencié et le plus agressif. En effet, il se caractérise par un envahissement loco-régional rapide, une tendance à la récidive, ainsi qu’une propension à la diffusion métastatique, aussi bien par voie lymphatique qu’hématogène. Les approches thérapeutiques de ces tumeurs sont encore controversées.

Observation :

Une patiente, âgée de 26 ans nous a été adressée pour une tuméfaction fronto-orbitaire droite, ayant rapidement augmenté de volume depuis 2 mois, avec une sévère altération de l’acuité visuelle. Elle aurait été opérée à deux reprises, il y a 6 mois puis 3 mois, par voie endonasale.

L’examen a retrouvé une importante masse bleutée, déformant la région fronto-orbitaire, associée à un œdème péri-orbitaire droit avec une ophtalmoplégie complète de l’œil droit. L’endoscopie nasale a montré une formation granulomateuse de la fosse nasale droite avec bombement du méat moyen. La palpation cervicale a retrouvé une adénopathie de 5 cm de diamètre, sous-dig気trique droite, de consistance ferme.

L’examen tomodensitométrique du massif facial et cervical a mis en évidence une volumineuse formation de l’ethmoïde droit, envahissant l’orbite, le sinus maxillaire et la fosse ptérygopalatine, et détruisant la lame criblée de l’ethmoïde avec extension endocranienne au lobe frontal, ainsi qu’une adénopathie sous-dig気trique droite de 5 cms de diamètre, d’allure tumorale. Une biopsie profonde de la formation nasale sous anesthésie générale a confirmé le diagnostic de carcinome neuroendocrine à petites cellules. Le bilan d’extension général a révélé à l’examen tomodensitométrique des localisations secondaires pulmonaires bilatérales et diffuses, ainsi que de multiples localisations secondaires osseuses.

Proposée par un comité multidisciplinaire pour une chimiothérapie palliative, la patiente a refusé tout traitement.

Conclusion :

Malgré leur importante agressivité, les symptômes et signes cliniques de ces tumeurs sont variables et non spécifiques. Les approches thérapeutiques en sont controversées, associant des protocoles multiples de chirurgie et de radio-chimiothérapie. Toutefois, tout geste chirurgical doit être large et bien codifié sous peine de faire flamber la tumeur (cas de notre patiente). Les formes avancées et métastasées relèvent du traitement palliatif.
Analysis of histopathologic implication in conservation surgery of hypopharyngeal cancer

S.Kim*(1)

(1) Seoul St.Mary's Hospital, Catholic University of Korea, , Korea, South

Introduction: Since Ogura et al. introduced the concept of a partial laryngopharyngectomy in 1991, conservation surgery in hypopharynx cancer have been widely used especially pyriform sinus cancer which originated from lateral wall of sinus.

An increased understanding of the histopathologic growth patterns and spread of piriform sinus carcinoma is needed to select appropriate patients for conservation surgery. We designed this study to investigate the pattern of lateralized pyriform sinus cancer and find out the oncologic significance of histopathologic subsites in conservation surgery.

Methods: A retrospective review of the medical record of the patients who were diagnosed with squamous cell carcinoma (SCC) of pyriform sinus and underwent total VHPL (vertical hemipharyngolaryngectomy) at our institution from 1998 to 2013 was done. All surgical specimen obtained from patients were reviewed by one pathologist.

Results: Totally 49 patients were enrolled in this study, and there were 5 patients with T4, 14 patients with T3, 23 patients with T2, 7 patients with T1 stage. Mean follow up period was 27 months and except one patient who had reconstruction with ALTF (anterolateral thigh flap), all the other patients have underwent VHPL with RFFF (radial forearm free flap) reconstruction. Thirteen patients showed paraglottic involvement (26.5%) and 4 patients showed TA muscle involvement (8.1%). In 4 cases of pre-epiglottic space involvement, 3 patients showed extension through paraglottic space but one patient did not showed paraglottic space involvement. Thyroid cartilage invasion was detected in 9 patients (18.3%) and in those patients, 5 cases showed extension beyond the cartilage. Submucosal spread was revealed in 14 patients and it had significant influence to the local recurrence (p-value = 0.05). In oncologic aspect, we could find statistical significance of pre-epiglottic space invasion to 5-year disease free survival and 5-year overall survival rate (p-value = 0.02, 0.05 for each).

Conclusion: Submucosal spread and pre-epiglottic space invasion in pyriform sinus cancer has negative effect to survival rate and local control. And it could be happened frequently through paraglottic space invasion.
ASSOCIATION OF TWO PRIMARY MALIGNANT TUMORS IN A PATIENT WITH BLOOM SYNDROME: CASE REPORT

M.Fidelis solla*(1), F.Fruet*(2), J.Braga aquino*(2), J.Salles chagas*(2), M.Paschoal*(2), D.Pereira(2), D.Gardenal alcantara(3)

(1)Pontificia Universidade Católica de São Paulo, Sorocaba, Brazil, (2)PUCCAMP, Campinas, Brazil, (3)Universidade São Francisco, Bragança paulista, Brazil

Objectives: To report the case of a patient with Bloom's syndrome and multiple malignant tumors, to reinforce the importance of investigating other primary sites and a detailed preoperative staging in patients with the syndrome.

Methodology: The information contained in this study was obtained through the analysis of medical records and literature review.

Results: The 36-year-old male patient was followed up at the otorhinolaryngology outpatient clinic due to suppurative chronic otitis media on the right, asymptomatic in relation to the digestive tract and was submitted to routine preoperative nasofibrolaryngoscopy for otologic surgery, observing an injury Vegetation in an oropharynx posterior wall whose biopsy showed little differentiated squamous cell carcinoma. Computed tomography (CT) of the neck showed lesion in the oropharynx and lymph node enlargement in level Ia. CT scan of the chest showed no lesions detectable by the method. The surgical staging was performed through upper digestive endoscopy (EDA) and another primary lesion was diagnosed, and the biopsy revealed squamous cell carcinoma of the middle esophagus. Ultrasonography was performed followed by endoscopic mucosectomy of the esophageal lesion, without intercurrences. Subsequently, he underwent endoscopic resection of the squamous cell carcinoma of the hypopharynx with a protective tracheostomy. After the exchange of the plastic tracheostomy cannula for metal, the patient presented extensive subcutaneous emphysema and right pneumothorax, developing respiratory insufficiency. Chest drainage, intubation by tracheostomy and referral to the ICU were performed. He evolved with bronchopneumonia, sepsis and death on the 29th postoperative day.

Conclusion: It is concluded that, in addition to the phenotypic findings that characterize them (short stature, micrognathism and erythema malar due to solar hypersensitivity), patients with Bloom Syndrome have a high incidence of malignant neoplasm at an early age and a higher probability of Develop multiple primary malignant tumors at different sites, routine physical examination is necessary, and in the case of neoplasia, a detailed preoperative staging is necessary, extending to other systems seeking possible alterations.
Cervical spondylodiscitis following an invasive procedure on the neopharynx after circumferential pharyngolaryngectomy

F.Espitalier*(1), A.De keating-hart(2), S.Morinière(3), J.Badet(4), C.Ferron(2), O.Malard(2)

(1)CHU DE NANTES, Nantes, France, (2)CHU Nantes, Nantes, France, (3)CHU Tours, Tours, France, (4)CHU Besançon, Besançon, France

PURPOSE:

To highlight cervical spondylodiscitis as an infrequent complication following an invasive procedure on the neopharynx in patients previously treated with circumferential pharyngolaryngectomy with pectoralis major myocutaneous flap reconstruction.

METHODS:

Patients diagnosed with cervical spondylodiscitis after circumferential pharyngolaryngectomy between 2001 and 2013 were retrospectively studied using a questionnaire sent to the French head and neck tumour study group. Medical history; tumour management; clinical symptoms; biological, microbiological and imaging results; and management of the infection were collected for each patient.

RESULTS:

Six men aged 51-66 years were diagnosed with spondylodiscitis on average 5.6 years after circumferential pharyngolaryngectomy, and a mean 2 months following an invasive procedure on the neopharynx (oesophageal dilatation, phonatory prosthesis insertion). The patients presented with cervical pain and increased CRP level. MRI showed epidural abscess and communication between the pharynx and vertebral bodies in most cases. Microbiological samples yielded bacteria from the pharynx flora. Infection was managed using antibiotics adjusted according to the culture results and spinal immobilisation for duration of 6-12 weeks. No surgical treatment was required. During follow-up, no patient experienced recurrence or residual disability.

CONCLUSIONS:

Cervical spondylodiscitis is a rare but potentially severe complication following an invasive procedure on the neopharynx after circumferential pharyngolaryngectomy. Therefore, the onset of nonspecific symptoms should not be overlooked, and MRI must be performed if infection is suspected. Microbiological confirmation is critical in optimising treatment, which should be aggressive, even if overall prognosis seems to be good.
CHARACTERISTICS AND POSSIBLE RISK FACTORS OF PATIENTS WITH HYPOPHARYNGEAL SCC IN KENYA

C.Muturi*(1)

(1)NAIROBI EAR, NOSE AND THROAT VLINIC, Nairobi, Kenya

ABSTRACT

Introduction:

Head and neck cancer has been on the increase in the last few decades. Just as well hypopharyngeal carcinoma cases are increasing and patients are at times younger than expected. Patients presenting with hypopharyngeal carcinoma at Kenyatta National Hospital (KNH) in Kenya are diagnosed at advanced stage of the disease due to late presentation. This is partly because of lack of awareness of symptoms and also lack of knowledge on the risk factors that predispose patients to developing hypopharyngeal cancer.

Objectives: To determine the characteristics and possible risk factors in patients with squamous cell carcinoma of the hypopharynx at Kenyatta National Hospital in Kenya.

Study Design: A hospital based descriptive cross – sectional study.

Study setting: The study was carried out at KNH in the Ear, Nose and Throat ward and outpatient clinic, as well as the radiotherapy department. This was done after ethical approval from the KNH-University of Nairobi research and ethics committee.

Study population: All patients over the age of 12 years with confirmed hypopharyngeal carcinoma who gave consent and assent form for the study from the ENT clinic, ENT ward, and radio-therapy department. Sixty 9 cases were recruited for the study.

Methodology: The study was carried out between June to October 2013. The patients' demographic data, medical history and physical examination findings were recorded in a patient proforma. The characteristics and possible risk factors in each patient were obtained by means of a questionnaire.

Results: Mean age was 50years (SD = 15years) with majority 41(59.4%) being male. Majority of the patients presented in the 6th and 7th decade with 21(30.4%) and 16(23.1%) patients respectively. Dysphagia was present in 69(100%). Seventeen (24.6%) of the patients were exposed to farming chemicals with a mean duration of 30years of exposure. Smoking was present in 36(52.1%) patients and all were male with the commonest type being filtered cigarettes, 32(97%). Secondary smoke exposure in 15(23.8%). Alcohol consumption was present in 35(50.7%) of patients 30(93.8%) of which also smoked. Intake of fruits and vegetable was low among the patients. The most common histology was moderately differentiated SCC with the postcricoid region being the most affected subsite.

Conclusion and recommendation: More studies need to be done to evaluate the real risk of certain environmental exposures as well as exposure to smoking, alcohol consumption and farming chemicals in areas most affected.
Clinical Characteristics and Outcomes of Hypopharyngeal Carcinoma Patients over 80 Years of Age: A Single Center Experience in Japan

S.Miyamoto*(1), Y.Seino(1), T.Okamoto(1), K.Kano(1), S.Tsutsumi(1), T.Yamashita(1)

(1)Kitasato University, Sagamiwara, Japan

Purpose of the study: Japan is currently entering in unprecedented super-aged society. Because the number of elderly cancer patients have steadily increased, the challenges in the treatment of those patients frequently confuse us due to the deterioration of physiological functions and comorbid disorders. Thus, we evaluated the clinical characteristics and outcomes of the patients over 80 years of age with hypopharyngeal carcinoma to understand properties of those patients.

Materials and methods used: We had decided on a treatment policy in a total of 248 patients with initial hypopharyngeal carcinoma in our hospital between 2006 and 2015. Average age was 69.0 (±9.3) year-old and the number of the elderly patients over 80 years of age was 31 cases (12%). Clinical stages, main treatment methods, and survival rates were analyzed between elderly and younger groups.

Results: The rate of the patients who took a course of palliative care in the elderly group (n=9) was higher than that in the younger group (29% vs. 10%, p=0.02). Among 22 patients who underwent definitive therapy in elderly group, the rate of the patients with advanced stage disease (n=15) was comparable with that in the younger group (68% vs. 67%, p=1.0). Although the rate of the patients underwent irradiation in the elderly group (n=18) showed no significant difference as compared with that in the younger group (82% vs. 68%, p=0.11), among them, the rate of the patients with radiotherapy alone in the elderly group (n=8) was higher than that in the younger group (44% vs. 17%, p=0.01). The rates of overall and disease-specific survival in the elderly group were comparable with those in the younger group, respectively (43% vs. 53%, p=0.09; 73% vs. 69%, p=0.6).

Conclusion: Elderly patients with hypopharyngeal carcinoma are expected to have equivalent prognosis to the usual-aged patients by treatment intervention. Therefore, it should be made a careful treatment decision for curability even in the patients over 80 years of age.
Comparison of outcomes between transoral laser microsurgery and open approach surgery in early staged hypopharyngeal cancer

J.Kim*(1), S.Nam(1), J.Lee(1)

(1)Asan Medical Center, Seoul, Korea, South

Objectives: Transoral laser microsurgery (TLM) is minimally invasive procedure performed in early to moderately advanced laryngeal and pharyngeal carcinomas to preserve function. TLM is now considered the method of choice in early laryngeal carcinomas but is the least established of TLM procedures in hypopharyngeal carcinomas. This study compares the functional and oncological outcomes of patients with hypopharyngeal carcinomas undergoing either TLM or open approach surgery at a single tertiary center.

Methods: We retrospectively reviewed the medical records of 37 patients with early (T1-T2) hypopharyngeal SCC who underwent TLM (n = 20) and open approach surgery (n = 17) from August 2009 to March 2015. Surgical margins, need for tracheostomy, feeding tube, hospital stay were compared between the two groups using Pearson’s chi-square test, Fisher’s exact test and Mann-Whitney test. Also differences in recurrence-free survival (RFS), cancer-specific survival (CSS), and overall survival (OS) were compared.

Results: For median follow-up of 40 months, the 2-year OS of patients undergoing TLM and open approach surgery were 95.0% and 58.2%, respectively (P = 0.02). The 2-year CSS of patients undergoing TLM and open approach surgery were 95.0% and 62.4%, respectively (P = 0.029). Statistically significant differences in positive resection margins (P = 0.014). The duration of tracheostomy, feeding tube, and hospital stay was also significantly shorter in the TLM group (P < 0.001).

Conclusions: This study showed that TLM had significantly better OS and CSS than open surgery group. It was associated with the duration of tracheostomy, feeding tube, and hospital stay.
Hypopharyngeal Schneiderian papilloma: a case report and a review of the literature.

M.Busoni*(1)

(1)AUSL Imola, Imola, Italy

Schneiderian papillomas represent a group of benign neoplasms arising from the ectodermally derived (Schneiderian) mucosa lining the nasal cavity and paranasal sinuses and they are composed of a squamous or columnar epithelial proliferation with associated mucous cells. Schneiderian papillomas have a tendency to spread along the mucosa into adjacent areas within the nasal cavities, and the occurrence of a primary lesion outside the sinonasal tract is an extremely rare event. We report a case of an Inverted Papilloma of the posterior wall of the hypopharynx.

CASE REPORT.

A 52-year-old Caucasian man presented with a single mass in correspondence of the right submandibular gland, of about 3cm in its greatest dimension. Routine fiberoptic examination showed a 0.5 mm whitish mass of the posterior wall of the hypopharynx. Under surgical microlaryngoscopy, intraoperative bioptic examination of the hypopharyngeal specimen revealed Inverted type Schneiderian Papilloma. Definitive histopathologic analysis confirmed the diagnosis, and the margins were free of the disease. The mass was then grasped and complete excision was accomplished by means of bipolar forceps. Postoperative time was uneventful, and the patient is currently free from disease after 17 months of follow up. Other cases of ectopic Schneiderian Papillomas have been described previously: lesions occurred predominantly in the nasopharynx, but were also found in the oropharynx, including a single lesion of the vallecula. Other unusual locations described in literature were cervical lymph nodes middle ear and mastoid. A previously case of hypopharyngeal Inverted Papilloma has been described.

The precise reason why these tumours arise beyond the boundaries of the Schneiderian membrane is unknown. A possible explanation of these ectopically-derived Schneiderian papillomas may be found in the embryology of the upper aerodigestive tract. Is it possible that by the week 10, islands of ectodermally derived epithelium, detached while nasal and oral compartment are forming, may migrate or be incorporated in areas which it is not normally found.

M.Busoni, I.Tasca, G. Ceroni Compadretti. Ospedale Santa Maria della Scaletta-AUSL 2 Imola
Hypopharyngeal tumors - SCC - case presentation

V. Sala*(1)

(1) Emergency Hospital Oradea, Romania, Romania

Anatomically the hypopharynx extends from the plane of the hyoid bone above to the plane of the inferior border of the cricoid cartilage below. The hypopharynx is composed of the following three parts and does not include the larynx: pyriform sinus, postcricoid area and posterior pharyngeal wall.

Hypopharyngeal carcinoma is relatively uncommon representing only 10 percents of all proximal aerodigestive track malignancies. Unfortunately hypopharyngeal tumours produce few symptoms until they are advanced. They may cause: dysphagia or odynophagia, sore throat, otalgia, disphonia, hoarseness, adenopaty in the neck, feeling of food sticking in the throat, hemoptysis, halitosis. Risk factors: tobacco and alcohol use, poor nutrition, human papilloma virus infection, genetic syndromes, workplace exposures, gender, age, race, gastro oesophageal reflux disease.

Treatment of hypopharyngeal squamous cell carcinoma usually involves surgical resection and or chemo radiotherapy.

We are presenting a case MW, 68 years old female, ex smoker and alcohol abuse, with a five weeks history of dysphagia and haematemasis. Patient was diagnosed with Hypopharyngeal squamous cell carcinoma (SCC) and treated surgical ENT and oncologicaly.

Squamous cell carcinoma (SCC) of the hypopharynx carries the worst prognosis of any squamous cell carcinoma (SCC) of the upper aerodigestive tract of the head and neck both because it often presents with advanced disease. Even when prognosis is corrected for stage, hypopharyngeal cancers continue to have poor outcomes.
Immunohistological criteria for predicting jejunal flap failure in hypopharyngeal reconstruction

S. Mauramati*(1), A. Occhini(2), G. Bertino(2), M. Alessiani(3), M. Benazzo(4), P. Morbini(5)

(1) Department of Otorhinolaryngology, University of Pavia, Foundation IRCCS Policlinico San Matteo, Pavia, Italy, (2) Department of Otorhinolaryngology, Foundation IRCCS Policlinico San Matteo, Pavia, Italy, (3) Department of Clinical, Surgical, Diagnostic and Pediatric Science, University of Pavia, Pavia, Italy, (4) Department of Otorhinolaryngology, University of Pavia, Foundation IRCCS Policlinico San Matteo, Pavia, Italy, (5) Department of Molecular Medicine, Unit of Pathology, University of Pavia, Foundation IRCCS Policlinico San Matteo, Pavia, Italy

Purpose of the study: the current study aims to assess the histological and immunohistochemical changes induced by Ischemia Reperfusion Injury in free re-vascularized autologous jejunum segments implanted in patients treated for hypopharyngeal cancer, correlating them with the occurrence of graft failure.

Patients and methods: eleven patients were treated with circular pharyngoesophageal resection followed by reconstruction with a free jejunum flap for advanced hypopharyngeal cancer. Biopsies were taken during surgery as follows: from normally perfused tissue, before isolation (T0), at the end of cold ischemia (T1), at the end of warm ischemia, just before reperfusion (T2), 15 min after reperfusion (T3), at the end of the digestive anastomoses, 60 min after reperfusion (T4). Furthermore, the external monitor loop resected on the 5th post-operative day was analyzed. All samples were fixed in formalin and embedded in paraffin for histopathological evaluation. Immunohistochemical markers for epithelial cell damage and apoptosis (I-FABP, M30), proliferation (ki67-MIB1) and for the characterization of inflammatory cell subpopulations (CD20, CD3, CD68, MPO) were used. The histological damage was scored using the Park/Chiu Score System.

Results: necrosis of the jejunum graft was seen in 2 cases, confirmed on postoperative day 2. For 9 patients post-operative course was uneventful: transferred autografts reperfusion was ideal, the loop immediately regained normal color and peristalsis was quickly resumed after few minutes from re-vascularization. In graft that developed necrosis mucosal damage according to the Park-Chiu score, peaked at T3, and declined after reperfusion, while in grafts with no evidence of damage the score was lower at all T points. Immunohistochemistry for M30 showed that apoptotic cells were sporadically present in villous tips of healthy jejunum. M30 expression markedly increased after reperfusion (T3) and declined at the end of surgery (T4) in failed grafts, and showed a modest, uniform increase in the other cases; on the contrary Ki67 positivity peaked at the end of surgery (T4) in all cases. A reduction of FABP expression was observed in the cases with necrosis. Finally, the intensity of the inflammatory infiltrates was higher before reperfusion in cases that underwent necrosis than in those with a favorable outcome.

Conclusion: increased apoptosis, as evidenced with M30 immunostain, and the intensity of inflammatory infiltrates at the end of the reperfusion phase may represent an indicator for the risk of early failure of free jejunum flap.
Impact of the method and success of pharyngeal reconstruction on the outcome of treating laryngeal and hypopharyngeal cancers with pharyngolaryngectomy: a national analysis

R. Nouraei*(1), D. Vokes(2), N. Jallali(3)

(1) Auckland City Hospital, Auckland, New Zealand, (2) Auckland City Hospital, Auckland, New Zealand, (3) Imperial College Healthcare NHS Trust, London, United Kingdom

Background: Surgical treatment of cancers which arise from or invade the hypopharynx presents major reconstructive challenges. Reconstructive failure exposes the airway and neck vessels to digestive contents.

Methods: We performed a national N=near-all analysis of the administrative dataset to identify pharyngolaryngectomies in England between 2002 and 2012. Information about morbidity, pharyngeal closure method, and postoperative complications were derived.

Results: There were 1589 predominantly male (78%) patients whose mean age at surgery was 62 years. The commonest morbidities were hypertension (24%) and ischemic heart disease (11%). For 232 (15%) of patients, pharyngolaryngectomy was performed during an emergency admission. The pharynx was closed primarily in 551 patients, with skin or muscle free or pedicled flaps in 755 patients, and with jejunum and gastric pull-up in 123 and 160 patients respectively. In-hospital mortality rate was 6% and was significantly higher in the gastric pull-up group (11%). Reconstructive failure had an odds ratio of 6.2 [95% confidence interval (CI) 2.4-16.1] for in-hospital death. Five-year survival was 57% and age, morbidities, emergency surgery, gastric pull-up, major acute cardiovascular events, renal failure, and reconstructive failure independently worsened prognosis. Patients who had pharyngeal reconstruction using radial forearm or anterolateral thigh flaps had lower mortality rates compared to patients who had jejunum flap reconstruction (Hazard Ratio = 1.50 [95% CI 1.03-2.19]) or gastric pull-up (Hazard Ratio = 1.92 [95% CI 1.32-2.80]).

Conclusions. Pharyngolaryngectomy carries a high degree of morbidity and mortality. Reconstructive failure worsens short- and long-term prognosis, and use of cutaneous free flaps appears to improve survival.
Laryngopharyngoesophagectomy with gastric pull up for hypopharyngeal squamous cell carcinoma: a retrospective case series

J. Meulemans*(1)

(1)University Hospital Leuven, department of otorhinolaryngology, head and neck surgery, Leuven, Belgium

Purpose: Hypopharyngeal squamous cell carcinomas (SCC) are generally diagnosed in an advanced disease stage. For resectable failures of primary organ preservation protocols, or in very advanced primary situations, a total laryngopharyngoesophagectomy with gastric pull up reconstruction is a time tested method in our centre. We present our results with this approach in terms of success rate, postoperative complications and functional and oncological outcomes.

Patients and methods: A retrospective review of records from 61 patients with hypopharyngeal SCC, who underwent laryngopharyngoesophagectomy with gastric pull up reconstruction (+/- neck dissection) between 1980 and 2015, was performed. Patient demographics and disease characteristics were described, actuarial survival rates were calculated (Kaplan-Meier), and variables modifying oncological outcome were analyzed using chi-square, Fisher’s exact and log-rank tests.

Results: Of the 61 patients, 38 (62%) underwent laryngopharyngoesophagectomy as an up-front procedure and 23 patients (38%) were treated in a salvage setting for persisting or recurrent cancer after (chemo)radiation or for second primary cancer after previous neck irradiation. Stage III and stage IV disease was apparent in 36% and 59% of patients respectively. Neck metastasis was present in 57%. Success rate of reconstruction by gastric pull up, defined as a viable pharyngogastric anastomosis, was 98%. The in-hospital mortality rate was 10%. Early and late complication rates were 45% and 15% respectively. No differences of complication rates between primary and salvage groups were observed (Fisher’s exact test, \( p=1 \) and \( p=0.64 \)). Mean and median follow-up were 26 and 12 months (range 0.75-227 months, SD=42 months). One-year and two-year actuarial overall survival rates were 56.0% and 36.7%. One-year and two-year actuarial disease specific survival rates were 74.1% and 57.2% and were significantly negatively influenced by presence of N+ disease (Log rank analysis, \( p<0.01 \)). One-year and two-year actuarial disease recurrence rates were 49.1% and 63.3%. A significant higher disease recurrence rate was observed in patients with N+ disease (26.5% versus 65.6% at 1 year, Log rank analysis, \( p<0.01 \)). Complete oral intake was achieved in 80% of patients with a trend towards poorer results in patients with prior irradiation (Fisher’s exact test, \( p=0.016 \)). Speech rehabilitation by means of Provox® puncture or electrolarynx was achieved in 58% of patients.

Conclusion: Total laryngopharyngoesophagectomy with gastric pull up reconstruction for advanced stage hypopharyngeal SCC combines acceptable oncologic and functional outcomes in a prognostic unfavorable patient group.
Lymph Node Ratio Predicts Recurrence and Survival in Patients with Pathologically Stage IV Hypopharyngeal Cancer

W.Lo*(1), C.Wang(2), T.Yang(2), P.Lou(2), J.Ko(2), Y.Chang(2)

(1)Far Eastern Memorial Hospital, , China, Republic of (Taiwan), (2)National Taiwan University Hospital, , China, Republic of (Taiwan)

Background: This study aimed to investigate the clinicopathological prognostic predictors of stage IV hypopharyngeal cancer and extend the traditional TNM classification system to advance its predictive ability.

Material and Methods: A total of 120 patients with pathologically stage IV hypopharyngeal cancer treated with pharyngolaryngectomy and neck dissection between 2001 and 2007 were enrolled.

Results: The 5-year overall survival (OS), disease-specific survival (DSS), and disease-free survival (DFS) for all patients were 44.6 %, 51.6 %, and 48.0 %, respectively. In multivariate analysis, lymph node (LN) ratio ≥ 0.113 was a significant poor prognostic factor for OS [hazard ratio (HR) 1.89, 95 % confidence interval (CI) 1.17-3.05, p = 0.009], DSS (HR 2.17, 95 % CI 1.29-3.64, p = 0.003), and DFS (HR 2.24, 95 % CI 1.12-4.52, p = 0.024) in stage IV hypopharyngeal cancer. In addition, pre-treatment neutrophil-lymphocyte ratio, lymphovascular invasion, and margin status were also predictors for survival outcomes. Furthermore, we found that patients with LN ratio ≥ 0.113 or < 0.113 had significantly difference in disease recurrence (68.2 % vs. 39.5 %, respectively; p = 0.002).

Conclusions: The LN ratio ≥ 0.113 is a strong predictor of disease recurrence and survival in patients with stage IV hypopharyngeal cancer.
MANAGEMENT OF HYOPHARYNGEAL AND LARYNGEAL TUMOURS: A 6-YEAR REVIEW

A.Sousa menezes*(1), M.Breda(2), D.Silva(2), A.Lima(2), J.Guimarães(2), L.Dias(2)

(1)DEPARTMENT OF OTOLARYNGOLOGY-HEAD AND NECK SURGERY | HOSPITAL DE BRAGA-PORTUGAL, Braga, Portugal, (2)DEPARTMENT OF OTOLARYNGOLOGY-HEAD AND NECK SURGERY | HOSPITAL DE BRAGA, Braga, Portugal

Introduction:
Hypopharyngeal and laryngeal cancer management remains complex, despite the recent improvements in diagnostic imaging and treatment modalities available.

Purpose of the study:
To evaluate the epidemiologic, clinicopathologic profile and management outcomes of hypopharyngeal and laryngeal squamous cell cancer.

Material and Methods:
A 6-year retrospective review of medical records of patients treated at our institution for squamous cell carcinoma of the hypopharynx (SCCH) and larynx (SCCL), was performed.

Results:
There were 122 patients comprising 118 (96.7%) males and 4 (3.3%) females with a mean age of 60.01 ± 12.82 years. History of cigarette smoking and alcohol consumption was present in 90.8% and 76.7% patients, respectively. The most common clinical presentations were hoarseness, dysphagia, and dyspnea. Laryngeal tumours were more frequent (63.3%) than hypopharyngeal tumours (36.7%). The most common anatomic location for laryngeal cancer was the transglottis (39.5%) and for the hypopharyngeal cancer was the piriform sinus (85%). About 70% of patients were firstly treated with primary surgical treatment, 11% treated with chemotherapy associated with radiotherapy, 10% treated with chemotherapy and 6% treated with radical radiotherapy. Combination therapy including surgery and/or chemotherapy and/or radiotherapy was chosen in over 70% of the patients. About 54% of the patients with SCCL, and about 66% with SCCH had advanced disease stage at presentation. The most common postoperative complication was pharyngocutaneous fistula. The median survival time for SCCL was higher compared to SCCH and was higher in the group submitted to primary surgical treatment.

Conclusion:
Overall survival of these tumours is still poor, particularly in hypopharyngeal cancer. This might be a reflection of the late presentation of patients with SCCH who often remain asymptomatic for a longer period and are therefore more commonly seen in later stages of the disease. Multimodal strategy including surgery with adjuvant radiotherapy and/or chemoradiation is the most common approach in our department for locally advanced disease.

Despite the evidence of benefit of different treatment modalities, the optimal approach has yet to be determined. Future prospective trials with better patient selection and more reliable clinical outcomes are needed. A multidisciplinary approach involving surgeons and oncologists is necessary in order to define guidelines for the successful management of these tumours specifically regarding the diagnosis, tumour staging, treatment and follow-up.
Metastatic synovial sarcoma of the neck: A case report.

E.Zhen*(1), R.Lewis(1)

(1) Fiona Stanley Hospital, Perth, Australia

Purpose of the study: To present a rare case of metastatic synovial sarcoma in the left thyroid region and surgical technique used for resection at our institution.

Material and Methods: (Case report) A 58-year-old female was referred to the Head and Neck Multidisciplinary Meeting at Fiona Stanley Hospital, Western Australia, with a large synovial sarcoma in the left thyroid region. She initially presented with 15 months history of a progressively enlarging left neck mass, mild dysphagia and nocturnal cough. This was on a background of metastatic synovial sarcoma since 1989: initially as localized lesion of the left wrist treated with repeated wide local excisions; then a below elbow amputation in 1995 in New Zealand; followed by recurrence of the left pleura with chest wall involvement in 2007, treated with left upper lobe lobectomy, sternotomy and post-operative radiotherapy. On examination, the patient had a large, firm mass in the left anterior neck, measuring 8 x 7 centimeter in size, with marked tracheal displacement to the right and movement on swallowing. Patient subsequently underwent 5 cycles of neoadjuvant chemotherapy (ifosfamide and epirubicin) with no response and further growth of mass on follow up CT. She underwent excision of left neck mass and hemithyroidectomy under general anaesthesia in May 2016. Intraoperatively, we found a large well encapsulated tumour extending from behind the left clavicle up to the level of thyroid cartilage. Trachea of displaced to the right of midline. Mass was peeled off left internal jugular vein and common carotid and removed en bloc with left strap muscles. Left vagus nerve was identified preserved. Intraoperative photos were taken.

Results: No perioperative complications occurred. Patient was referred to Radiation Oncology for consideration of adjuvant radiotherapy.

Conclusion: There are only a few case reports of synovial sarcoma of the head and neck in the English medical literature. This type of tumour is often asymptomatic until sequelae of compression or displacement of neighboring structures occur. While prognosis of synovial sarcoma is poor, a recent study has found improved local disease control at 3 and 5 years with post operative radiotherapy. It is important for Otolaryngologists and Head and Neck surgeons to be familiar with the type of tumour and current management options.
Novel strategies to overcome the poor exposure of Hypopharynx area during Transoral robotic surgery (TORS): Early experiences of Lateral Pharyngotomy via Retroauricular Approach

Y.Koh*(1), S.Kim(1), D.Kim(1), J.Kim(1), J.Na(1), S.Shin(1)

(1)Yonsei University College of Medicine, Seoul, Korea, South

Purpose: TORS has been shown to be feasible and safe as a primary treatment for early hypopharyngeal squamous cell carcinoma(HPSCC). But hypopharynx is the one of most difficult lesion to get a good surgical view by transoral approach. So when we can’t create enough surgical space for TORS, we have applied lateral pharyngotomy via retroauricular approach after retroauricular robot assisted neck dissection (RAND) to overcome the poor exposure during TORS.

Methods: We performed a retrospective review of 5 patients who underwent lateral pharyngotomy via retroauricular approach for T1 and T2 HPSCC in Yonsei Head and Neck Cancer Center between 2013 and 2016. All of the cases (1 female and 4 male) were planned for TORS after RAND via retroauricular approach, but we can’t proceed surgery by transoral approach because of trismus, retrognathia and other reasons.

Results: Patients who underwent surgical resection for T1 were 4 cases (T1 was 1 case) and N0 were 4 cases (N2b was 1 case). The average size of primary lesion is 2.76cm x 1.98cm. The average hospital day of 3 patients which treated with pharyngocutaneous fistula was 62 days and the other was 16 days. 3 cases were repaired by primary closure and 2 cases underwent free flap for defect. 2 patients had positive surgical margin and 3 patients had experienced pharyngocutaneous fistula formation after surgery. 1 case had postoperative concurrent chemoradiotheraphy for local recurrence after 7 months and the other had no locoregional failure yet.

Conclusion: Our early experience of lateral pharyngotomy via retroauricular approach has shown us that this approach is feasible, safe, and applicable to selected cases, with a clear surgical view. Long-term results are still not reported but it can offer one of interesting options to overcome the poor exposure of hypopharynx area during TORS.
Oncological and functional results of surgical treatment of carcinoma of the hypopharynx

R. Jović*(1)

(1) University ENT Clinic, Novi sad, Serbia

In the era of organ preservation, chemoradiotherapy is generally accepted way of treating cancer of the hypopharynx, a surgical treatment with total laryngectomy is suppressed, reserved for recurrent disease.

GOAL

The aim is to analyze the oncological and functional results of surgical treatment of carcinoma of the hypopharynx and the place of surgery in treatment of cancer of this localization.

MATERIALS AND METHODS

In the period from 2001 to 2010, at the Clinic were treated 178 patients with hypopharyngeal cancer, 168 (93.8%) men and 10 (6.2%) of women 39-87 years of age. Primary surgery were apayed in 95 (53.3%) patients, and 83 (46.7%) patients were treated with chemoradiotherapy or symptomatic therapy. Selection of patients for surgical treatment is carried out on the basis of resectability, comorbid conditions and the will of patients. As surgical technique were applied partial pharyngectomy; partial pharyngectomy with partial laryngectomy; near total laryngectomy with partial pharyngectomy, total laryngectomy with partial pharyngectomy and total laryngectomy with total pharyngectomy.

RESULT

In 94 patients is histologically determined squamous cell carcinoma, and in one liposarcoma. The largest number of 89/95 (93.6%) patients were in advanced III 21/95 (22.1%) and IV 68/95 (71.5%) stage until early stage makes 6.4%, 4/95 (4.2%) stage I and 2/95 (2.1%) stage II.

Neck dissection was performed in 89/95 (93.6%) patients. Metastases in the neck are histologically diagnosed in 72 (75.7%) patients. Leading complications in the postoperative period were pharyngocutaneous fistula 22 (23.4%), infection 19 (20.2%) and bleeding 4 (4.2%) patients.

Relapse occurred in 48/95 (50.5%) patients. The largest number of relapses is related to the regional and distant metastases 27/95 (28.4%), followed by the second primary cancers 12/95 (12.6%) and local relapse in 9/95 (9.4%) patients. Total 5-year survival was 43.7% and the 5 year disease free period was 41.7% operated.

Rehabilitation of voice and speech in laryngectomees has been established at 47/61 (77%) patients, 27 patients esophageal voice and vocal prosthesis 20 patients.

Significant impact on the survival of patients had N status. It is expected the best in N0 58.7% and 52.4% N1, better in N2a N2C 54% and 55.7%, and worse in N2b stages 31.9%. As expected the worst survival is in N3 category 15.5%

CONCLUSION

Surgery of hypopharyngeal cancer with postoperative radiotherapy is a treatment option with good oncological and functional results and has its place in the treatment of cancer of this localization.
Organ preservation surgery in elderly hypopharyngeal cancer patients

K. Matsuura*(1), Y. Asada(1), T. Imai(1), S. Morita(1), S. Saijo(1)

(1) Miyagi cancer center, Natori, Japan

OBJECT:
The larynx preservation surgery is very important tactics. The purpose of this study is to examine the feasibility and therapeutic effects of this surgery for patients over 70 years with hypopharyngeal cancer.

SUBJECT:
We treated 12 elderly hypopharyngeal cancer patients (12 male and no female, whose age ranged from 70 to 76 years) by organ preservation surgery in our hospital from 2004 to 2016. The median follow-up was 51 months (range 15 - 75 months). The control cases were 33 cases that had total pharyngo-laryngo-esophagectomy (TPLE) for the same period.

RESULTS:
Clinically, there were 4 patients with T1, 5 with T2, 2 with T3, and one with T4A. Nodal metastasis was noted in all cases at the first treatment. There were 3 patients with Stage 3, and 9 with Stage 4A. 9 patients underwent reconstructive surgery with free flaps (5 free jejunum and 4 forearm flap) and 3 had primary closure. The 5-year cause-specific survival rates was 52%, and the 5-year overall survival rates was 46%, respectively. The 5-year cause-specific survival rate and overall survival rates of the control group was 77% and 65 %, respectively. But, there were not significant differences between two groups.

CONCLUSION:
Even if it is elderly patient, there is a case to be suited of the larynx preservation surgery, and these prognoses are similar to the patients who had TPLE. We think this organ preservation surgery to be one of the treatment choices for elderly hypopharyngeal cancer.
HN-HC-18

Pedical Trans-axillary Thoracodorsal Artery Perforator (TDAP) flap: A versatile new technique for reconstruction of the hypopharynx and cervical esophagus

A.Amin*(1), M.Zedan(1)

(1)National Cancer Institute, Cairo University, Cairo, Egypt

Introduction: Reconstruction of the hypopharynx and cervical esophagus after tumor resection remains a challenging problem. Different techniques of reconstruction have been described for such defects. Although free flap reconstruction including jejunum and fasciocutaneous flaps have gained popularity for this complex defect, gastric pull up is still in use worldwide.

Methods: We present our experience at the National Cancer Institute, Cairo University, Cairo, Egypt, using the pedicled thoracodorsal artery perforator (TDAP) flap whereby only a small cuff of latissimus dorsi muscle around the perforators is harvested and the remaining muscle with its nerve supply is preserved. Preoperative mapping of the perforators is performed using a hand held Doppler. The flap is then delivered to the neck through the cervico-axillary tunnel behind the clavicle for reconstruction of the pharyngo-esophageal segment. This technique was used in 23 patients. The flap was used as a complete tube for circumferential defects in 18 patients and for associated external skin in 5 patients. Tumor resection, flap harvest and insetting were all completed without changing the patient’s position.

Results: A total of 24 TDAP flap were used for reconstruction in 23 patients. All flaps survived except in 2 patient who suffered a complete flap loss. One patient was salvaged using the contralateral TDAP flap while the other patient died from carotid blow out. Partial sloughing of the distal portion of the flap used to reconstruct the neck skin in composite defects occurred in 2 patients, these did not require any surgical intervention. Pharyngeal fistulas developed in 6 patients and were managed using conservative measures. The donor site was closed primarily in all patients. Patients resumed oral diet within two weeks except patients with fistulas. One patient underwent trachea-esophageal puncture (TEP) for voice rehabilitation. The follow up period ranged from 5 months to 6 years. Late anastomotic stricture is the most common complication. Three patient succumbed from the disease and one patient developed a locally advanced sinonasal carcinoma (2nd primary) and received palliative radiation.

Conclusion: The pedicled trans-axillary TDAP flap is an ideal technique for reconstruction of the pharyngo-esophageal segment. It offers the advantages of free fasciocutaneous flaps, has a wide arc of rotation, a relatively large flap dimensions, a reliable vascular pedicle, and an acceptable donor-site morbidity.
Pharyngoesophageal reconstruction with synthetic prosthesis - advantages and the management of complications

S.Bertesteanu*(1), R.Grigore*(2), B.Popescu*(2), C.Antonie(2), A.Nicolaescu(2), P.Pascu(2)

(1) University of Medicine and Pharmacy Carol Davila Bucharest, Coltea Clinical Hospital, Bucharest, Romania,
(2) Coltea Clinical Hospital, Bucharest, Romania

Purpose of the study: Circumferential pharyngoesophageal defect represents one of the biggest reconstructive challenges. Following ablative surgery, proper three-dimensional reconstruction is necessary for a good quality of life. Our objective is to assess the oesophageal synthetic prosthesis as a method of pharyngoesophageal reconstruction in patients who have cancer of the hypopharynx and cervical oesophagus cancer. The authors present preliminary studies for the production of active pharyngoesophageal prosthesis, that have patented it. The implantable pharyngo-esophageal prosthesis is designed to replace the cervical esophagus affected by different morphology altering disease. Its structure is tubular reaching from the base of the tongue to the cranial region of the resected esophagus. The prosthesis has a funnel shape at the upper part to be sutured to the base of the tongue and a round lower shaft to be placed inside the remaining esophagus. It has two round concentric walls with an inbetween space. The space between the inner and outer tubes contains seventeen to twenty artificial muscles mounted on the inner layer’s outer coating and on the outer layer’s inner coating.

Materials and Methods: We diagnosed 65 patients with pharyngoesophageal cancer, who underwent circular pharyngolaryngectomy and reconstruction with oesophageal prosthesis. Each case was assessed for complications. Patients were also evaluated for their ability to maintain an oral diet. Patients were followed up for a minimum of 2 months after surgery.

Results: 47 patients had received postoperative external beam irradiation. There were 10 fistulae and 8 patients with other complications. Two patients died 3 months after surgery of distant or local metastasis disease. The oral realimentation can begin after 14 days.

Conclusions: The oesophageal prosthesis is a safe method of reconstruction of the pharyngoesophageal segment, which allow an early oral refeeding, with a low rate of major complication and low cost. The advantages of the pharyngo-esophageal prosthesis are certain and have been tested. Early refeeding is possible at 14 days postoperative with a physiological swallowing due to the synergic action of the artificial muscles. The lenght of the surgical procedure is diminished by a minimum of two hours and the complications and mortality of the procedure are lower. Overall morbidity is reduced due to the biocompatibility of the materials and the antiacid reflux mechanism from the stomach. Considering all the data the in-hospital period is shorter meaning lower general costs.
Pharyngolaryngoesophagectomy with Laparoscopic Gastric Pull-Up: Our Experience

A.Camaioni*(1), M.Simone(2), E.Vesperini(1), D.Tassone(1), C.Viti(1)

(1)San Giovanni - Addolorata Hospital of Rome, Roma, Italy, (2)San Giovanni - Addolorata of Rome, Roma, Italy

Purpose of the study
To evaluate affordability of pharyngo-laryngo-esophagectomy with laparoscopic gastric pull-up in the management of hypopharyngo-oesophageal carcinomas. We discuss the main differences with normally laparotomic technique and review the literature.

Materials and Methods
Between October 2002 and August 2011 we performed 18 pharyngo-laryngo-esophagectomy with laparoscopic gastric pull-up in patients affected by hypopharyngo-oesophageal carcinomas. Surgical procedure was performed in one stage by two surgical team. During the demolitive phase, a first team performed a circumferential pharyngo-laryngo-esophagectomy with bilateral (radical or selective) neck dissections and total thyrodeectomy; after that the second team performed a gastric tubulization with transhiatal esophageal dissection. At last we restored the base of tongue-gastric continuity by a personal technique.

All patients are staged as IV TNM classes (3 T3, N2; 3 T4a, N0; 8 T4a, N1 and 4 T4, N2).

Results
In our sample, the intraoperative mortality was 0%, whereas we recorded a post-operative mortality of 6,25 %. There were two anastomotic leakage in the third and ninth postoperative days that needed a surgical revision in one case (post-operative morbidity: 12,5 %). Oral food intake was restored after 14,3 ± 9,5 days. Patients were discharged from the hospital after 18 ± 9,2 days.

The OS at 5 years follow-up is 40% (1 non disease free). Of the 11 died patients, 3 are disease free at time of death.

Conclusions
We consider the pharyngo-laryngo-esophagectomy with laparoscopic gastric pull-up, a safe procedure with a low post-operative mortality and reduced post-operative complications.
Planned pharyngostoma: and old technique revisited
C. Martin villares*(1), M. Gonzalez gimeno(2), L. Diez Gonzalez(3), J. Dominguez calvo(4), J. San Roman carbajo(5), C. Valor(6)

(1) Hospital El Bierzo., Ponferrada, Leon, Spain, (2) Hospital Clinico San Carlos, Madrid, Spain, (3) Hospital de Palencia, Palencia, Spain, (4) Hospital El Bierzo, Leon, Spain, (5) Hospital El Bierzo, Ponferrada, Spain, (6) Hospital Infanta Sofia, Madrid, Spain

INTRODUCTION

Major wound complications in high-risk patients after laryngectomy can be conducted surgeons to revist old simple techniques for new complex patients. The technique of planned surgical pharyngostome is an old technique presented as a safe and easy alternative procedure with very selected indications in the era of miocutaneous flaps and microsurgery anatomooses.

METHODS:

We present our surgical experience with 5 planned pharyngostome technique in management of 10 complex postlaryngectomy wounds. We discuss surgical design and technical considerations since the design to the closure of the pharyngostome for very selected patients.

RESULTS:

The medical records 19 patients who O postlaryngectomy major fistula. Ten patients with major postlaryngectomy fistula (52.6%) need any surgical reconstructive technique. Reconstructive methods included 5 local flaps, 2 pediculated cutaneous flap, 3 miocutaneous pectoralis flaps.

We used P.L.A.N.D.E.D S.U.R.G.I.C.A.L M.I.N.I.P.H.A.R.Y.N.G.O.S.T.O.M.Es in 5 patients. In one heavy radiated patient underwent a radical salvage surgery, a planned surgical minipharyngostoma were created after laryngectomy (a PROPHYLACTIC PHARYNGOSTOMA). In two patients, EMERGENCY PHARYNGOSTOME was made because of massive bleeding from an infected neck and 2 patient with cronic postoperative fistula with alarm sings we made an elective controlled pharyngostoma.

CONCLUSIONS:

Salvage laryngectomy in high-risk patientes have a high rate of major wound complications. Controlled pharyngostome technique should be considered as an easy and quickly alternative to complex microanastomoses techniques in order to avoid cervical necrosis and the potential blowout of carotid or yugular system in a severe infected neck.
Protocols to prevent complications of Total Laryngectomy

B.Basavarajah*(1), D.Prasad_(2)

(1)JSS Medical College, JSS University, Mysuru, Mysuru, India, (2)JSS Medical college, JSS University, Mysuru, India

Protocols to prevent complications of Total Laryngectomy

Purpose of study

Head and neck cancer is ranked sixth leading cause of cancer death worldwide and average incidence rate of 8.8 and 5.1 per 1,00,000 males and female respectively. Head and neck cancer constitute 4 to 5% of all cancers. Laryngeal cancer is an important malignancy in head and neck region. There are many therapeutic options available in the treatment of laryngeal cancer. These include Total laryngectomy, partial laryngectomy, chemoradiation and combined therapy. Total Laryngectomy is one of the most frequently done oncological surgeries in this part of world as patient report with advanced disease with high incidence of morbidity. Through improvised techniques and pre and post operative protocols the incidence of complications are reduced, none the less they occur, Complications following total laryngectomy with or without partial pharyngectomy include pharyngocutaneous fistula, wound infection, flap necrosis, haematoma, can cause serous implication on the final outcome of the treatment which leads to increased post operative morbidity, hospital stay and hospital cost.

Materials and Methods: It was a prospective study done in the Department of Otolaryngology & Head- Neck Surgery, JSS Medical College Hospital, Mysuru, from November 2014 to July 2016. 30 patients undergoing Total laryngectomy with or without partial pharyngectomy for laryngeal and pyriform fossa were included in this study. Patients were reviewed after surgery and any complication that occurred was recorded. The presentation, diagnosis and management of these complications were discussed.

Results: There were 30 patients included in the study, over all if we see, age of the patients vary between 32-76 and peak incidence is noted between 51-70 (60%) age group. Also male preponderance was seen with approximately M:F ratio 3:1 i.e. out of sample of 30 patients 23 were males(76.7%) and 7 were females. Out of these 30 patients, 5 patients developed complications. Most common complication was pharyngocutaneous fistula(2 patients, 6%), which was developed after 7th day. It was managed conservatively in both patients, wound infection was second complication(1, 3%). Other complications were drain failure(1, 3%) and chylous fistula(1, 3%) were managed successfully. With this experience and review of literature protocols were designed.

CONCLUSION: Wound infection and pharyngocutaneous fistula are most common complications after total laryngectomy with or without partial pharyngectomy. Assessment of risk factors and early recognition of complications are necessary to reduce the complication after total laryngectomy with or without partial pharyngectomy.
Introduction
The visceral jejunal flap is a type of microvascularized flap very useful to reconstruct the digestive tract in the total circular pharyngolaringuectomy. It consists of joining the jejunum in its upper portion with the base of the tongue, lateral and posterior walls of the pharynx, and at its lower edge with the esophagus. After that, the mesenteric vessels are anastomosed with the cervical ones.

Material and Method
A clinical report of one patient with a pharyngeal epidermoid carcinoma recurrence where a total circular pharyngolaringuectomy with a free microvascularized jejunal flap is performed

Clinical features
A 58-year-old woman with a history of alcoholic liver cirrhosis and squamous cell carcinoma of the hypopharynx (T3N2aM0) treated with chemoradiotherapy. Five years later, it placed a recurrence of the tumor lesion. An irregular lesion was seen on the lingual surface of the right epiglottis and an excreting mass in the right piriform sinus. It had performed bilateral functional neck dissection and suprahyoid and infracricoid circular total pharyngolaringuectomy and reconstruction with jejunal microvascularized flap. The postoperative period was satisfactory. At ten days an esophagogram is performed where an adequate transit of contrast is observed through the esophagus. After nine months of follow-up, the patient is alive, with a soft diet although she doesn’t progress with the rehabilitation of an erigmofoinic voice.

Discussion
Management of patients with advanced squamous cell cancer of head and neck requires always to know the control of the disease, the consequences of treatment and quality of life. Patients who have a locally advanced squamous cell carcinoma of the hypopharynx have a poor prognosis with a high risk of locoregional failure and metastasis, and a 3-year survival of only 40%. However, surgical treatment with head and neck reconstructions following extensive tumor resection has been shown to increase life expectancy and, perhaps more importantly, quality of life.

The jejunum has many anatomical advantages for the reconstruction of head and neck defects. These advantages are: it is tubular, lubricated and has peristaltic activity. In addition it has a good vascularization and its obtaining is relatively easy.

There are many reconstructive options for the same defect, so choosing the best option can become a real challenge. And remember: more you are able to reconstruct, more you can dissect and more you can heal.
Results of total laryngectomy as treatment for locally advanced hypopharyngeal cancer

P.García-cabo herrero*(1), J.Rodrigo(2), J.Llorente(2), L.Fernández-vañes(2), C.Álvarez-marco(2), D.Pedregal(2)

(1)Hospital Universitario Central de Asturias, Spain, (2)Servicio de Otorrinolaringología, Hospital Universitario Central de Asturias, Oviedo, Spain

Introduction and objectives: Total laryngectomy (TL), with eventual postoperative radiotherapy (RT), had proven to be effective in treating cases of locally advanced hypopharyngeal cancer. The aim of this study was to analyse the oncological outcomes of this procedure in patients with hypopharyngeal cancer classified T3 and T4.

Methods: We studied 59 patients (33 T3 and 26 T4a) with primary squamous cell carcinoma of the hypopharynx treated with TL from 1998 to 2012.

Results: Mean age was 61 years with a male predominance (96.6%). All patients were smokers and 96% consumed alcohol. Unilateral selective ND was performed in 12 patients, unilateral radical ND in 11 patients, bilateral selective ND in 20 patients and radical ND plus selective ND in 14 patients. 66% of patients received postoperative radiotherapy. Lymph node metastases occurred in 81% of patients and extranodal invasion in 56% of them. 29% of patients had loco-regional recurrence, a 17% developed distant metastases, and a 25% of patients a second primary tumor. The 5-year disease-specific survival was 46%.

Conclusions: TL extended to pharynx (with eventual postoperative RT) offers good oncological results in terms of loco-regional control and survival in locally advanced hypopharyngeal cancer, so organ preservation protocols should achieve similar oncological results to those shown by TL.

Authors: García-Cabo, Patricia; Fernández-Vañes, Laura; Menéndez, Marta; Sánchez, Paula; López, Fernando; Álvarez-Marcos, César; Llorente, Jose Luis; Rodrigo, Juan Pablo.

Servicio de Otorrinolaringología, Hospital Universitario Central de Asturias, Oviedo, Asturias, España.
Surgical therapeutical alternatives of hypopharyngeal carcinomas at the Department of Oto-Rhino-Laryngology and Head and Neck Surgery, Medical University of Szeged, Hungary

L. Ivan*(1), G. Vass(2), Z. Bere(2), V. Majoros(3), L. Rovo(2)

(1) Department of Oto-Rhino-Laryngology and Head and Neck Surgery, Medical University of Szeged, Hungary, Hungary,
(2) Department of Oto-Rhino-Laryngology and Head and Neck Surgery, Medical University of Szeged, Hungary, Hungary,
(3) Department of Anaesthesiology and Intensive Therapy, Medical University of Szeged, Hungary, Hungary

Hypopharyngeal cancer is one of the most aggressive tumors and it is one of the most malignant otorhinolaryngological tumors with the worst prognosis. Smoking, alcohol consumption, bad teeth and poor oral hygiene are proven promoting factors. Authors present the function preserving surgical alternatives in the treatment of hypopharyngeal carcinomas at their Oto-Rhino-Laryngology and Head and Neck Surgery Department in Szeged, Hungary.

In cases of small hypopharyngeal tumors endoscopic-microscopic laser surgery can be an adequate treatment alternative with strict indication criteria. Laser surgery might be an up-to-date method as a minimal invasive technique in carefully selected cases of hypopharyngeal cancers guided by the "quality of life" principle.

They also discuss the indications for the different organ-preserving open operations of hypopharynx tumors.

In the beginning, surgery of hypopharyngeal cancer meant a partial pharyngectomy connected with a total laryngectomy. However, in certain selected cases – depending on tumor localization – organ sparing and speech preserving techniques are allowed. In their open surgical methods, they combine the radical tumor resection with a function preserving technique, and, if needed, with the reconstruction of the meso-, hypopharyngeal wall with myocutaneous flap.

Due to the linear spreading of the CO2 laser, the resection lines are determined; moreover the evaluation of the tumor’s deep tissue infiltration is sometimes difficult and unreliable. For these reasons even nowadays we remove the majority of the hypopharyngeal cancers with open operations, and we think the adequate treatment choice is the external approach.
Surgical treatment of advanced squamous cell carcinoma of the hypopharynx and pharyngoesophageal reconstruction with the use of forearm free flap – our experience.

A. Marinou*(1)

(1) GENERAL HOSPITAL OF ATHENS ‘GEORGIOS GENNIMATAS’, Athens, Greece

Purpose: For advanced-stage carcinomas of the hypopharynx, goals of the surgeon are the excision of the tumor in order to obtain negative margins and the reconstruction of digestive system. We cite our experience in surgical treatment of the hypopharyngeal carcinomas and the reconstruction with the use of forearm free flap, concerning the surgical technique, the control of the disease, the postoperative management and the overall survival.

Materials and methods: Nine (9) patients with hypopharyngeal cancer (Stage III-IVb) were treated by total laryngectomy, partial pharyngectomy, bilateral neck dissection and reconstruction of the continuity of the digestive system with free forearm flap, in ENT Clinic of General Hospital of Athens ‘Georgios Gennimatas’ during the period 2012-2016. Data from the preoperative evaluation, the surgical technique and the follow up of the patients were analysed. The patients remain under surveillance till today.

Results: The duration of the surgical procedure varied between 12 and 17 hours (average 15 hours). One patient passed away during the 4th postoperative day, suffered from pelvic veins thrombosis, while two other patients were diagnosed with secondary primary lung cancer 18 months and 13 months years respectively after surgery and the first patient died two years later. Seven patients are still alive till today, free from the disease with excellent capability for oral food intake. None of the patients developed complications from the donor site.

Conclusion: The encouraging results that arise from our survey, make the use of forearm free flap reliable choice for the reconstruction of the function of swallowing, for the oral food intake and for the improvement of the quality of life of the patients.

Affiliation:

1. Athanasia Marinou, Otorhinolaryngologist Consultant, ENT Clinic, General hospital of Athens ‘Georgios Gennimatas’, Athens, Greece
4. Evangelia Zacharioudaki, Otorhinolaryngologist, Director of ENT Clinic General hospital of Athens ‘Georgios Gennimatas’, Athens, Greece
The Tubed Supraclavicular Artery Island Flap (SCAIF) for Reconstruction of Total Laryngopharyngectomy Defects

U.Patel*(1)

(1)Northwestern University, Chicago, United States

PURPOSE: Reconstruction of complex pharyngeal defects has been revolutionized over the past few decades with the progression and refinement of microvascular free tissue transfer. Yet initial chemoradiotherapy, need for salvage surgery, and prior sacrifice of donor vessels from makes such transfer considerably more challenging. Within this context, there has been renewed interest in the use of regional pedicled flaps for reconstruction of pharyngeal defects. While the pectoralis flap has been a workhorse flap for partial pharyngeal defects for decades, its bulk renders it a poor choice for total laryngopharyngectomy defects.

The supraclavicular artery island flap provides another source of donor tissue for pharyngeal reconstruction, yet offers some unique benefits. Based on the supraclavicular artery, arising from the transverse cervical vessels, its vascular supply is often preserved despite prior neck dissection. Furthermore, it is a thin fasciocutaneous flap, allowing a robust epithelial surface for neopharyngeal reconstruction, yet lacks an underlying muscle layer that hinders its pliability.

We publish here our series of cases, the first to our knowledge reported in the literature, of total laryngopharyngectomy defects reconstructed with the pedicled supraclavicular flaps shaped into a cylindrical tube.

MATERIALS & METHODS: We performed a multi-institution retrospective review of all patients who underwent tubed supraclavicular flap reconstruction for total laryngopharyngectomy defects. Three attending surgeons performed procedures at two institutions. Perioperative complications, diet, voice restoration, need for dilation, and survival were recorded.

RESULTS: Five patients met criteria for inclusion and underwent total laryngopharyngectomy. Minimum follow-up time was 6 months. All flaps were successful with no flap failures, nor need for reoperation for wound management. All patients were able to resume an oral diet, though one became gastrostomy-dependent over time. Two had received voice restoration. Two patients required esophageal dilation to maintain patency. Two patients remain alive without disease, two had died without disease, and one had died from recurrence.

CONCLUSION: The supraclavicular artery island flap is a viable candidate for complex, tubed pharyngeal reconstruction in the setting of partial and total pharyngectomy defects. Such reconstructions can allow for both oral nutrition and voice restoration, and achieve results similar to those seen for free tissue transfer. This is the first report of this reconstruction method specifically for total pharyngectomy defects.

Evan S. Greenbaum, MD(1); Urjeet A. Patel, MD(1); Joseph A. Paydarfar, MD(2)

1-Northwestern University, Chicago, IL USA
2-Dartmouth-Hitchcock Medical Center, Lebanon, NH USA
The usefulness and prognostic impact of 18F-FDG-PET/CT for synchronous esophagogastric carcinoma in patients with oropharynx or hypopharynx carcinoma

H.Tsuzuki*(1), H.Suzuki(2), Y.Fujimoto(3), Y.Hasegawa(2), M.Sone(3)

(1)Department of Otorhinolaryngology, Nagoya University Graduate School of Medicine
Department of Otorhinolaryngology, Nagoya University Graduate School of Medicine, Nagoya, Japan, (2)Department of Head and Neck Surgery, Aichi Cancer Center Hospital, Nagoya, Japan, (3)Department of Otorhinolaryngology, Nagoya University Graduate School of Medicine, Nagoya, Japan

Objective
To assess the usefulness and prognostic impact of 18F-FDG-PET/CT for synchronous esophagogastric carcinoma in patients with oropharynx or hypopharynx carcinoma.

Methods
Between January 2008 and August 2013, 102 patients who were diagnosed with squamous cell carcinoma of oropharynx (OPC) or hypopharynx (HPC) at the Aichi Cancer Center Hospital underwent both esophagogastroduodenoscopy (EGD) and 18F-2-fluorodeoxyglucose positron emission tomography with computed tomography (18F-FDG-PET/CT) before treatment in same institution.

Using univariate analysis, patients were separated into two groups based on the presence of synchronous esophagogastric carcinoma or the presence of abnormal FDG-uptake of esophagogastoric carcinoma.

Correlation between the presence of synchronous esophagogastric carcinoma and clinical parameters (age, gender, clinical T and N and M classifications, clinical stage, tumor site, radical treatment groups and presence of abnormal FDG-uptake of esophagogastoric carcinoma) were compared by Chi-square test.

Overall survival rate was analyzed using Kaplan-Meier method.

Results
The mean age of the patients was 69 years (range 40-89). The mean follow-up period was 46 months (range 5-102). Primary carcinoma sites of patients were oropharynx (43) and hypopharynx (59).

21 synchronous esophagogastric carcinoma and 12 abnormal FDG-uptake of esophagogastric carcinoma were detected in 102 patients.

The diagnostic sensitivity and specificity of PET/CT for synchronous esophagogastric carcinoma were 43% (9/21) and 100% (81/81), respectively (p<0.01).

The 5-year overall survival rates of patients with OPC or HPC only and OPC or HPC combined with synchronous esophagogastric carcinoma were 70% and 63%, respectively (p<0.05).

Also, the 5-year overall survival rates of patients with presence of abnormal FDG-uptake of esophagogastric carcinoma and no presence were 33% and 65%, respectively (p<0.05).

Conclusion:
Patients with OPC or HPC with synchronous esophago-gastoric carcinoma and with presence of abnormal FDG-uptake of esophago-gastoric carcinoma tend to have a substantially poorer
prognosis than those without. FDG-PET/CT played a significant role in the management of the treatment in patients with OPC or HPC.
Therapeutic management of pyriform sinus cancer: results of a single center study of 122 patients.

C.Page*(1)

(1)CHU Amiens-Picardie, Amiens, France, , France

OBJECTIVE: To analyze the survival rate of a non-selected pyriform sinus cancer population.

STUDY DESIGN: Case series with chart review.

SETTING: University Hospital.

SUBJECTS AND METHODS: A total of 122 patients were included in this study covering the period 2002-2008. All patients had squamous cell carcinoma originating from the pyriform sinus. Survival and prognostic factors were analyzed.

RESULTS: The 3-year and 5-year overall survival rate was 39.7 % and 2.4 % respectively. The 3-year and 5-year survival rate without recurrence was 34% and 27%, respectively. The median survival for UICC stages 1 and 2 patients was 60 months; 40 months for stage 3 patients and 19 months for stage 4 patients. Stage 4 patients had a lower median survival rate than other stages (p=0.039). The 5-year survival rate for patients having T3-T4 operable cancers treated by surgery was 46% vs 45% for patients treated by laryngeal conservation protocol (NS). The 5-year survival rate for patients having non-operable T4 cancers was 17.2%. The 3-year and 5-year overall survival rate of N0 patients was significantly higher than N1 patients (p=0.042). N2 and N3 patients had 100% 5-year mortality.

CONCLUSION: This study showed that overall survival and therapeutic management depend on the initial stage of pyriform sinus cancer, notably on the N-status. In particular, non-operable T4 pyriform sinus cancer and N2 and N3 patients had a very poor prognosis. Laryngeal conservation protocol seemed as effective as surgical management in terms of survival.
Total pharyngolaryngectomy with partial pharyngeal reconstruction by myocutaneous flaps for advanced stage hypopharyngeal cancers: functional and carcinological outcomes.

E. De mones del pujol*(1)

(1)GROUPE HOSPITALIER PELLEGRIN, Bordeaux, France

Authors: David Fonmarti MD1, Damien Bonnard MD, PhD1, Vincent Castetbon MD1, Thomas Sagardoy MD1, Erwan de Monès MD, PhD1

1 Department of Otorhinolaryngology Head and Neck Surgery, Bordeaux University Hospital – France

Background: Hypopharyngeal squamous cell carcinoma (HSCC) is associated with a poor prognosis. Patients are frequently diagnosed with a locally advanced disease and often require a total pharyngolaryngectomy (TPL) (i.e. total laryngectomy (TL) with partial pharyngectomy) with adjuvant radiotherapy as primary standard treatment. It has been demonstrated that the quality of life of such patients depends on the postoperative quality of swallowing and speech. The latter are worse in hypopharyngeal cancers than in laryngeal ones since the neopharynx is narrower after TPL owing to wider resection of the pharyngeal mucosa.

Objectives: To compare functional and oncological results of patients treated by total pharyngolaryngectomy (TPL) and TPL with partial pharyngeal reconstruction by pedicled myocutaneous flap (TPL+F) for advanced stage hypopharyngeal cancer.

Methods: Retrospective study from 2007 to 2014. Morbidity, functional (diet, voice rehabilitation) and oncological data (histologic outcomes, 5-year rates for overall survival (OS), disease-free survival (DFS) and local control (LC)) were analyzed.

Results: Forty-two patients (15 TPL and 27 TPL+F (20 Pectoralis Major and 7 latissimus Dorsi)). Tumors were larger (p=0.01) and more caudally situated (p<0.01) in the TPL+F group. There was no significant difference in exclusive oral feeding recovery (p=1), tracheoesophageal successful voice rehabilitation (p=0.42), pharyngocutaneous fistula (p=0.74) or pharyngeal stenosis (p=0.22). Five-year OS, DFS and LC rates were 59.6%, 91.9% and 100% in the TPL group and 61.5%, 62.7% and 81.9% in the TPL+F group, respectively.

Conclusions: Myocutaneous flaps associated with TPL are reliable for pharyngeal enlargement in case of large piriform sinus tumors, with satisfactory functional outcomes and a low rate of complications. In comparison to TPL without pharyngeal reconstruction for smaller lesions, this technique provides equivalent postoperative and functional outcomes and local control rates for significantly larger tumors. These regional flaps can be harvested by the same surgical team without unduly lengthening operating time. We believe this study should interest ENT surgeons who do not have easy access to free flap reconstructions. More systematic pharyngeal enlargement in total pharyngolaryngectomy may limit the risks of pharyngeal stenosis, thereby enhancing quality of life.
TRANSORAL LASER MICROSURGERY AS PRIMARY TREATMENT FOR SELECTED SUPRAGLOTTIC CANCERS.

M. Salom Lucena*(1), J. Rodrigo Tapia*(2), D. Pedregal Mallo(2), F. López Alvarez(2), J. Llorente Pendás(2), M. Sánchez Canteli(3)

(1) Hospital Universitario Central de Asturias, Tenerife, Spain, (2) Hospital Universitario Central de Asturias, Spain, (3) Universidad de Oviedo, Spain

ABSTRACT:

Controversy exists regarding treatment of advanced laryngeal cancer. The purpose of this study was to evaluate the oncologic and functional outcomes of transoral laser microsurgery (TLM) in the treatment of supraglottic squamous carcinomas.

METHODS:

Retrospective review of oncological and functional outcomes of patients treated with TLM between 1998 and 2013. Seventy nine patients with supraglottic squamous cell carcinomas (SCCs) were included. In addition to TLM, 6 patients received unilateral and 53 bilateral selective neck dissections. Sixteen patients also received postoperative radiotherapy. Patients were evaluated in terms of overall survival (OS), disease-free survival (DFS), and organ preservation rates.

RESULTS:

Distribution of the patients by TNM stage was: stage I:19, stage II:17, stage III:26, and stage IV:17. 92% were male and 8% were female. Postoperative complications included 11 cases of bleeding, 1 emergency tracheostomy, and 5 cases of pulmonary infections. Minimum follow up was 36 months and median follow-up was 48 months. Sixteen patients developed local relapse:10 patients were treated with total laryngectomy, 5 by additional TLM, and one by radical RT. Five year OS, DSS, and laryngectomy-free survival were 51%, 85%, and 80% respectively. None of the patients that did not had a recurrence needed a definitive tracheostomy, a gastrostomy, or both.

CONCLUSION:

TLM +/- selective neck dissection +/- adjuvant radiotherapy for supraglottic SCC represents an effective alternative treatment to open partial laryngectomies and nonsurgical organ preservation protocols. TLM constitutes a true alternative for organ preservation in locally advanced supraglottic carcinomas with good oncologic and functional outcomes.
HN-HPV-01

Awareness of the association between human papillomavirus and oropharyngeal carcinoma amongst general practitioners and medical students

M. King*(1)

(1) NHS Greater Glasgow and Clyde, , United Kingdom

Purpose of the study: Oropharyngeal cancer (OPC) has the fastest rising incidence of any cancer amongst Scottish men, a concerning trend attributed to the human papillomavirus (HPV). There are concerns regarding the lack of awareness about the rising prevalence and different clinical presentation of this head and neck cancer (HNC). We aimed to assess knowledge of HPV and OPC amongst family doctors and medical students, with a view to identifying areas for targeted education.

Materials and methods used: A cross-sectional survey was used. University of Edinburgh Medical students in year 1 (Y1MS), post-ENT teaching senior medical students (SMS) and local general practitioners (GPs) were surveyed using an online questionnaire. Fisher’s Exact test was used for statistical analysis.

Results: There were 217 participants including 52 first year medical students, 84 Senior Medical Students and 81 General Practitioners. Overall, 60.7% were aware of the link between HPV and OPC, with Senior Medical Students answering most answers correctly (22.4% vs. 81% vs. 64.4% Y1MS vs. SMS vs. GPs; p<0.05). Only 32.8% recognized the rapid rise in incidence of HPV related OPC. 75.3% of GPs correctly identified who was eligible for HPV vaccination vs. 44.9% of Y1MS. There was poor self-rated knowledge of HNC and this was reflected in failure to clearly identify the commonest clinical presentation of HPV related OPC in all groups.

Conclusions: Knowledge of HPV related OPC amongst non-ENT specialists lags behind the increasing incidence of this cancer. Prevention of HPV infection, early detection of cancers and patient support following diagnosis, are essential to improve patient outcomes.

Authors and their affiliations:

Dr Matthew King (NHS Greater Glasgow and Clyde)
Miss Katie Connor (NHS Lothian)
Mr Justin Yeo (NHS Lothian)
Mr Ewan Harison (NHS Lothian)
Mr Andrew Evans (NHS Lothian)
Chick embryo chorioallantoic membrane laryngeal squamous cell carcinoma and laryngeal papilloma model to quantify tumor growth and angiogenesis

A.Kuzminiene*(1), V.Ulozas(2), A.Valanciute(2), J.Palubinskiene(2), I.Balnyte(2), I.Uloziene(2), R.Pribuisiene(2)

(1)Lithuanian University of Health Sciences Hospital, , Lithuania, (2)LUHS, , Lithuania

Purpose of the study: We aimed to develop chick embryo chorioallantoic membrane (CAM) model of laryngeal squamous cell carcinoma (LSCC) and recurrent respiratory papilloma (RRP) to evaluate its mass development, angiogenesis, infiltrative growth and metastasis on CAM.

Materials and methods: Fresh LSCC tumor (N=12) and RRP tissue (N=13) samples were obtained from operated patients and implanted in 398 chick embryo CAMs. Morphological, morphometric, and angiogenic changes in the CAM and chorionic epithelium were evaluated up until 7 days after the implantation. Immunohistochemical analysis (34βE12, Ki-67, MMP-9, PCNA, and Sambucus nigra staining) was performed to detect cytokeratins and endothelial cells and to evaluate proliferative capacity of the LSCC and RRP before and after implantation on the CAM.

Results: The implanted LSCC tissue samples survived on CAM in 95% and RRP in 73% of cases while retaining their essential morphologic characteristics and proliferative capacity of the original tumor. LSCC and RRP implants induced thickening of both, the CAM (154-403%, p=0.001 and 260-560%, p = 0.001) and the chorionic epithelium (100-533%, p=0.005 and 107-151%, p = 0.001), while the number of blood vessels (60-457% and 37-85%, p = 0.001) in the CAM has increased. LSCC implants showed the infiltrative tumor growth pattern on experimental CAMs, whereas RRP tumors grew on the surface of CAMs and no signs of RRP's ingrowths into CAM's mesenchymal layer were detected.

Conclusion: The results of the present study confirm that chick embryo CAM is a relevant host medium that allows implantation of fresh tissues of LSCC and RRP and demonstrate the specific growth pattern of both tumors after the implantation.
Continuing rise in oropharyngeal cancer in a high HPV prevalence area: A Danish population-based study from 2011-2014

A. Carlander*(1)

(1) Rigshospitalet, University of Copenhagen, Denmark, Copenhagen oe, Denmark

Background

Human papillomavirus (HPV) is a critical element in the rising incidence of oropharyngeal squamous cell carcinoma (OPSCC), although whether this trend will continue, and the types of HPV responsible, are currently unknown. We previously demonstrated an increased incidence of HPV-related OPSCC in the high HPV prevalence area of Eastern Denmark from 2000-2010. Therefore, we investigated if the incidence for OPSCC continued to rise, the association to HPV and putative HPV types in Eastern Denmark from 2011-14. We then projected the expected incidence of OPSCC versus cervical cancer through to 2020.

Patients and Methods

Patients with OPSCC (tonsillar squamous cell carcinoma (TSCC) and base of tongue squamous cell carcinoma (BSCC)) were identified via the Danish Head and Neck Cancer Group and the Danish Pathology Databank (n=700). Tumors were re-reviewed and assessed using p16 immunohistochemistry, HPV DNA PCR, with genotyping by next generation sequencing.

Results

Sixty-two % (432/700) of tumors were HPV-positive (HPV+). The total incidence rate (pr. 100,000) for OPSCC increased from 4.0 in 2011 to 4.5 in 2014, primarily due to a rise in HPV+ tonsillar squamous cell carcinomas (TSCCs) and HPV+ base of tongue squamous cell carcinomas (BSCCs), although numbers of HPV-negative (HPV-) OPSCC also increased during the study period. The majority of HPV+ tumors were HPV16 DNA positive (86%), but we also identified HPV33 DNA (6%), HPV35 DNA (4%), and others (3%), including HPV18, 26, 31, 45, 56, 58, 59, and HPV67.

Conclusion

An increasing incidence of OPSCC is driven primarily by HPV+ OPSCC. Sixty-two % of tumors were HPV+, which is a high prevalence, although the lower number of HPV- cases has yet to stabilize. HPV16 was the predominant genotype, although a significant proportion (14%) was of another genotype. Our projections suggest that the number of HPV+ OPSCC will exceed that of cervical cancer in 2016 in Eastern Denmark.
DISTINCTIVE EXPRESSION AND AMPLIFICATION OF GENES AT 11q13 IN RELATION TO HPV STATUS IN HEAD AND NECK SQUAMOUS CELL CARCINOMAS

J.Rodrigo*(1), F.Hermida-prado(2), A.Villaronga-torre(2), S.Alvarez-teijeiro(2), S.Tirados-menéndez(3), M.Hermsen(2), J.García-pedrero(2)

(1)Hospital Universitario Central de Asturias-University of Oviedo, Oviedo, Spain, (2)IUOPA, Oviedo, Spain, (3)King's College, London, United Kingdom

Purpose of the study:
Recent studies have evidenced important differences on the molecular alterations and the impact of the 11q13 chromosomal region in HNSCC, depending on the anatomic site of the tumor and the HPV infection status. These studies suggest that the amplification of 11q13 in HNSCC is more frequent in HPV negative than in HPV positive tumors. This consideration prompted us to study the role of various genes (CTTN, CCND1 and ANO1) mapping at 11q13 amplicon in relation to HPV status in HNSCC patients.

Materials and methods:
CTTN, CCND1 and ANO1 protein expression and gene amplification were respectively analyzed by immunohistochemistry and real-time PCR in a cohort of 372 homogeneous surgically treated HNSCC patients: 248 located in the orpharynx, 62 in the larynx, and 62 in the hypopharynx.

Results:
Amplifications of CTTN, CCND1 and ANO1 were frequently found in HPV-negative tumors (ranging 42-61%), while they were very rare or absent in HPV-positive tumors (0-11%). Furthermore, IHC analysis also revealed distinctive expression of CTTN, CCND1 and ANO1 in relation to HPV status. Interestingly, all HPV-positive tumors exhibited negative expression of these three proteins. In contrast, CTTN, CCND1 and ANO1 expression was frequently detected in HPV-negative tumors (52%, 39% and 22% respectively). These results were further confirmed using TCGA data from 279 HNSCC patients.

Conclusión:
Based on our results, the CCND1, CTTN and ANO1 genes appear to have a more significant role in HPV-negative HNSCC, than in HPV-positive tumours.
Exosomes from Human papillomavirus-positive Head and Neck cancer cell lines carry HPV-associated proteins and suppress T-cell mediated anti-cancer immune response

S.Funk*(1), S.Lang(1), T.Whiteside(2)

(1)Department of Otorhinolaryngology and Head and Neck Surgery, University Hospital Essen, Germany, Essen, Germany, (2)Departments of Pathology and Medicine, University of Pittsburgh School of Medicine and University of Pittsburgh Cancer Institute, Pittsburgh, PA, USA, Pittsburgh, United States

Purpose of the study: Human papillomavirus (HPV) induced Head and neck cancer (HNC) has a significantly better prognosis than HPV-negative HNC. We investigated whether exosomes from HPV-positive and HPV-negative HNC cell lines or patients differ in their biological features and immunosuppressive effects on T cells.

Methods: Exosomes were isolated from concentrated supernatants of three HPV-positive (SCC-2, SCC-47, SCC-90) and two HPV-negative (PCI-13 and PCI-30) HNC cell lines, as well as plasma of HPV-positive and HPV-negative HNC patients. Exosome isolation on Sepharose 2B size exclusion chromatography columns was followed by assessments of their morphology and size by TEM, protein content using BCA, molecular profiles by Western blots and functional assays with CD8+ Jurkat and human normal CD4+ T cells. Results were analyzed for HPV-associated differences.

Results: Exosomes produced by HPV-positive and HPV-negative cell lines and those present in patients' plasma had comparable size ranges (30-100nm) and quantitative protein amounts. Western blot profiles showed that exosomes from HPV-positive HNC cell lines carry HPV-associated markers, such as p16, Rb and Cyclin D1, whereas HPV-negative cell lines produce exosomes with different profiles. CD4+ T cell proliferation and CD8+ Jurkat apoptosis were impaired by exosomes from HNC cell lines and HNC patients and there were no significant differences (p>0.05) between exosomes produced by HPV-positive and HPV-negative HNC cancers.

Conclusions: HPV-positive HNC-derived exosomes carry HPV-associated proteins which might be involved in promoting tumor growth, spreading and metastasis. Yet, these exosomes were not more suppressive of T cell functions than exosomes produced by HPV-negative tumors. Thus, ex vivo T-cell responses did not correlate with the HPV-status of HNC exosomes.
HEAD AND NECK CARCINOMAS – IS HPV ASSESSMENT USEFULL?

N.Balica*(1), M.Poenaru(2), H.Stefanescu(2), C.Doros(2)

(1)"Victor Babes" University of Medicine and Pharmacy Timisoara, Romania, Timisoara, Romania, (2)"Victor Babes" University of Medicine and Pharmacy Timisoara, Romania, , Romania

Purpose of the study: Human Papilloma Virus (HPV) involvement in histopathological aspects of head and neck carcinomas are still a debate subject.

Materials and methods used: We performed a 3 years (2013-2015) retrospective study. Biopsy fragments were standard and immunohistochemistry techniques processed, using Leica Bond-Max machine (Leica Biosystems, Newcastle uponTyne, UK), incubation with the primary HPV16 L1 (Novus Biologicals, 8100 Southpark Way, A-8 Littleton, CO80120, mouse monoclonal CamVir1, 1: 100 dilution, incubation for 20 minutes) and HPV 18 L1 (Novocastra, Newcastle, UK, mouse monoclonal, clone 5A3, 1:10 dilution, incubation 60 minutes) antibodies.

Results: the study included a number of 95 cases: 49 laryngeal cancers (LC), 28 oropharyngeal (OC) and 18 hypopharyngeal cancers (HC). From these cases high risk HPV types were: 16,18,31,33,35,39,45,51,52,56,58,59,66,68; identified in 19 LC cases (20%), in 13 OC cases (13,68%) and 4 HC cases (4.21%). Low risk types LR-HPV 6,11,42 were assessed: in 16 LC cases (16,84%), 9 OC cases (9,47%) and 8 HC cases (8,42%), while other HPV types: 26,40,53,54,55,61,62,64,67,69,70,71,72,73,81,82,83,84,IS39,CP6108 were identified in 6 LC cases (6,31%), 1 OC cases (1,05%) and in 5 HC (5,23%) cases. The other cases were HPV free.

Conclusion: After statistical analysis Pearson concluded that patients with HPV have a high risk of head and neck cancer development.
The scientific evidence accumulated in the last 20 years about the prognostic significance of high risk Human Papillomavirus (hr-HPV) infection in SCCs from a single site, which is the oropharynx, lead this parameter to be the only molecular characterization marker included in the NCCN guidelines. Still, despite a notable volume of literature hypothesizing treatment modulation through HPV detection in oropharyngeal squamous cell carcinomas (OPSCC), the same NCCN justifies at present such approach only in clinical trials. The main reason is that the NCCN panel waits for the demonstration in randomized trials that deintensification of treatment in HPV-positive OPSCC, which can be for sure beneficial as for functional results, is also oncologically safe.

Basing upon our personal experience and on the literature, we do believe that there is also another fundamental concern hampering the safe introduction of HPV in head and neck clinical practice, which is the consensus about the best diagnostic method(s). What is requested to a diagnostic method to be utilized in clinical practice is to demonstrate a clinically relevant translationally active number of copies of the viral genes, which are therefore supposed to have impacted on the carcinogenetic process, to currently contribute to the transformed phenotype and to be associated to the typical features of HPV-induced cancers (HPV driven carcinogenesis).

All the current options for detecting HPV infection in HNSCC in the clinical practice follow one of the following strategies, or a combination of them:

- Detection of viral mRNA
- Detection of viral DNA with PCR
- Detection of viral DNA without PCR
- In situ hybridization (ISH)
- Markers of HPV-induced carcinogenesis (p16 protein, pRb, p53, cyclin D1)
- Serum testing

It should be stressed that we already have a gold standard for the detection in the clinical practice of HPV infection in OPSCC, which are the methods based upon E6/E7 mRNA detection but for these tests to be reliable, a clinical sample stored in RNA later and possibly at -20°C is needed. Nevertheless the samples available for HPV testing are most often FFPE specimens: in this situation a standard for HPV detection is still lacking.

In the present keynote lecture, basing upon our personal experience and on evidence reported on the literature we discuss the progress made towards a standard in HPV diagnosis in head and neck oncology and what appear to be the most promising perspectives.
Human Papilloma Virus Infection as a possible etiology for Inverted Papillomas of the Nose and Paranasal Sinuses

A. Paehler*(1)

(1) ENT Department, KRH Nordstadt Hospital, Germany

Background: Inverted Papilloma is the most frequent benign tumor of the nasal cavity and the paranasal sinuses. Clinical characteristic of these lesions is a recurrence rate of about 15% along with malignant transformation in 2-6% of cases. Currently not much is known about the etiology of this tumor. The purpose of the present study was to investigate histologic specimens of inverted papilloma patients for human papilloma virus DNA as a possible etiologic factor for tumor development.

Patients and Methods: Operative specimens of 100 patients who were operated on for an inverted papilloma of the nasal cavity and the paranasal sinuses were evaluated by immunohistochemistry for estimation of HPV on a protein level. If immunohistochemistry revealed positive expression of HPV DNA, western blot was performed for further HPV subtyping. The results were correlated to clinical parameters (i.e. gender and age of patients, along with site of tumor origin), histology and clinical follow up.

Results: Evidence for HPV infection was found in about one third of tumor specimens. There were no correlation neither to age or gender of patients nor to duration of symptoms or site of origin. The results give evidence that there is some correlation between HPV infection and HPV subtype and recurrence rate and development of malignant conditions.

Conclusion: HPV infection might be an etiologic factor in the tumor development at least in a sub-group of patients with inverted papilloma of the nasal cavity and paranasal sinuses. Therefore it is reasonable to conclude that investigations for HPV detection is justified in this cohort of patients. Currently there is no specific therapy for HPV positive and negative tumors. However, patients with HPV positive tumors might have a higher risk for development of tumor recurrences and malignant conditions so that a careful long-term follow-up is mandatory.
Human Papilloma Virus-16 and the Pathological Characters of Laryngeal Cancer In Egypt

M. Gomaa*(1)
(1)Faculty of Medicine, Minia University, Minia, Egypt

Objective :-
Laryngeal cancer is the most common cancer in the head and neck. Human papilloma virus is a group of over 150 related viruses. Infection with certain types of HPV can also cause some forms of cancer.

The aim of the study is multivariate analysis of sociodemographic and pathological character of Squamous cell carcinoma of the larynx and Human papilloma virus subtype-16.

Patients and Method :-
The study was conducted on 50 patients who were admitted at the otolaryngology-head and neck surgery department in Minia University Hospital, and other 4 University Hospitals during the period from January 2014 till December 2014.

All patients were subjected to a preoperative assessment protocol that include history taking, general examination, otolaryngological examination, laryngeal imaging, laryngeal biopsy and biopsy assessment to identify the tumor grade and Immunohistochemical staining for HPV-16.

Results :-
HPV-16 immunostaining was positive in 18% (9/50) cases studied. There was no statistically significant difference between the HPV-16 immunoreactivity and any of the clinicopathological variables. There was highly significant correlation between HPV-immunoreactivity and tumor grade (p=0.000).

Conclusion :-
- The present study revealed that, the prevalence of HPV-16 was 18%.
- Multivariate analysis of HPV-16 with other studied variables revealed that there was no correlation between HPV-16 and age, gender, smoking, alcohol consumption, tumor site or tumor stage.
- The only variable that was highly significantly correlated with HPV-16 was tumor grade.
- We think that there is other route of transmission of HPV-16 other than sexual route, as all our patients deny extra marital sex or multiple marriage.
Human Papillomavirus (HPV) in oral squamous cell carcinoma

S. Fonseca*(1), C. Costa(2), H. Ramos(2), A. Rego(2), V. Daher(2), A. Linhares(2)

(1) CENTRO DE REABILITAÇÃO E READAPTAÇÃO DR. HENRIQUE SANTILLO- CRER, Distrito Federal, Brazil,
(2) CENTRO DE REABILITAÇÃO E READAPTAÇÃO DR. HENRIQUE SANTILLO- CRER, Goiania, Brazil

The objective is to establish the relationship between infection with human papillomavirus (HPV) and development of squamous cell carcinoma of oral cavity and oropharynx through a retrospective study of literature.

Method: We performed an electronic search of potentially relevant articles and citations on the prevalence, etiology, prediction and prognosis of squamous cell carcinomas, using Pubmed and Lilacs databases restricted to studies in humans published in English, Portuguese and Spanish, published 20 years ago at least.

Results: The human papillomavirus is a DNA virus, it has considerable tropism for epithelial tissue. The World Health Association considered HPV as a major cause of cervical cancer by about 99.7% of cases throughout the world. The viral DNA synthesis occurs in the basal layer of squamous epithelium, where malignancy develops. This occurs from the synthesis of three oncoproteins, the E5, E6 and E7, all found in high-risk HPV (HPV16, 18, 31, 33, 35, 39, 42) for the oral mucosa. In oral mucosa, the prevalence of HPV and its role in the pathogenesis of dysplasia and cancer is not fully understood. Terai M. et al, in 1999, a study on prevalence of HPV in normal oral cavity in adults, showed that human papillomavirus was found in normal oral mucosa using PCR and observed the prevalence of HPV-18 infection in subclinical or latent, suggesting that oral cavity is a reservoir of virus infection and in combination with other factors such as smoking and alcohol may later develop cancer. The transmission of HPV to the oral mucosa occurs by self-inoculation and through oral sex. The floor of the mouth is a place with much saliva, where carcinogens such as alcohol and tobacco, are dissolved, allowing greater opportunity for viral deleterious action. The incubation period ranges from 2 to 8 weeks and is related to individual immune competence. The progression of the incubation phase to active expression depends on two factors: permissiveness of cell-type virus and host immune status. Based on these data, and using PCR and Southern blot, many studies claim a correlation between the presence of HPV (serotypes high risk) and increased malignancy of the lesion.

Conclusion: The analysis of the literature on the detection of HPV DNA in oral squamous cell carcinoma allows the following conclusions: Epidemiological studies, in vitro experiments, and methods of detection in tissue DNA viral cavity show a clear relationship between HPV and oral cancer. However, most studies need to be improved.
Human Papillomavirus related Head and Neck Squamous cell carcinomas reveal differential microRNA expression

S. Emmett*(1)

(1) QIMR Berghofer Medical Research Institute, Brisbane, Australia

Aims: Squamous cell carcinoma (SCC) of mucosal head and neck sites (HNSCC) is the sixth most common cancer world-wide. Human papillomavirus (HPV) is responsible for over 70% of oropharyngeal SCCs, and a smaller number at other subsites. MicroRNAs are small, non-coding, single strands of RNA which regulate gene expression at a post-transcriptional level; and have been identified to have oncogenic or tumour suppressive functions. We sought to identify microRNAs which are differentially expressed between HPV-positive and HPV-negative HNSCC. Methodology: Total RNA was extracted from 240 50 formalin-fixed paraffin-embedded (FFPE) tonsillar SCC specimens HNSCC specimens from all head and neck subsites. Clinical, lifestyle and pathological data was obtained retrospectively. A microarray was performed on 52 tonsillar SCCs (25 HPV-positive and 27 HPV-negative) at LC Sciences, using miRBase v.21. Eighteen microRNAs from the microarray were validated in the full cohort of 240 HNSCCs with Fluidigm Gene Expression IFC. IFC. Results: HPV associated tumours demonstrated differential microRNA expression compared with HPV-negative tumours. miR-16, miR-20b, miR-29a and miR-29c were up-regulated in HPV-positive tumours across all head and neck subsites. In the oropharynx, miR-15b, miR-16, miR-20b, miR-30e, miR-142, miR-361 and miR-363 were all significantly differentially expressed. Smoking status and primary tumour recurrence were also associated with differential microRNA expression. Conclusions: We have identified a panel of microRNAs which are differentially expressed in HPV related tumours of the head and neck. This has potential clinical utility in diagnosis and disease stratification, as well as differential response to therapy.

Authors: Emmett, S. (1, 2, 4), Stark, M. (3), Whiteman, D.C. (1, 4), Panizza B. (2, 4), and Antonsson A (1, 2, 4).

Affiliations: 1. Epidemiology, QIMR Berghofer Medical Research Institute, Brisbane. 2. Otolaryngology and Head and Neck Surgery, Princess Alexandra Hospital, Brisbane. 3. Translational Research Institute, Brisbane. 4. School of Medicine, University of Queensland, Brisbane.
Incidence of cystic squamous cell carcinoma metastases in lateral cervical cysts

P. Stefanicka*(1), N. Gnojcakova(2), F. Kurinec(2), M. Profant(1)

(1) Dept. of Otorhinolaryngology - Head and Neck Surgery, Medical Faculty, Comenius University Bratislava, Bratislava, Slovakia, (2) Dept. of Otorhinolaryngology, Nove zamky, Slovakia

Objective: To distinguish between lateral cervical cyst and cystic metastasis is unable based on the clinical and radiological examination. The incidence of HPV positive oropharyngeal carcinoma with typically cystic metastasis is rising, so the risk of metastasis in isolated cystic mass is increasing simultaneously.

Methods: Patients with isolated lateral cervical cystic mass scheduled for surgery from January 1st 2010 to August 31st 2016 in two tertiary care referral centers in Slovakia were analyzed retrospectively. Patients with previous history of malignancy and histologic diagnosis of non-squamous cell malignancy were excluded.

Results: One hundred sixteen patients with isolated lateral cervical cystic mass were included. Cystic squamous cell carcinomas were histologically confirmed in 11 patients (9.4%). The overall incidences of cystic metastases in adults and in patients older than 40 years were 9.8% and 18.5% respectively. Panendoscopy with direct biopsies and tonsillectomy revealed an occult primary tumor in 9 from 11 patients. All identified primary tumors were in oropharynx, 6 in palatine tonsils and 3 in base of tongue. All 11 patients were p16-positive by immunohistochemistry in samples from the primary tumor or from the metastasis.

Conclusion: Incidence of cystic squamous cell carcinoma metastases in lateral cervical cysts in patients older than 40 years is highly enough to perform frozen section biopsy after excisional biopsy and potentially continue with panendoscopy with direct biopsies, tonsillectomy, and even neck dissection in case of histologically confirmed carcinoma.

Key words: cystic squamous cell carcinoma metastasis, lateral cervical cyst, HPV-positive oropharyngeal carcinoma
Investigating HPV-associated oral cavity and oropharyngeal squamous cell carcinomas and sexual behaviour

S. Emmett*(1)

(1) QIMR Berghofer Medical Research Institute, Brisbane, Australia

Aims: The last decade has seen changes in the epidemiology of mucosal squamous cell carcinomas of the head and neck (HNSCCs), with increasing numbers of cases attributable to human papillomavirus (HPV) infection. We sought to determine the prevalence of HPV in Australian HNSCC patients and to identify predictors of HPV-positivity.

Methodology: For this study, we recruited 137 Australian patients with a primary SCC of the oropharynx (n=96) or oral cavity (n=41). Participants reported about basic characteristics, sexual behaviour, and alcohol, tobacco and illicit drugs use, and we collected clinical data from medical charts. We analysed formalin-fixed paraffin-embedded tumour tissue for HPV with GP+ primers.

Results: Overall, 71 of the 137 HNSCC patients were HPV-positive (52%). The HPV DNA prevalence in patients with an oral cavity SCC was 5% (2/41) and 72% (69/96) in oropharyngeal SCCs (p<0.0001). Compared to HPV negative patients, those with oral HPV infection were more likely to have ever given oral sex (23% vs 90%; p<0.0001). We found no statistically significant associations with alcohol consumption, smoking or numbers of partners for passionate kissing or sexual intercourse.

Conclusions: This study confirms a higher prevalence of HPV in oropharyngeal tumours, and there was an association between ever having given oral sex and having a HPV-positive tumour. However, oral oncogenic HPV infections are common, and the majority are cleared spontaneously. Further research is needed to understand the factors contributing to tumour development.

Authors: Emmett, S. (1,2,3), Panizza, B. (2,3), Porceddu, S. (2,4), Whiteman, D.C. (1,2), and Antonsson, A (1,2).

Affiliations: 1. Department of Population Health, QIMR Berghofer Medical Research Institute, Brisbane. 2. School of Medicine, University of Queensland, Brisbane. 3. Department of Otolaryngology Head and Neck Surgery, Princess Alexandra Hospital, Brisbane. 4. Department of Radiation Oncology, Princess Alexandra Hospital, Brisbane.
Liquid Biopsies for HPV in Oropharyngeal Squamous Cell Carcinoma

A.Qureishi*(1)

(1) Oxford University, , United Kingdom

Background

New cases of oropharyngeal squamous cell carcinoma (OPSCC) are routinely tested for HPV using p16 immunohistochemistry (IHC) to prognosticate and guide treatment. PCR has proven successful in detecting HPV in saliva, but its clinical applicability in the context of OPSCC remains unknown.

Aims

To determine the sensitivity and specificity of saliva testing for HPV in patients with OPSCC.

Methods

Forty six consecutive patients diagnosed with OPSCC had pre-treatment saliva specimens collected and biopsies performed. PCR for HPV on saliva was compared to p16 IHC and HPV DNA in-situ hybridisation (ISH) on surgical biopsies. Investigators were blinded to limit bias.

Results

The mean age of participants was 58.8 years, there were 35 males (76.1%) and HPV prevalence was 78.3% (63.6%-89.1% 95% CI). The sensitivity and specificity of saliva testing when compared to the reference test of p16 IHC with/without HPV DNA ISH was 72.2% (54.8%-85.8% 95% CI) and 90% (55.5%-99.8% 95% CI) and positive and negative predictive values were 96.3% (81.0%-99.9% 95% CI) and 47.4% (24.5%-71.1% 95% CI). There were no reported adverse events and one test failure. Time from last meal, smoke, alcohol and exercise did not impact on the reliability of a result.

Conclusions

Saliva testing is a promising pre-biopsy/operative test to detect HPV in patients with OPSCC. The test is easily implemented and requires no pre-test preparation. If validated by large studies, a positive result could avoid the need for surgical biopsies thereby reducing costs, patient morbidity and expedite treatment.
Might a simple kiss be harmful? The awareness of HPV infections in terms of head and neck neoplasm among young adults.

J.Jeruzal*(1), W.Pietruszewski(2)

(1) N. Barlicki University Hospital of Łódź, Otorynolaryngology and Oncological Laryngology Clinic, Łódź, Poland,
(2) N. Barlicki University Hospital, Otorynolaryngology and Oncological Laryngology Clinic, Łódź, Poland

Introduction:

Human Papilloma Virus (HPV) is oncogenic virus. Commonly, HPV infection is known to be the cause of cervical cancer only, although it has been proved that HPV is responsible for many head and neck neoplasms. Prophylaxis is the best form of treatment, so popularization of the knowledge about the ways to prevent infection along with anti-HPV vaccines, seems to be crucial.

Aim:

The aim of the study was to investigate the awareness of young adults in terms of prophylaxis and oncological aftermaths of HPV infection.

Methods:

A cross-sectional study of 929 respondents was based at author’s questionnaire distributed via Internet. Single and multiple choice questions were applied.

Results:

Average age of respondents was 24,4 years (SD=3,7), with male to female ratio=0,74. Infectious potential of a kiss was recognized by 93,63% of respondents. Almost 50% of them were aware of the existence of anti-HPV vaccine, and 55,38% of the fact, that HPV infection can lead to oncological consequences. Almost 3% answered that the forms of prevention does not exist. The awareness of disease-causing potential of HPV infection was shown by 63% of respondents, 55,26% answered that it can cause neoplasms. Most of them referred to cervical cancer (34%), some mentioned also vaginal ca (10,53%), vulvar ca (9,54%) and anal ca (8,54%) and 25% of respondents linked HPV infection with all listed tumours.

Knowledge about vaccine existence was higher among women (59,37%) then men (37,55%). Only 8% of women owe their knowledge about HPV to their gynecologist.

Conclusions:

The awareness of risks connected with HPV infections among young adults is low. It seems to be legitimate to introduce actions which might result in increasing the level of knowledge about HPV in society. Moreover, the youth should be aware that a simple kiss may lead to major diseases and not only gynecological, but also laryngological aspect of oncological consequences should be expanded.
Molecular mechanisms of selective anti-tumour activity of 5-Azacitidine in HPV-associated head and neck squamous cell carcinoma

D. Alnafisee*(1), M. Hajek(2), N. Issaeva(2), W. Yarbrough(2)

(1) Royal College of Surgeons, Dublin, Ireland, (2) Yale University, , United States

Purpose: Current research suggests that HPV-driven head and neck squamous cell carcinomas (HNSCC) display distinct biological and clinical features compared to tobacco–associated HNSCC. Regardless of HPV status, standard therapy includes a combination of surgery, radiotherapy and chemotherapy. Our aim is to find an equally efficacious treatment with a superior side effect profile. 5-Azacitidine (5-AZA) is an epigenetic agent used to treat acute myelogenous leukaemia. In addition to changing a cell’s epigenetic profile, 5-AZA damages DNA and activates DNA damage response pathways. However, the mechanism and type of DNA damage is poorly understood. Our study attempts to clarify the molecular mechanism of 5-AZA induced DNA double strand breaks (DSBs).

Materials and methods: HPV-positive (HPV+) (UMSCC47, SCC090) and HPV-negative (HPV-) (UNC7, UNC10) cell cultures were treated with 5-AZA in addition to various transcription inhibitors (Triptolide, Actinomycin-D, DRB) and replication inhibitors (Hydroxyurea and Aphidicolin). The cells were collected for either pulsed-field gel electrophoresis (PFGE) or clonogenic survival assays.

Results: HPV(+) HNSCC cells were found to be significantly more sensitive to 5-AZA than their HPV(-) counterparts. Furthermore, 5-AZA induced DNA DSBs in HPV(+) HNSCC cells, but not in HPV(-) cells. Our next step was to elucidate the mechanism of selective DSB formation in HPV(+) HNSCC cells. Through pulsed-field gel electrophoresis, it was demonstrated that the DSBs are transcription dependent, and that transcriptional inhibitors were protective against 5-Azacitidine’s toxicity. Furthermore, it was found that DNA replication inhibitors also play a role in preventing DSBs.

Conclusion: Given that the DSBs are dependent on both transcription and replication, we theorize that newly activated transcription occurs pathologically in areas of active DNA replication. The activation of transcription while the DNA is in the process of replication can lead to head-on collision of both processes, resulting in cytotoxic DNA DSBs. This conclusion was reached based on the evidence that inhibiting either one of these mechanisms (transcription/replication) prevents DSBs from occurring. The question as to why 5-AZA induces DSBs in HPV(+) HNSCC cells deserves further investigation.

Authors:
Daniah AL-Nafisee1, Micheal Hajek2, Natalia Issaeva3, PhD, Wendell G. Yarbrough3,4,5, MD, MMHC, FACS

Affiliations:
1. Faculty of Medicine, Royal College of Surgeons, Dublin, Ireland.
2. Faculty of Medicine, Division of Otolaryngology, Department of Surgery, Yale University, New Haven, CT, USA
3. Department of Surgery, Division of Otolaryngology, Yale School of Medicine, New Haven, CT, USA
4. H&N Disease Center, Smilow Cancer Hospital, New Haven, CT, USA
5. Molecular Virology Program, Yale Cancer Center, New Haven, CT, USA
Novel nomograms for survival and progression in HPV+ and HPV- oropharyngeal cancer: a population-based study of 1,542 consecutive patients

C.Grenhøj*(1)

(1)Rigshospitalet, Copenhagen University Hospital, , Denmark

Background: No study has combined tumour and clinical covariates for survival to construct an individual risk-profile for overall survival (OS), time to progression (TTP), and survival after progression (SAP) in patients with HPV+ and HPV- oropharyngeal squamous cell carcinoma (OPSCC). Based on the largest-to-date, unselected, population-based cohort of patients diagnosed with OPSCC, we performed a comprehensive analysis of long-term OS, TTP, and SAP and constructed novel nomograms to evaluate patients’ prognoses.

Methods: We included all patients diagnosed with OPSCC (n = 1,542) between 2000–2014 in Eastern Denmark. Survival rates were estimated by the Kaplan-Meier method. A multivariate Cox regression model was used to construct predictive, internally validated nomograms.

Results: At a median follow-up of 4.0 years (range: 0.8–15.8 yrs.), 690 deaths were recorded. The 5-year OS, TTP, and SAP for the HPV+/p16+ subgroup were 77%, 82%, and 33, vs. 30%, 66%, and 6% for the HPV−/p16− group (P < 0.01). 376 patients failed to maintain disease control with a median TTP of 13 months in the HPV+/p16+ subgroup vs. 8.5 months in the HPV−/p16− subgroup (P < 0.05). HPV combined with p16 status remained one of the most informative covariates in the final Cox regression model for OS, TTP, and SAP.

Conclusion: The HPV+/p16+ subgroup had improved OS, TTP, and SAP compared with other combinations of HPV and p16 after adjusting for covariates. Nomograms were constructed for 1-, 5- and 10-year survival probability. Models may aid patients and clinicians in their clinical decision making as well as in counselling, research, and trial design.
Oropharyngeal cancer prognosis by tumour HPV status in France: the multicentric Papillophar study.

J.Lacau st guily*(1), A.Rousseau(2), S.Franceschi(3), P.Group(4)


Objective: To evaluate the impact of human papillomavirus (HPV) status, tobacco smoking and initial treatment on progression-free survival (PFS) and overall survival (OS) for oropharyngeal cancer (OPC) in France, a country where smoking declines started late (in the 1990s).

Methods: 340 OPC patients (median age: 60 years) from 14 French hospitals were enrolled from 2009 through 2012 and followed up (median 26.7 months). PCR-based positivity for both HPV DNA and E6/E7 mRNA was used to distinguish HPV-positive OPC (27.1%).

Hospital-stratified hazard ratios (HR) and corresponding 95% confidence intervals (CI) were used to compare PFS and OS according to HPV and other prognostic factors in hospital-stratified unadjusted and multivariate models. The combined effect of HPV status with either smoking, stage, or initial treatment on PFS was evaluated.

Results: in multivariate analysis, PFS was better in HPV-positive patients (HR=0.42; 95% CI: 0.24-0.73) and worse in older patients (HR for 5-year age increase=1.12) and those having had firstly radiotherapy (HR =1.86; 95% CI: 1.19-2.92) or induction chemotherapy (HR=1.73; 95% CI: 1.08-2.79) instead of upfront surgery. Findings for OS were similar. Loco-regional recurrences were less frequent in HPV-positive (10.5%) than HPV-negative patients (26.0%) but distant recurrences were similarly frequent. HPV status did not modify the influence of smoking or stage on PFS. Importantly, the absence of upfront surgery impaired prognosis in HPV-negative patients. In those HPV-negative patients, it may be related to the impossibility to perform surgery. Surgery was not impacting on HPV-positive patients prognosis.

Conclusions: The rate of HPV-positivity (DNA & RNA) in our prospective study in France was 27.1%, a rather low figure in a developed country. HPV-positive OPC patients fare better than HPV-negative OPC and may benefit from toxicity-sparing. HPV positivity is a good prognosis marker, independently from age, TNM, treatment, tobacco-alcohol consuming. Whether HPV-negative patients responded less well to radiation and chemotherapy because of more severe genomic damage or bulkier tumours is unclear.
Prevalence of HPV in head and neck squamous cell carcinoma in northern Spain

F. García Velasco*(1)

(1) Hospital Universitario Central de Asturias, Hospital Universitario Fundación Jiménez Díaz; Hospital Universitario Infanta Elena; Madrid, Spain

Introduction: Recent studies support an important role for human papillomavirus (HPV) in oropharyngeal squamous cell carcinomas (OPSCC), although the incidence varies widely depending on the geographic location and time period studied. The significance of HPV in non-oropharyngeal head and neck cancers is uncertain.

Objective: The aim of this study was to determine the proportion of HPV in oropharyngeal, laryngeal (LSCC) and hypopharyngeal (HPSCC) squamous cell carcinoma in northern Spain.

Material and Methods: Clinical records and paraffin embedded tumor specimens of 248 consecutive patients surgically treated for OPSCC (140 tonsillar and 108 base of tongue) between 1990 and 2009, and 124 consecutive patients surgically treated for laryngeal (62 cases) and hypopharyngeal (62 cases) SCCs between 2002 and 2007 were retrieved. OPSCC, LSCC and HPSCC cases were histomorphologically evaluated, and protein expression of p16 and p53 was analyzed by immunohistochemistry. Detection of high-risk HPV DNA was performed by GP5+/6+/PCR and in situ hybridization (ISH).

Results: In OPSCC thirty cases (12%) were positive for p16 immunostaining, of which eight (3.2% of the total series) were found positive for HPV type 16 by genotyping of GP5+6-/PCR products. All HPV GP5+/6-/PCR-positive tumors were p53-immunonegative, seven had a basaloid morphology and seven were also positive by HPV ISH. Presence of HPV correlated inversely with tobacco and alcohol consumption (p < 0.001), but not with age of onset of OPSCC. Overall survival was better in the HPV-positive group, although not statistically significant (p = 0.175). In LSCC and HPSCC, seventeen cases (14%) were positive for p16 immunostaining, of which 2 (1 larynx, 1 hypopharynx, 1.6% of total series) were found positive for HPV DNA by subsequent GP5+/6+/PCR. Both SCCs contained HPV type 16 and showed HPV16 E6 mRNA expression.

Conclusion: OPSCC patients in northern Spain demonstrated a low involvement of HPV, increasing (although not significantly, p = 0.120) from 1.8% in 1990-1999 to 6.1% of cases in 2000-2009. HPV is only occasionally involved in laryngeal and hypopharyngeal SCC patients in northern Spain.

García-Velasco F(1); García-Pedrero JM(1); Fresno MF(1); Brakenhoff RH(2); Heideman DA(2); Díaz Molina JP(1); Rivas-Castillo F(1); López-Álvarez F(1); Llorente JL(1); Rodrigo JP(1)

1 Department of Otolaryngology, IUOPA, Hospital Universitario Central de Asturias, Oviedo, Spain

2 Department of Pathology, VU University Medical Center, Amsterdam, The Netherlands
PREVALENCE OF HPV INDUCED ORAL CAVITY AND OROPHARYNGEAL CANCER IN KAZAKHSTAN

Z.Sadyk*(1), G.Adiibayev(1), V.Shipilova(1), G.Kydyrbayeva(3), D.Adiibay(1), J.Klozar(2)

(1)Kazakh Institute of oncology and Radiology, Almaty, Kazakhstan, (2)Charles University in Prague, University Hospital Motol, Prague, Czech Republic, (3)Kazakh Institute of Oncology and Radiology, Almaty, Kazakhstan

The purpose of the study: to study the prevalence and the role of different types of human papillomavirus (HPV) in etiology of oral and oropharyngeal cancer in Kazakhstan.

Materials and Methods: The study included 60 patients with verified squamous cell carcinoma of the oral cavity and oropharynx. Biopsy and/or postoperative specimens were used for high-risk HPV analysis by PCR also P16 was obtained on IHC or ICH to cross-check the results. AmpliSens HPV HCR genotype-FRT PCR kit was used to provide high-risk HPV types PCR analysis and CINtec Histology kit were used to detect p16 by IHC or ICH.

Results:

Of the 60 oral and oropharyngeal tumors 13 contained HR HPV DNA, 12 of them HPV 16 and one HPV 56. 13/13 tumors also stained for p16 IHC. One oral cavity tumor had a negative PCR result but was P16 positive on IHC.

Of the 28 oropharyngeal tumors, 8 were HPV DNA and p16 IHC positive, giving the rate of 28.5%.

Of the 32 oral tumors, 5 were HPV DNA and p16 IHC positive, giving the rate of 15.6% (excluding only P16 positive case).

The group is divided into 28/60 patients with oropharyngeal cancer and 32/60 patients with oral cancer. In the oropharyngeal cancer group, 18/28 patients had advanced tumors stage III and IV. Patients with oropharyngeal tumors received concurrent chemoradiotherapy (CRT) according to the local standards. Complete response was achieved in 18 patients (64.2%) and partial response in 10 patients (35.8%). The complete response rate was 6/8 (75%) in HPV positive tumors and 12/20 (60%) in HPV negative tumors. In the group of oral cancer 23/32 had advanced tumors oral cancer stage III and IV. They were treated mostly by surgery and adjuvant RT (CRT).

Conclusion: This is the first study mapping prevalence of HPV positivity in oral and oropharyngeal cancer in this part of the world. In concordance with European and American results, the rate of HPV positivity was higher in oropharyngeal than in oral cancer and HPV 16 was by far the most frequent type. However, the HPV positivity rates are in this first study performed in Kazakhstan lower than referred elsewhere. We continue to recruit patients to enlarge the group and follow the whole cohort to allow further clinical correlations.
Prevalence of HPV Infection in Hypopharyngeal and Laryngeal Squamous Cell Carcinoma

W.Pongsapich*(1), C.Chongkolwatana(1)

(1)Siriraj Hospital, Mahidol University, Bangkok, Thailand

Background:
The relationship between HPV and cervical carcinoma was well established decades ago. The viral carcinogenicity also confirmed in subsets of head and neck carcinoma especially in oropharynx. Meanwhile, data from developed countries showed the strong association between HPV infection and oropharyngeal carcinogenesis, which was in contradiction to our previous report. Nonetheless, other subsites of head and neck with less association to HPV have never been studied in Thailand. Thus, this study aimed to determine the presence of HPV DNA in hypopharyngeal and laryngeal squamous cell carcinoma in Thai population.

Materials & Methods:
Eighty hypopharyngeal and laryngeal squamous cell carcinoma patients in Department of Otorhinolaryngology, Siriraj Hospital were included. The presence of HPV genome was determined from pathological confirmed fresh specimens. As well, demographic data and risks of HPV infection were evaluated. A concealed self-administered questionnaire about risks of HPV infection were particularly adapted from the “sexually transmitted disease evaluation questionnaires, with only 4 questions including number of sexual partners, age of sexual debut, frequency of orosexual activity per week, and history of sexually transmitted diseases.

Results: Of 80 patients, 90% were male. Only one patient (2.5%) had positive HPV-62 serotype. Most of the patients consumed tobacco and/or alcohol. There were 5 patients with no risks for cancer development. According to the responded questionnaire, the mean age of first sexual debut was 20.17 years. Also, 48 patients (65.8%) had multiple sexual partners, followed by 16 patients (21.3%) with history of sexual transmitted disease infection, and 7 patients (10%) with habitual orogenital contact.

Conclusion: Despite the report of HPV associated cancer in otorhinolaryngology in other parts of the world, no detectable oncogenic HPV DNA is observed in cancer of larynx and hypopharynx. The percentage of HPV-related tumors in Thailand is, nevertheless, considerably low when compared with developed countries.
Prevalence of human papillomavirus in tonsil brushings and gargles in cancer-free patients: The SPLIT study

J. Combes*(1), V. Dalstein(2), T. Gheit(3), M. Tommasino(3), C. Clavel(2), J. Lacau St Guily(4), S. Franceschi(3)

(1) International Agency for Research on Cancer, Lyon, France, (2) CHU Reims, Hôpital Maison Blanche, Laboratoire Biopathologie, Reims, France, (3) International Agency for Research on Cancer, Lyon, France, (4) Department of Otorhinolaryngology and Head and Neck Surgery, Faculty of Medicine-Pierre et Marie Curie University-Paris VI and Tenon Hospital, Assistance Publique Hôpitaux De Paris, Paris, France

Objective: To evaluate human papillomavirus (HPV) prevalence in the tonsil using extensive ex vivo brushing and gargling in a large age-stratified sample of cancer-free patients.

Methods: From 2012 to 2016, consecutive patients undergoing tonsillectomy for benign indications in 19 French University Hospitals were invited to participate in the SPLIT study. Immediately after resection, half-tonsils were extensively brushed at the pathology laboratories on the surface epithelium and in tonsil crypts to collect exfoliated cells. In 11 centers, patients aged 15 and over (adults) were also asked to provide gargoyle samples before surgery. HPV-DNA detection used a very sensitive Luminex technology to evaluate 21 HPV types.

Results: Tonsil brushings from 692 patients aged 1-70 years and gargles from 268 adults were tested for HPV. Among adults, overall HPV prevalence was 3.6% in tonsil brushings and 13.1% in gargles and HPV16 prevalence was 2.2% and 4.1%, respectively. Among 139 children, tonsil brushings were positive in two girls (1.4%). Percent agreement in HPV detection in paired tonsil brushings and gargles in adults was 85.8% and positive agreement 9.5%. HPV prevalence in gargles significantly varied by sex (prevalence ratio in men vs women = 2.1; 95% confidence interval; 1.1-4.1) and tonsillectomy indication (non-infectious vs. infectious = 4.9; 1.4-17.0).

Conclusion: HPV infection is infrequent in tonsil brushings of cancer-free children and adults. In contrast, HPV infection in gargles in adults is rather common. Low agreement in paired tonsil brushings and gargles suggests that gargoyle is not representative of HPV prevalence in the tonsil.

Jean-Damien Combes(a), Véronique Dalstein(b, c, d), Tarik Gheit(a), Gary M. Clifford(a), Massimo Tommasino(a), Christine Clavel(b, c, d), Jean Lacau St Guily(e), Silvia Franceschi(a), for the SPLIT study group

a International Agency for Research on Cancer, 69372 Lyon Cedex 08, France
b CHU Reims, Hôpital Maison Blanche, Laboratoire Biopathologie, Reims 51092, France
c INSERM, UMR-S 903, Reims 51092, France
d Université de Reims Champagne-Ardenne, Faculté de Médecine, Reims 51095, France
e Department of Otorhinolaryngology and Head and Neck Surgery, Faculty of Medicine-Pierre et Marie Curie University-Paris VI and Tenon Hospital, Assistance Publique Hôpitaux De Paris, France
Prognostic capacity of regional involvement in patients with oropharyngeal carcinoma according to HPV status.

J.Costa*(1), L.Alemany(2), M.Taberna(2), M.Mena(2), M.Quer(3), X.León(3)

(1)Hospital Sant Joan Despí Moisès Broggi, Barcelona, Spain, (2)ICO - Cancer Epidemiology Research Programme, Barcelona, Spain, (3)Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

Purpose of the study. Several studies have shown that regional TNM category does not have prognostic capacity for patients with HPV-positive oropharyngeal squamous cell carcinoma (OPSCC). Recently, Spector and O’Sullivan (ICON-S) have proposed a new classification of the regional extension of the disease for HPV-positive OPSCC patients.

Objective. To analyze the prognostic role of regional involvement in patients with HPV-positive OPSCC in a low-frequency HPV environment, and to assess the prognostic capacity of the specific new N classifications.

Materials and methods. We carried out a retrospective study of 397 OPSCC patients. HPV DNA positivity was evaluated by PCR HPV. DNA positive samples were further tested for HPV E6*I mRNA detection and/or p16INK4a immunohistochemistry. We compared the prognostic capacity of TNM (TNMN), Spector (HPV+N-Spector) and O’Sullivan (HPV+N-ICON-S) classifications.

Results. Forty-nine (12.3%) of the OPSCC cases were HPV-positive. HPV-positive patients had lower local tumor extension but a high regional category at diagnosis. The frequency of cN+ in the group of HPV-positive patients was 78.9%, significantly higher than 49.6% for HPV-negative patients (P>0.006). HPV-negative patients showed an orderly decrease in disease specific survival (DSS) as the regional category increased (P <0.0001). Paradoxically, in HPV-positive OPSCC cN+ patients showed a trend to better DSS than cN0 patients (81.5% versus 44.7%, P=0.057). We reclassified the regional extension category for HPV-positive cN+ patients (n=37) according to the HPV+N-Spector and HPV+N-ICON-S classifications. There were no significant differences in DSS when classifying patients with the TNMN (P = 0.095) or the HPV+N-ICON-S (P = 0.241) classification. However, there were significant differences in DSS with the HPV+N-Spector classification (P<0.0001). The HPV+N-Spector classification achieved the best values regarding the heterogeneity in survival between categories.

Conclusions. HPV-positive OPSCC had a higher regional involvement than HPV-negative OPSCC. However nodal status was not a prognostic factor in HPV-positive patients. According to our results, the classification proposed specifically for cN+ HPV-positive OPSCC patients by Spector (HPV+N-Spector classification) had the highest prognostic capacity.
Prognostic significance of extracapsular spread, perineural and lymphovascular invasion in patients with HPV and non-HPV related oropharyngeal squamous cell carcinoma.

D.Neskey*(1)

(1)Medical University of South Carolina, Charleston, United States

Purpose/Objectives: Approximately 15,000 cases of oropharyngeal squamous cell carcinoma (OPSCC) are diagnosed each year in the United States. Previously these cancers had a strong association with chronic alcohol and tobacco use. Over the past decade the increasing incidence of the human papilloma virus (HPV) has been identified as a major etiologic agent of oropharyngeal cancer and currently is associated in over 70% of cases in the United States. Although the prognostic significance of HPV is clear the impact of traditional pathologic parameters remains unclear. Therefore the goal of this study is to compare surgical pathologic variables in non-HPV and HPV associated OPSCC. We hypothesize the presence lymphovascular invasion will portend a poor prognosis in HPV related OPSCC whereas, perineural invasion and extracapsular spread will be associated with decreased survival in non-HPV related disease.

Materials/Methods: Retrospective chart review of 240 patients treated for oropharyngeal SCC at a tertiary care cancer center. The primary outcome measures were overall and disease free survival. The endpoints assessed were clinical and pathologic T and N stage, and presence of extracapsular spread, perineural invasion, or lymphovascular invasion.

Results: Of the 240 patients with OPSCC reviewed, 116 patients underwent surgery as part of their primary treatment and had pathologic variables and p16 status available for review. Of this cohort, seventy patients had HPV related disease while 46 patients had non-HPV related disease. The presence of perineural invasion was associated with decreased disease free survival in both HPV and non HPV related OPSCC (p=.003 and p=.003 respectively). Lymphovascular invasion portended a worse overall and disease free survival in HPV related disease (p=.050 and p=.006 respectively) but not non-HPV related (p=.717 and p=.942 respectively). In contrast, extracapsular spread did not correlate with decreased overall or disease free survival in either HPV related OPSCC (p=.899 and p=.575 respectively) or non-HPV (p=.772 and p=.843 respectively).

Conclusions: In the current series the presence of perineural invasion portended a worse prognosis in patients with OPSCC independent of HPV where as there was not an associated prognostic significance of extracapsular spread regardless of HPV status. In contrast, lymphovascular invasion appears to correlate with decreased survival in patients with HPV related OPSCC. Based on these findings the indications for adjuvant therapy following surgery for OPSCC may be different for HPV and non-HPV related disease.
Survival outcome of Tonsillar Squamous Cell Carcinoma (TSCC) in context of Human Papilloma Virus (HPV): A Systematic Review and Meta-Analysis

N.Ahmad* (1), M.Chan(2), Y.Huo(3), R.Chin(4)

(1) Department of Otolaryngology and Head and Neck Surgery, Nepean Hospital, Sydney, Australia, (2) Radiology Department, Concord Hospital, Sydney, Australia, (3) University of New South Wales, Sydney, Australia, (4) Department of Otolaryngology and Head & Neck Surgery, Nepean Hospital, Sydney, Australia

Objective:

The objective of our study was to assess whether HPV-positive TSCC had better overall survival and prognosis when compared to HPV-negative TSCC and in addition, whether there was any difference in survival and prognosis in different global regions.

Material and Methods:

A systematic review and meta-analysis was performed utilising 9 electronic databases from their inception to October 2016. Studies included had TSCC HPV-negative and HPV-positive. TSCC was confirmed with histopathology and HPV status was confirmed with polymerase chain reaction, immunohistochemistry and/or in-situ hybridisation. The primary endpoints were overall survival (OS) and disease free survival (DFS).

Result:

Twenty-four studies were identified, involving 1921 TSCC cases, of which 56.2% (1079) were HPV positive. OS was significantly higher in patients with HPV-positive TSCC compared to HPV-negative TSCC in years 1-5 (OR 2.54, P<0.01; OR 2.93 P<0.01; OR 2.74 P<0.01; OR 2.20 P<0.01, and OR 2.14 P<0.01 respectively) and OS across 5 years was also higher in HPV-positive (OR 2.41, p<0.01). Similarly DFS was also significantly higher in patients with HPV-positive TSCC compared to HPV-negative TSCC in years 1-3 (OR 2.86, P<0.01; OR 2.60 P<0.02; and OR 2.60 P<0.01 respectively). This difference was attenuated in years 4 and 5 (OR 1.83, P=0.10 and OR 1.50, P=0.12). Despite this overall DFS across 5 years was maintained (OR 2.36, p<0.01). There was no difference noted in OS in different regions of the world (P=0.22)

Conclusion

This is the largest meta-analysis with 1921 patients, comparing non-HPV induced TSCC and HPV induced TSCC, looking at outcome and survival. HPV-positive had better OS and DFS. There appears to be a lack of regional variability in prognosis that suggests that is a homogenous disease entity, no variation across regional centres in the world.
Survival, lung-metastasis and comorbidity in HPV+ and HPV- patients

C. Von Buchwald*(1)

(1) Rigshospitalet, , Denmark

Background

The aim was to explore the overall survival survival of oropharyngeal cancer patients (OPC) in relation to co-morbidity, lung failure, HPV DNA status, p16 expression and combined HPV/p16 status.

Method and materials

We included all patients (n = 1,542) diagnosed with OPC in Eastern Denmark as registered in the Danish Head and Neck Cancer Group (DAHANCA) database and the Danish Pathology Databank, 2000-2014. Patients were treated according to national guidelines (radiotherapy +/- concomitant cisplatin). All specimens were analysed using HPV DNA PCR and p16 immunohistochemistry. Clinical information was retrieved from medical files, the DAHANCA database and the Danish National Patient Registry. Survival analysis were performed with the Kaplan-meier method and risk of and association with comorbidity was evaluated with Cox regression model.

Results

We observed improved OS for HPV+/p16+ compared to HPV-/p16- also when adjusted for relevant comorbidities. Lung metastasis were divided equally between the HPV+ and HPV- group, although smoking was significantly higher in the HPV+ group. Comorbidity was significantly higher in the HPV- group compared with the HPV+.

Conclusion

Survival depends on combined HPV/p16 status as an independent variable. Failure to the lung is frequent in patients with OPC. Comorbidity is frequent in OPC patients and most prevalent in HPV negative patients.
The analysis of frequency of high-risk oncogenic types of human papillomavirus in papilloma of upper respiratory tract.

J. Markowski*(1), M. Śnietura(2), R. Lamch(2), A. Kopeć(2), D. Lange(2), W. Likus(3)

(1) Silesian Medical University, Laryngology Department, Katowice, Poland, Katowice, Poland, (2) Tumor Pathology Department, Maria Sklodowska-Curie Memorial Cancer Center and Institute of Oncology, Gliwice Branch, Gliwice, Poland, (3) Department of Anatomy, School of Health Science, Medical University of Silesia, Katowice, Poland

Squamous cell papillomas in mucous membranes of upper respiratory tract are considered pre-neoplastic condition, where the HPV virus is responsible for its aetiology. HPV virus was discovered in the early 1970s, it is a DNA virus having the size of 52-55 nm, while its family comprises some 100 genotypes. A sub-group of oncogenetic viruses is made up of: HPV 16, 18, 31, 33. The results of epidemiological studies indicate some 20% risk of occurrence of neoplasm in case of stated local HPV viremia. The aim of this study was the assessment frequency of high-risk HPV (types 16, 18, 31, 33) and low-risk HPV (6, 11) in histopathological exam confirmed papillomas of upper respiratory tract. Next aim was to select in the group of patients suffering from squamous cell papillomas of the oral cavity and oropharynx the tissues in which the presence of high risk oncogenetic viruses has been confirmed and follow up this group of patients. Material and methods. Fifty patients diagnosed with squamous cell papilloma of the oral cavity and oropharynx who were treated surgically between 2012 and 2015 in Laryngology Department of Silesian Medical University were enrolled in this study. To confirm presence of the papilloma an experienced pathologist revised all histological slides. Patient charts were reviewed on age, gender, date of diagnosis, number and anatomical location of papillomas, and symptoms of recurrence during the follow-up. Detection of LR-HPV and HR-HPV DNA in paraffin-embedded histopathological samples was achieved using a commercially available LR-HPV test allows to detect HPV 6 and 11 DNA with a sensitivity of not less than 500 copies/ml in one multiplex reaction. High Risk HPV PCR Test can detect HR-HPV types in the same reaction and can also differentiate between HPV16, HPV18, and other less frequent HPV types. DNA of the tumor was isolated from archival paraffin-embedded tissue samples. Results. Informative results of RT-PCR and immunohistochemistry were obtained for all tested samples. Genome of any HR-HPV types covered by the HR-HPV test was not detected in any sample. We haven’t found any correlation between frequency of LR-HPV infection and anatomical location of the papilloma. Conclusions. In our study we didn’t find coexist oral and oropharyngeal papillomas with high-risk human papillomavirus infection.
The expression of APOBEC3A associates with human papillomavirus genome integration in oropharyngeal cancers

T. Yoshizaki*(1)
(1) Kanazawa University, Japan

Purpose of study: We recently demonstrated that an antiviral factor, apolipoprotein B mRNA-editing catalytic polypeptide 3 (APOBEC3), can induce hypermutation of Human papillomaviruses (HPV) DNA in vitro. The purpose of the present study was to verify whether HPV16 DNA is hypermutated in oropharyngeal cancers (OPCs), and, association of A3 expression with the mutational load and incidence of viral genome integration.

Methods: Using 3D-PCR technique, 52 OPC tumour specimens were examined for C-to-T and G-to-A hypermutations, specific mutation introduced by A3, in the HPV16 E2 gene. Biopsy specimens were immunohistochemically examined for the expression of A3 proteins. Using an RT-qPCR assay, integration status of HPV was determined by the copy number ratio of the HPV16 E2 and E6.

Results: Of the 52 patients, 29 were HPV16 positive, whereas the other 23 patients were HPV16 negative. There were C-to-T and G-to-A hypermutations in the HPV16 E2 gene in the samples. In addition, mRNA of A3A, A3F and A3H was upregulated in the samples of HPV16-positive OPCs. Immunohistochemical analysis of biopsy specimens revealed that A3A and A3G expression was significantly higher in HPV16-positive OPCs than in HPV-negative OPCs. Finally, A3A expression is strongly correlated with the integration of HPV DNA.

Conclusions: These results suggest that HPV16 infection upregulates A3A expression, thereby increasing the chance of viral DNA integration. The role of A3A in HPV-induced carcinogenesis is discussed.
The influence of human papillomavirus on nasopharyngeal carcinoma in Japan.

M.Kano*(1), Y.Takaso(2), T.Imoto(2), S.Kondo(2), T.Yoshizaki(2)

(1)Kanazawa university, Kanazawa, Japan, (2)Kanazawa University, Japan

Objective: Although Japan is a non-endemic area with nasopharyngeal carcinoma (NPC), the proportion of WHO type I NPC in Japan are different from that in non-endemic areas such as North America and Europe. Recently, it is said that not only Epstein-Barr virus (EBV) but also human papillomavirus (HPV) has an influence on NPC in non-endemic areas. The aim of this study is to clarify the influence of HPV on NPC in Japan.

Methods: Paraffin-embedded tumor specimens were available for 59 patients with NPC diagnosed between 1996 and 2015. We detected the virus status by p16 immunohistochemistry, HPV PCR and in situ hybridization for Epstein–Barr virus (EBV)-encoded RNA. Kaplan–Meier curves were used to compare the overall survival by viral status.

Results: Among the 59 patients, 49 (83%) were EBV-positive/HPV-negative, 2 (3%) were EBV-positive/HPV-positive and 8 (16%) were EBV-negative/HPV-negative. All HPV-positive NPCs were co-infected with EBV. There were no significant differences between the overall survival in the 3 groups (p = 0.111).

Conclusion: In Japan, HPV was detected in a few patients with NPC, and we suggest that HPV has no influence on NPC carcinogenesis in this population. However, EBV is a major etiologic agent, particularly in non-keratinizing NPC (WHO type II/III).
The presence of human papilloma virus does not modify the presentation and clinical course of basaloid carcinoma of larynx. We present a Case series of Basaloid Carcinoma of the larynx

R.Carlos*(1), J.Gutierrez jodas(2), L.Rodríguez pérez(2), J.Aguilar cantador(2)

(1)Hospital Universitario Reina Sofía. Cordoba, Spain., (2)Hospital Universitario Reina Sofía, Cordoba, Spain

Introduction: The basaloid carcinoma is a rare variety of squamous cell carcinoma. The human papilloma virus has been associated with its development, specially the subtype 16. We report 13 cases diagnosed with this type of cancer in the larynx, between 1990 and 2011. The primary objective was to assess whether infection with human papilloma virus modifies the presentation and clinical course.

Methods: Retrospective study of 13 cases. We studied age, sex, location, treatment, TNM stage, presence of human papilloma virus, CD34 and S100, and recurrence. We used the Fischer test and U de Mann-Whitney to assess the association between variables.

Results: Mean age was 59.7 ± 8.1 years. 75% of cases with human papilloma virus showed supraglottic level. The presence of virus was confirmed in 4 patients. No association was found between stage, local recurrence, the presence of metastasis or survival with the virus.

Conclusions: The presence of human papilloma virus does not modify the presentation and clinical course of basaloid carcinoma of larynx. It is a tumor of low prevalence, occurring mainly in patients aged over 50 years and in an advanced stage. The supraglottis is the most common presentation. Keywords: Laryngeal neoplasms, basaloid squamous-cell carcinoma, HPV, aggressive squamous carcinoma variant.
The role of HPV on the risk of second primary neoplasia in patients with oropharyngeal carcinoma

A.Codina aroca*(1), M.Martel(2), C.Rodríguez(1), L.Alemany(3), M.Taberna(3), B.Sílvia(1), X.León(1)

(1)Hospital de la Santa Creu i Sant Pau, Barcelona, Spain, (2)Hospital Moisè Broggi., Sant Joan despí, Barcelona, Spain, (3)Cancer Epidemiology Research Program, Catalan Institute of Oncology (ICO) IDIBELL., L’hospitalet de llobregat, Barcelona, Spain

Objectives: It has been reported that patients with HPV-positive oropharyngeal cancer (OPC) have a lower risk of appearance of second primary neoplasm (SPN) than HPV-negative OPC patients. The aim of our study was to analyze the risk of developing SPN in a large group of patients with OPC according to HPV status in the primary tumor.

Materials and Methods:
We included 412 OPC patients treated at our center from 1991 to 2014 for which the HPV DNA positivity was evaluated by PCR in available tumor specimens. HPV DNA positive samples were further tested for HPV E6*I mRNA detection and/or p16INK4a immunohistochemistry. We estimated the incidence of SPN in all cancer sites and in cancer sites related to tobacco and alcohol consumption according to the HPV status in the primary tumor.

Results:
Fifty-one (12.4%) out of 412 OPCs included in the study were HPV-related. Five-year SPN-free survival for HPV-negative versus HPV-positive OPC patients was 57.0% and 89.0% (P<0.001), respectively. Corresponding estimates for 10-year SPN-free survival were 35.2% versus 78.5% (P<0.001). When restricting the analyses to tobacco/alcohol-related SPNs, the corresponding survival rates where 62.0% versus 97.6% (P<0.001) and 42.2% versus 97.6%, (P<0.001), for 5-year and 10-year survival rates, respectively. HPV status and previous toxic habits might allow classifying patients regarding the risk of tobacco/alcohol-related SPNs.

Conclusion:
HPV-related OPC patients have a significant lower risk of SPN development, particularly in those locations related to tobacco use or alcohol consumption.
The role of up-front surgery in oropharyngeal cancer. About a series of 340 patients.

J.Lacau st guily*(1), S.Franceschi(2), A.Rousseau(3), G.Papillophar(4)


Purpose: To evaluate the impact of human papillomavirus (HPV) status combined with treatment with upfront surgery on progression-free survival (PFS) and overall survival (OS) for oropharyngeal cancer (OPC).

Methods: 340 OPC patients (median age: 60 years) from 14 French hospitals were followed up (median 26.7 months). PCR-based positivity for both HPV DNA and E6/E7 mRNA was used to distinguish HPV-positive (HPV-pos) OPC (27.1%). Hospital-stratified hazard ratios (HR) and corresponding 95% confidence intervals (CI) were used to compare PFS and OS according to HPV and other prognostic factors in multivariate models. Patients were treated according to each centre’s standard of care by physicians who were not aware of the patient’s HPV status at the time of treatment. Many different combinations of treatments were used that we reclassified into three general strategies according to initial treatment: 1) upfront surgery; 2) up-front radiotherapy; 3) induction chemotherapy. Upfront surgery did not include lymph-nodal dissection before radiotherapy or induction chemotherapy (4 HPV-neg and 5 HPV-pos OPC patients). The combined effect of HPV status with smoking, stage, or initial treatment on PFS was also evaluated.

Results: PFS in multivariate analysis was better in HPV-pos patients (HR=0.42; 95% CI: 0.24-0.73) and worse in older patients (HR for 5-year age increase=1.12) and those having had upfront radiotherapy (HR =1.86; 95% CI: 1.19-2.92) or induction chemotherapy (HR=1.73; 95% CI: 1.08-2.79) instead of upfront surgery. Findings for OS were similar. The impossibility to perform upfront surgery may be more relevant for HPV-negative patients. Compared to HPV-pos/upfront surgery, PFS was similar in HPV-pos/no upfront surgery (HR=0.92; 95% CI: 0.37-2.32) and HPV-neg/upfront surgery (1.43; 95% CI: 0.59-3.45) patients but significantly worse in HPV-neg/no upfront surgery patients (HR=2.86; 95% CI: 1.25-6.56) (interaction: p=0.13). The combined influence of HPV status and upfront surgery on OS was similar to that seen for PFS.

Only the lack of upfront surgery had an equally strong effect on PFS as the absence of HPV in multivariate analysis. In addition to HPV and upfront surgery, worse OS in multivariate analysis was also associated with older age, poor performance status, and UICC stage 4. It was suggested that not having had upfront surgery worsened PFS and OS in HPV-neg patients to a greater extent than in HPV-pos patients.

Conclusions: HPV+ patients had 2-fold better progression-free survival (PFS) than HPV-negative. Only lack of upfront surgery had an equally strong effect on PFS as HPV and was especially detrimental in HPV-negative patients.
Trans-oral micro-endoscopic KTP-532 laser assisted excision of stage I-III glottic cancer – our experience.

D. Nayak*(1)

(1) Kasturba Medical college, Manipal University, Manipal, Manipal, udupi, India

Background: Trans-oral laser surgery has shown great promise in the management of early and selected locally advanced glottic cancer. This has replaced the conventional surgery with better patient compliance.

OBJECTIVE: To elucidate the role of laser and to evaluate the survival of patients having glottic cancer stage I-III treated with trans-oral micro-endoscopic KTP-532 laser assisted excision.

METHODS: This is a Retrospective observational study was carried out between January 2000 to December 2013. A total of 109 patients of biopsy proven cases of squamous cell carcinoma of glottis in different stages including 35 cases of post radiotherapy recurrence were taken up for the study. All these patients were treated surgically with trans-oral micro-endoscopic KTP-532 Laser assisted excision of primary lesion under frozen /paraffin section control till negative margin is achieved. All patients with clinically and radiologically positive N status underwent neck dissection within 10 days. Average follow up period was 19 months. All cases received post op radiotherapy except the radio-recurrent ones who were managed with salvage surgery alone.

RESULTS: The age range was 40 years to 82 years. The maximum incidence was found in 6th and 7th decades. 96/109 patients had no disease on their last follow up. 69 patient were followed up for a period of 3 years or more with 62 being disease free. Overall, 13 cases had recurrences of which 7 underwent successful revision laser surgery within 3 years, while total laryngectomy was done for rest 6 cases. Neck dissection was carried out in 9 cases in staged manner after 10 days. 35 salvage surgery for radio-residual disease. In all, we had cases T1A – 22, T1B- 24, T2- 41, T3-22. Among the 13 recurrences, T1A had no recurrence T1B had 2 cases, T2 had 5 cases and T3 with 6 cases. 2 patients had lung metastasis after 3 years. Overall survival rate was 88.08 % and 3 year specific disease free survival rate was 91.03 % calculated using Kaplan-Meir scale.

CONCLUSION: This study evaluates the efficacy and survival rate of patients who underwent Trans-oral micro-endoscopic KTP-532 LASER assisted excision for glottic cancer as an effective alternative to conventional open surgeries with better quality of life.
Value of narrow band imaging versus white light endoscopy for assessing laryngeal and hypopharyngeal lesions

B.Popek*(1), K.Bojanowska- poźniak*(1), J.Jeruzal*(1), W.Pietruszewskaw

(1)Norbert Barlicki Memorial Teaching Hospital No. 1, Łódź, Poland

An optimal method of diagnosis of the head and neck region, allowing an accurate assessment of lesions in the early stages, is constantly sought. One of the most recent methods used in imaging of the larynx is narrow band imaging (NBI). NBI enables us to detect specific patterns of pathological angiogenesis suggestive of premalignant or neoplastic lesions.

The aim of this study was to assess the value of NBI endoscopy in the diagnosis of pharyngeal and laryngeal lesions.

Between January 2015 and October 2016: 309 patients with pharyngeal and laryngeal lesions underwent NBI-endoscopic evaluation. Endoscopic narrow band imaging findings were classified into five types according to the Ni classification and were compared with histopathological reports. Sensitivity and specificity were calculated.

Results: For the calculation of sensitivity and specificity laryngeal cancer and high grade dysplasias were classified as positive, while benign lesions were calculated as negative. Sensitivity and specificity for cancer and high grade dysplasias were 97,22%, 99,50% in NBI and 87,74%, 99,01% in white light respectively.

Conclusion: Narrow-band imaging endoscopy improves assessment of tumor extent and affects therapeutic strategy for laryngeal cancer. Due to its ability to early detection of recurrences and metachronous tumors NBI plays an important role also in follow-up care after cancer treatment. These results suggest, that endoscopic narrow band imaging may be useful in distinguishing nonmalignant from malignant lesions.
Value of narrow band imaging versus white light endoscopy for assessing laryngeal and hypopharyngeal lesions

W.Pietruszewska*(1), K.Bojanowska-poźniak*(1), B.Popek*(1), J.Jeruzal*(1)

(1)Norbert Barlicki Memorial Teaching Hospital No. 1, Łódź, Poland

An optimal method of diagnosis of the head and neck region, allowing an accurate assessment of lesions in the early stages, is constantly sought. One of the most recent methods used in imaging of the larynx is narrow band imaging (NBI). NBI enables us to detect specific patterns of pathological angiogenesis suggestive of premalignant or neoplastic lesions.

The aim of this study was to assess the value of NBI endoscopy in the diagnosis of pharyngeal and laryngeal lesions.

Between January 2015 and October 2016: 309 patients with pharyngeal and laryngeal lesions underwent NBI-endoscopic evaluation. Endoscopic narrow band imaging findings were classified into five types according to the Ni classification and were compared with histopathological reports. Sensitivity and specificity were calculated.

Results: For the calculation of sensitivity and specificity laryngeal cancer and high grade dysplasias were classified as positive, while benign lesions were calculated as negative. Sensitivity, specificity for cancer and high grade dysplasias were 97,22%, 99,50% in NBI and 87,74%, 99,01% in white light respectively.

Conclusions: Narrow-band imaging endoscopy improves assessment of tumor extent and affects therapeutic strategy for laryngeal cancer. Due to its ability to early detection of recurrences and metachronous tumors NBI plays an important role also in follow-up care after cancer treatment. These results suggest, that endoscopic narrow band imaging may be useful in distinguishing nonmalignant from malignant lesions.
Algerien experience in laryngal préservation

S.Benyahia*(1)

(1) faculte de medecine d'alger chuy mustapha service orl et ccf, , Algeria

la préservation laryngée est d'introduction récente en Algérie, notre expérience porte sur 50 cas de cancers pharyngo laryngé qui ont bénéficié d'un protocole TPF, 3 a 4 séances suivie de radiothérapie potentialisé pour les bons répondeurs.

50 patient dont la moyenne d'âge était de 61,7ans (29 - 73), 46 hommes pour 4 femmes, tous porteurs de cancers pharyngo laryngés docum Gretes, avec carcinome épidermoïde a l'histologie, 43,3 % étaient de siège laryngé, 27% d'hypo pharynx et 30,2 pharyngo laryngé nos patients étaient aux stade III 62,2 % et 37,8 % stade IV, 92% ont bénéficié du protocole TPF, 92% ont été éligible a une radiothérapie potentialisé, 25 patients ont bénéficiés de RTE + cetuximab et 25 autres patients RTE + cisplatinum.

résultats : après la fin de la séquence CT+ RTE potentialisée 65,8 % des patients étaient en rémission complète, 29,7 % ont été invalidés du fait d'un dysfonctionnement pharyngo laryngé, notre taux de préservation laryngée a été de 53,6, nos critères de bon résultats ont été : le stade III plutôt que le stade IV, le siège laryngé plutôt que le siège hypo pharyngé ou le siège pharyngo laryngé, l'aspect macroscopique bourgeonnant de la tumeur plutôt que l'aspect infiltrant, la mobilité aryténoïdienne conservée, la durée de sevrage du tabac plus longue, on na pas trouvé l'influence de l'âge, de l'amaigrissement, du sexe, l'alcoolisme ni la toxicité aigue a la chimiothérapie, les facteurs biologiques étudiés ont été l'HPV, la P53 et l'EGFR, il na été retrouvé de corrélation entre ces facteurs biologique et la préservation laryngée.

conclusion : l'avènement de la préservation laryngée dans les cas de tumeurs pharyngo laryngés localement avancées a permis une évolution dans la prise en charge de ces tumeurs nous proposons cette option pour les patients sans atteinte cartilagineuse. ce protocole de préservation laryngée a totalement intégré notre offre de traitement pour nos patient, toutefois il est indispensable de sélectionner les patients sur les critères sus citer, ce protocole n'est pas dénué de toxicité non négligeable source parfois de décès, l'avènement de nouvelles techniques de radiations tell que la radiothérapie conformationelle, associés aux biothérapies permettront pour nous de réduire la toxicité tout en améliorant l'efficacité la place de laryngectomie totale sera moins prépondérante a l'avenir.
Development and external validation of a risk prediction model to predict 5-year overall survival in advanced larynx cancer


(1)Department of Head and Neck Surgery and Oncology, John Hopkins Medical Center, Baltimore, United States,
(2)Department of Otolarngology Head and Neck Surgery, Emory University School of Medicine. Atlanta, Georgia, USA, Atlanta, georgia, United States, (3)Department of Otalaryngology, Head and Neck Surgery, The Royal college of Surgeons in Ireland, Dublin, Ireland, (4)Otorhinolaryngology, Head and Neck Surgery and Department of Oncology, section Head and Neck Oncology, University Hospitals Leuven, Leuven, Belgium, (5)Department of Otorhinolaryngology/Head and Neck Surgery, Lund University Hospital, Lund, Sweden, (6)Department of Head and Neck Surgery and Oncology, The Netherlands Cancer Institute, Amsterdam, Netherlands

Background: The TNM-classification is an effective determinant of prognosis and overall survival (OS) on a population level, but works less well on the individual level. We aimed to develop a risk prediction model for advanced larynx cancer to improve the prediction of OS rates.

Methods: Based on a cohort of patients with T3-T4N0-N+M0 larynx cancer diagnosed and treated in the Netherlands between 1991-2010 (n=3,442), we developed a risk prediction model to estimate the 5-year OS rate. The model was built using multivariable cox regression analysis. All patients were treated with primary radiotherapy (RT), chemoradiotherapy (CRT) or a total laryngectomy (TL). To validate this model we used data from 5 external centers from several countries (n=770): John Hopkins Hospital, Baltimore, USA; Emory University Hospital, Atlanta, USA; University Hospital Leuven, Belgium; University Hospital of Lund, Lund, Sweden and a national cohort from the National Cancer Registry of Ireland. Discrimination and calibration were assessed using the c-statistic and calibration plots.

Results: We included the variables age, sex, TNM-classification and subsite as prognostic variables in the model. The c-statistic of the model was 0.65, as compared to 0.57 using only TNM-classification. Based on the derivation dataset we created three risk categories; low-, intermediate, and high risk, by dividing the group into tertiles. Although the model was able to distinguish well between the three risk groups in the external dataset, by performing external validation the c-statistic decreased to 0.59 (compared to 0.55 for TNM only), and the model was not well calibrated. In a post-hoc analysis, we added co-morbidity as scored by ASA-classification for 181 patients with T3-T4N0-N+M0 larynx cancer treated in the Netherlands Cancer Institute between 1999-2008. This improved the performance and yielded a c-index 0.68.

Conclusion: We have developed a risk prediction model for patients with advanced larynx cancer with readily available clinical variables, based on the largest development cohort so far. Although this model gives more accurate estimations of 5-year survival compared to TNM-classification alone, it is still suboptimal for individual predictions. Adding co-morbidity data seems to improve the prognostic value, but more research is needed to further explore which variables better predict OS in this patient group. Genomics and radiomics seem promising fields to identify such variables.
Endolaryngeal supraglottic laryngectomy; late oncological and functional results

F. Kasapoglu* (1)

(1) Uludag University Medical Faculty Department of Otolaryngology Head and Neck Surgery, Bursa, Turkey

OBJECTIVE: The aim of this study was to present long-term oncological and functional results of the patients who were underwent supraglottic laryngectomy with technic of endolaryngeal CO2 laser surgery between 2010-2016.

MATERIALS AND METHODS: Between the years 2010 to 2016, 22 patients diagnosed with stage 1-3 supraglottic squamous cell carcinoma, according to the American Joint Committee on Cancer (AJCC), TNM Staging system. The patients underwent supraglottic endolaryngeal CO2 laser laryngectomy (ELSL) were researched retrospectively in the Department of Otorhinolaryngology University Uludağ.

RESULTS: 22 patients enrolled to the study. Nine of the patients had preoperative tracheostomy. Only one patient had local recurrence and again treated with partial surgery. Totally we had %100 percent of local control and the patients has nearly 36 months disease free survival. In the paper detailed surgery types and the follow-up of all patients were written detailed in tables.

CONCLUSION: Supraglottic laryngectomy with endolaryngeal CO2 laser surgery (ELSL) provides excellent control of the surgical site with microscope and depth of resection is done with palpation. Duration of the surgery is shorter, early oral feeding time and low percentage of tracheostomy are the benefits of the surgery according to the conventional surgical techniques. This technique is appropriate for the selected patients diagnosed with supraglottic larynx carcinoma.
Extramedullary plasmocytoma of the larynx: a case report.

A. Boumed’(1), Y. Rochdi(2), A. Raji(2)

(1) CHU Fort-de-France, Martinique, Fort-de-france, Martinique, (2) CHU Mohammed VI, Marrakech, Morocco

Extramedullary plasmocytoma is uncommon, accounting for only 3% of all plasma cell neoplasms. Most lesions occur in the head and neck, primarily in the upper aerodigestive tract; only a minority occur in the larynx. We report the case of a 53-year-old man who presented with a recent history of dysphagia and intermittent hoarseness. Physical examination identified a submucosal epiglottic mass. Biopsy indicated that the mass was plasmacytoma. The diagnosis of extramedullary plasmocytoma was confirmed after a general work-up including serum protein electrophoresis and immunoelectrophoresis that showed no monoclonal protein. Urine was free of Bence-Jones protein. Systemic X-ray examination, abdominal ultrasonography and bilateral bone marrow biopsies did not reveal dissemination of the disease. The patient was treated with radiotherapy at the dose of 50 Gy, and the tumor was eradicated. The patient remains disease free.

EMP is a rare plasma cell malignancy of soft tissues. Involvement of the larynx is especially rare. The diagnosis is based histopathologic findings that may be difficult in some cases. Subsequent diagnostic work-up is necessary for establishing or excluding other sites of involvement. Radiotherapy, often, as in this case, is effective for eradicating local disease. Close control is needed to deal with any recurrence or dissemination.
LARYNGEAL OR HYPOPHARYNGEAL TUMORS: EVALUATION OF A NEW DIFFUSION-MRI BIOMARKER IN THE PREDICTION OF NEOADJUVENT THERAPEUTIC EFFECT.

A. Coffre*(1)

(1) CHU Grenoble, Grenoble, France

Background:
Evaluating laryngeal and hypopharyngeal tumors early evolution with imaging is a challenge for surgeons, since it highly influences patient management. Most patients with T2b/T3/T4 cancers are suitable for non-surgical larynx preservation with chemoradiotherapy. Patients who have a partial response to treatment should have a neck dissection. Currently, the role of PET-CT as imaging modality for these cases remains debatable. In this prospective study, we intended to evaluate the role of a new diffusion-MRI biomarker, which allows analysis of high angular resolution diffusion-weighted images, the apparent fibre density (AFD) coefficient.

Methods:
Study ethics approval was obtained from our institutional review board. Fifteen patients (3 women) aged 18 or over, were enrolled in this study with a history of laryngeal (9 patients) or hypopharyngeal (6 patients) tumors with histological proof and they had undergone preoperative MR scans before management. The parameters of the diffusion sequence were b-value of 1000s/mm²; 32 directions; voxel size: 2mm isotropic; scan time: 9’31”. AFD was calculated with the constrained spherical deconvolution model. Post-processing steps include delimitation of the tumor process on AFD map with the region of interest (ROI) method. Quantitative analyses using Mann-Whitney test were performed. Statistical analysis included accuracy parameters and inter-observer agreement.

Results:
All patients were treated by neoadjuvant therapies, and the post-therapeutic tumor regression rate was determined.

Three patients (20%) were categorized into the non-respondeur group.

The AFD was significantly higher in tumors associated with good response (0.75 ± 0.12) than in AFD value and the chemoradiotherapy response, as defined on the residual tumor (p≤0.001). The inter-reader agreement was good for observers (k=0.815).

Conclusion:
AFD has the potential to distinguish hypopharyngeal and laryngeal tumors with good chemoradiotherapy initial response, providing specific information regarding the intra-cellular compartment in head and neck tumors.
Novel Function-preserving Operation for T4a Laryngeal Cancers with Special Emphasis on Vocal Cord Paralysis Case - A Report on Two Cases -


(1)Miyagi Cancer Center, Natori, Japan, (2)Miyagi Cancer Center, Sendai, Japan, (3)Miyagi Cancer Center, Sendai, Japan, (4)Tohoku University Hospital, Sendai, Japan

PURPOSE

The purpose of the presentation is to demonstrate our new surgical techniques to preserve laryngeal function for T4a laryngeal cancers and to have this operation evaluated. With a background that there is no standardized organ-preserving surgery for T4a laryngeal cancers with vocal cord paralysis which is able to maintain the essential laryngeal functions, viz. articulation and deglutition, we contrived a new surgical method which enabled us to realize this goal.

MATERIALS AND METHODS

We conducted a novel two-staged surgery, which had been approved by IRB at Miyagi Cancer Center, for 2 cases, both being 67 y/o men, of T4a laryngeal cancer. One of them was T4a with vocal cord paralysis, which rendered the standard operation for organ preservation impossible. The other one was a T4a case without vocal cord paralysis which might have been a candidate for CHEP surgery, but which was not actually the case due to lack of such facilities in this region. Both patients aspired to have their laryngeal function preserved.

After obtaining full informed consents we conducted the operation. In the first stage, extended vertical partial laryngectomy was performed including resection of the affected thyroid, arytenoid, and cricoid cartilages, followed by local closure of the hypopharynx. Additionally, laryngeal suspension surgery and cricopharyngeal myotomy were performed in addition to suturing the epiglottis with the intact arytenoid cartilage to enhance swallowing function. In the second stage, airway reconstruction was added using a local skin flap.

RESULTS

The first case is free from local tumor recurrence and doing well with the functioning larynx at the 12th postoperative month, and the second patient is in the same condition at the 8th month postoperatively.

CONCLUSION

We, a combined team of head and neck surgeons and plastic surgeons, performed an innovative operation on patients with advanced laryngeal cancer who aspired to maintain their laryngeal function. Our method comprised radical tumor resection and a well-devised suturing method combined with conventional deglutition improvement operation. The patients' laryngeal function has remained favorable after operation. We believe our new surgical treatment, with further refinement, should be a strongly recommended option for patients with advanced-stage laryngeal cancer and vocal cord fixation who wish to have their laryngeal function conserved.
Oncologic and functional outcomes of TLM for treatment of glottic carcinoma

D. Pedregal Mallo*(1)

(1) Hospital Universitario Central de Asturias (Oviedo-Spain), Spain

Department of Otolaryngology, Hospital Universitario Central de Asturias (Oviedo-Spain).

Introduction: The Transoral CO2 Laser Microsurgery (TLM) in the treatment of laryngeal carcinomas has been used for decades. TLM has become the standard approach for treatment of early-stage tumours in most institutions due to their better functional results with less local complications. The purpose of this study was to analyze the oncological and functional results of TLM in the treatment of early glottic tumours.

Material and methods: We present a retrospective study of 123 patients with glottic carcinoma treated with TLM in our Department of Otolaryngology, at the Hospital Universitario Central de Asturias, from 1998 to 2013. The variables included in this work were: age, sex, histology and location of the tumours, the consumption of tobacco and alcohol, the familiar and personal history of cancer, the disease stage, the histological grade, the post-operative complications and the incidence of relapse and second primary malignancy. Patients with a minimum follow-up of 18 months were included. All data were analysed with the help of the SPSS 19.0 statistical software package.

Results: 121 patients were men and 2 women. The mean age was 64 years. 84% and 65% of the patients had a history of moderate-heavy smoking and alcohol consumption, respectively. Eight patients presented a carcinoma which was placed in the anterior commissure. Following the European Laryngological Society’s criteria, the corectomies was sorted as follows: type I coroectomy in 12 patients, type II in 34, type III in 38, type IV in 11 and type V in 28. The distribution by tumoral stage was: Stage I (112 patients), stage II (11). The mayor post-operative complications were bleeding (4 cases), respiratory infection (2) and the need of tracheotomy (2). 19 patients had a second primary malignancy (8 in lung, 3 in head&neck and 8 in other locations). 25 patients had a local relapse (12 were treated with a total laryngectomy, 9 with rescue TLM and 4 with radiotherapy). The larynx preservation rate was 87%. The 5-year disease-specific survival rate was 90%. The most important factors with influence in the prognosis and mortality were male sex, higher tobacco and/or alcohol consumption, the disease stage according to the TNM system, and the positive margin status.

Conclusions: TLM is a minimally invasive modality with good oncologic and functional outcomes, with few complications, in early glottic carcinomas.
Onco logic results of the surgical salvage of recurrent laryngeal squamous cell carcinoma: emerging role of supracricoid partial laryngectomy

A.De virgilio*(1), A.Greco(1), M.De vincentiis(1)

(1)'Sapienza' University of Rome, , Italy

BACKGROUND:
Several studies in the last decade evaluated conservative surgical procedures and, in particular, supracricoid operations as an alternative to total laryngectomy for the salvage of recurrences of laryngeal squamous cell carcinoma (SCC) after a first attempt of organ preservation.

METHODS:
The medical records of 68 consecutive patients diagnosed with the first recurrence of a laryngeal SCC at the Catholic University of Rome, Policlinico Agostino Gemelli and at the Policlinico Umberto I, University of Rome La Sapienza from 2004 to 2010, who were treated primarily through an endoscopic (laser CO2) or a nonsurgical function-preserving strategy, and surgically salvaged with a curative intent by a total laryngectomy or a supracricoid partial laryngectomy, have been retrospectively evaluated. Patients with nonsquamous primaries, patients with known distant metastases or not eligible for a salvage treatment with a radical intent, patients who did not undergo follow up, and patients salvaged with different modalities (radiotherapy, endoscopic surgery) were excluded from this study.

RESULTS:
Starting from the date of primary treatment, the OS* rate was 79% and the DSS rate was 82% at 3 years. Starting from the date of salvage treatment, the OS rate was 74% and the DSS* rate was 80% at 2 years. The survival was not affected by the primary treatment or by salvage modality. The only parameter always keeping a prognostic value is the involvement of resection margins of salvage surgery. Patients with early relapse seem to have a worse prognosis than patients with a delayed relapse (p = .05 at Cox multivariate analysis and p = .048 at Wilcoxon test for overall survival [OS] from the primary treatment).

CONCLUSION:
Supracricoid operations, if the indications are careful, can prove reliable salvage procedures.
Partial laryngectomies-organ preservation option

P. Spiric*(1)

(1) University clinic center RS, Banja luka, Bosnia and Herzegovina

Total laryngectomy as a treatment for various diseases of the larynx opened surgical era in laryngology. 20th century offered a range of partial laryngectomies as a organ preservation treatment mainly for malignant diseases of the larynx and pharynx. Modern diagnostic tools and surgical instruments made more advanced surgical techniques possible. With beginning of radiotherapy and chemotherapeutic treatment new strategy replaces the conventional surgery. It seemed that was the perfect solution to treat malignant diseases of head and neck. But! After decades of use, we realized limitations of this approach, so we are witnessing renaissance of old techniques improved with new technical possibilities (laser ...).

Today we have to choose and compare the best partial laryngectomy techniques to radiotherapy and chemotherapy.

The aim of this instructional course, was to present the best surgical solution for a certain stage of throat cancer as organ preservation technique. We will present whole series of partial laryngectomys as well as describe the most suitable skin incision, the best tumor site access and the best way of reconstruction. We also want to stress necessity to skip the old dogmatic rules in the head and neck surgery. We will discuss relation of partial laryngectomy with neck dissection and ways to preserve the reconstruction and perform the dissection at the same time. Also, attention will focus on preoperative and postoperative treatment strategies, feeding and rehabilitation. We will emphasize the importance of joint decision-making, with radio-oncologist and oncologist. The main goal would be to offer the possibilities to choose the best for patients.
Partial pharyngolaryngectomy in advanced hypopharyngeal cancer: 57 consecutive reconstructions with infrahyoid flap

E.Muratori*(1), G.Dolivet*(2), S.Cortese(2), M.Roch(3), R.Mastronicola perna(2), E.Beulque(2), R.Karunna(2), A.Deganello(4)

(1)Azienda Ospedaliero-Universitaria Careggi, Firenze, Italy, (2)Institut de Cancerologie de Lorraine, France, (3)Centre Hospitalier Universitaire de Nancy, France, (4)Azienda Ospedaliero-Universitaria Careggi, Florence, Italy

Purpose of the study. Hypopharyngeal cancer treatment is a major issue in head and neck cancer mainly because of late diagnosis and poor prognosis. Starting from the total pharyngolaryngectomy, many techniques have been described to preserve laryngeal function and improve the quality of life. We evaluated a cohort of advanced hypopharyngeal squamous cell carcinoma, treated with conservative surgery, reconstruction with infrahyoid flap and adjuvant therapies.

Materials and methods. We used partial laryngopharyngectomy and adjuvant therapies to treat fifty-seven patients with selected stage III-IV hypopharyngeal squamous cell carcinoma from November 1994 to December 2011. Clinical examination and speech therapy evaluation were used for estimation of laryngeal function.

Results. All patients received a partial laryngopharyngectomy. All patients underwent neck dissection; 56 patients received bilateral neck dissection. Reconstruction was achieved by infrahyoid flap. Five-year overall and disease-specific survival rates were 50,9% and 71,7%, respectively. We obtained a laryngeal function preservation in the majority of cases with tracheal tube removal in 52 patients (91,2%) and an exclusive oral feeding in 39 patients (68,4%).

Conclusion. Selected even if advanced carcinomas of the hypopharynx maybe treated with partial laryngopharyngectomy with reconstruction with infrahyoid flap. Both oncological and functional results showed good outcomes. The use of a pedicled flap may be considered in fragile patients.
Preserving function on laryngeal and hypopharyngeal carcinomas: the importance of selecting the most appropriate treatment.

L. Rodrígáñez*(1), A. Castro(1), J. Gavilán(1)

(1) University Hospital of La Paz, Madrid, Spain

Introduction

Total laryngectomy has been the standard surgical treatment for advanced laryngeal carcinoma for many years. Different strategies to preserve laryngeal functions has been developed to improve patients quality of life. Conservative surgical techniques, or partial laryngectomies, constitute an oncologic alternative for appropriately selected patients, achieving similar local control and survival rates to total laryngectomy but with the advantage of function preservation. Organ preservation strategies based in chemo-radiotherapy (CRT) are reported to achieve similar oncologic outcomes to surgery but with a higher economic cost and with notable toxic side effects.

In this study, we present our long-term results regarding larynx function and quality of life with both types of laryngeal preservation strategies (CRT protocols and partial laryngectomies) in patients with laryngeal and hypopharyngeal carcinomas.

Material and methods

A retrospective review of the medical records of every patient who underwent a partial laryngectomy or a CRT organ preservation protocol between 1990 and 2009 was performed. Patients with T1 tumors and those who chose treatment against medical criteria were excluded. A total of 85 patients were included of whom 41 received CRT and the remaining 44 underwent surgery (26 patients underwent horizontal supraglottic laryngectomy while 18 patients underwent a supracricoid laryngectomy).

Data regarding demographics, tumor stage, and functional results were recorded. Minimum and median follow-ups were 20 and 72 months, respectively. Patients alive and with a functional larynx were contacted and 75% answered a Quality of Life (QoL) questionnaire including EORTC-QLQ, MDADI, and VHI.

Results

Similar functional larynx preservation rates were found in both groups, although it seems to be more stable over the time in the surgery group in which larynx function remains stable after the third year (73%), whereas in the CRT group lost of the function is seen after the fifth year (67% and decreasing).

QoL scores of the different questionnaires were quite high for both populations, with minimal differences between them. Pain, teeth diseases and thick saliva were statistically greater in the CRT group in comparison with the surgery group (p<0.01; p<0.03; p<0.04 respectively).

Conclusions

Selecting the most appropriate treatment for each patient and tumor is crucial to achieving excellent oncologic results. In some cases, total laryngectomy is the best option but, when oncologically possible, organ preservation protocols accomplish fabulous long-term functional
outcomes. Partial laryngectomies properly indicated and performed obtain more stable functional results, at a lower cost than CRT protocols, and with an outstanding quality of life.
RESULTS OF RECONSTRUCTION OF SUBTOTAL PHARYNGO-LARYNGECTOMY USING A FASCIOCUTANEOUS FREE FLAP WITH CARTILAGE GRAFT

W.Ghanem*(1), Q.Qassemyar(1), F.Kolb(1), F.Janot(1), S.Temam(1), M.Julieron(1)

(1)Gustave Roussy, France

Purpose of the study:
Subtotal subcricoid HemiPharyngo-laryngectomy (SSHPL) with reconstruction using a fasciocutaneous free flap armed with cartilage graft aims to avoid permanent tracheostomy while still maintaining the laryngopharyngeal functions.

We modified Urken’s technique described in 1997, and we hereby report the oncological and functional outcome of our study.

Materials and methods:
Retrospective study including fifteen men of mean age of 55 years [41-65] operated on between 2001-2016.

Fourteen patients had a squamous cell carcinoma and one had a sarcoma of the piriform sinus classified: [1T2, 7T3 and 7T4a, 9N2b, 2N1 and 4N0].

Six patients had three cycles of neo-adjuvant chemotherapy without response in the context of larynx preservation protocol.

All patients had a post-operative radiotherapy (n=5)/ radiochemotherapy (n=10).

The average follow-up was six years [1-6]. Specific survival included death caused by cancer or SSHPL complications.

There was retrospective functional evaluation in ten patients and prospectively in five.

Results:
We had: pT4a (n=8), pT3(n=6), pT2(n=1), R1(n=4), R0(n=11), pN0(n=3), pN2b(n=12), capsular rupture (n=8).

There were no locoregional recurrences. Two patients died due to pulmonary metastasis two and four years after surgery. One patient died due to inhalation pneumonia three years after surgery.

Overall and specific survival rates three years after surgery were 70% and 80%, while after 5 years they were 60% and 70%. Six patients later died from general reasons not related to their disease. Five patients are alive, four of them without evolution [4-38 months] and one presents a peritoneal carcinoma three years after SSHPL.

Mean decannulation was at six months [1-14 months] with two patients needing endoscopic dilatation. One total pharyngolaryngectomy for a stenosis was required at 18 months after SSHPL. One tracheotomy was performed six years later for Pneumonia. All decanulated patients recovered satisfying voice quality. The first deglutition attempt was at 30 days on average [15-90 days]. False routes were frequent, needing prolonged speech therapy treatment. Withdrawal of feeding tube was done at nine months [1-24 months].

Conclusion:
SSHPL with reconstruction using an armed fasciocutaneous free flap avoids total pharyngolaryngectomy with good oncologic results. However, tracheotomy is extended and deglutition recovery is long with high risk of false routes. These complications justify that such surgery should be realized only on selected patients with no co-morbidities.
RESULTS OF SURGICAL TREATMENT IN POST-INTUBATION LARYNGOTRACHEAL STENOSIS

B.Matos*(1), G.Matos(2), L.Terzian(3), M.Resende(3), M.Dutra(3), A.Andrade jr.(3)

(1)hospital Santa Marcelina, São paulo, Brazil, (2)Faculty of Medicine of ABC, , Brazil, (3)Santa Marcelina Hospital, , Brazil

Introduction

Ventilatory assistance, each time more and more frequent in intensive care units, requires the use of endotracheal or tracheostomy tubes. In addition, technological and scientific advances, allowing an increase in survival, prolong this assistance, from which result sequels, among them, one of the most common in our environment is laryngotracheal stenosis.

Objective

To analyze the results of the surgical treatment of the cases operated from 1990 to 2016 at the Head and Neck Surgery Service of Santa Marcelina Hospital - São Paulo – Brazil.

Casuistry and method

Retrospective survey of electronic medical records by the MV System of patients submitted to surgical treatment of post-intubation stenosis from 1990 to 2016.

The stenoses were classified by the McCaffrey classification, being divided in group A and B, as for the mobility of the vocal cords. The techniques of stenosis correction were the technique of resection and cricotracheal or thyrotracheal anastomosis and enlargement techniques with anterior laryngoplasty with the hyoid bone flap and posterior laryngoplasty with costal cartilage graft. The evaluation of the results, regarding airway permeability, was classified as excellent or good; Satisfactory, regular and poor (Pearson & Gullane); Evaluation of vocal cord mobility and voice evaluation was considered normal, abnormal, but intelligible and aphonie or non-intelligible (Cotton).

Results

The major cause of intubation was traumatic brain injury in 75% of the patients; other causes were bronchopneumonia, sepsis, encephalitis and myasthenia gravis. The highest incidence occurred in the age group of 21 to 30 years and in the male sex. Resection and cricotracheal anastomosis were performed in 60 cases, laryngotracheal anastomosis in 32 cases and enlargement techniques were used in 48 cases. As to airway permeability, it was excellent or good in 78 patients in group A and 19 in group B, and was satisfactory in 14 of group A, 17 of group B and was poor in 12 of group B. Tracheostomy was performed before surgery in 33.5% of cases. The most frequent complications were infections in 5% (local and pulmonary), subcutaneous hematoma 2%, restenosis 3% and zero of mortality.

Conclusion

Surgery to correct laryngotracheal stenosis is quite complex, and the surgeon will have to have a thorough knowledge of the upper airway, but the results are very encouraging with patients returning to normal social life.
Ten-year experience of transoral en bloc epiglottectomy by transpre-epiglottic space approach

M. Liu*(1)

(1) Dept of ENT&Head-Neck surgery, Second hospital of Harbin Medical University, Harbin, CHINA, Harbin, China, People's Republic of

Purpose of the study

Piece meal resection of epiglottic carcinomas (EC) is still acceptable nowadays. However, this maneuver is not in accordance with the oncologic principles. The present modified technique allows an en bloc removal of EC via pre-epiglottic space.

Materials and methods used

From June 1, 2006, to June 1, 2016, 48 patients with clinical T1-2N0M0 EC were treated by CO2 laser transorally in our department, and all tumors were located on the laryngeal face of the epiglottis. En bloc resection of epiglottis was performed for all cases by using a modified technique which is composed of following steps: 1) surgical views were chosen by shifting the positions of the laryngoscope, unnecessarily to expose entire epiglottis; 2) the first view is for the mucosa incision on the plicae glosso-epiglottica, which allows the incision into the pre-epiglottic space; 3) identification of landmarks in the space is to find the upper edge of thyroid cartilage and “mucosal infra epiglottic tubercle recess”, until vocal cords become visible; 4) the second view is to cutting either side of ary-epiglottic fold which meets medially to first incision; 5) the epiglottis is turned over allowing the surgeon to check the tumor and cut with margin of safety. Optional neck dissections (II, III) were performed for the first 17 cases at the same time of transoral CO2 laser surgery. “Wait and see” policy was applied for other cases.

Results:

En bloc resection of EC was performed for all cases. The follow-up for this study covers a period ranging from 6 months to 10 years postoperatively. Among 48 patients, 3 cases had local recurrences, 2 of them were underwent additional repeated excisions and another with total laryngectomy. The incidence of lymph node metastasis was 11% (2/17) in neck dissection group and 10% (3/31) for the “wait and see” policy. Compared to the open technique, the patients treated by CO2 laser had better QOL in terms of the time of naso-feeding or hospitalization. Overall survival rates were much increased for this modified technique.

Conclusions:

En bloc resection of epiglottis can be performed by transpre-epiglottic space approach. Identification of the landmarks in the space allows the operation to be done without exposure of the tumor. Transpre-epiglottic space approach for en bloc resection of EC by CO2 laser is a technique in agreement with the oncologic principles.
The "survival / laryngeal preservation" trade-off in advanced laryngeal cancer: from the otorhinolaryngology patient to the managing physician.

O.Laccourreye*(1), D.Malinvaud(1), P.Bonfils(2), M.Ménard(3), P.Giraud(4)

(1)Université Paris Descartes Sorbonne Paris Cité, HEGP, APHP., Paris, France, (2)Université Paris Descartes Sorbonne Paris Cité, HEGP, Dept oF Otorhinolaryngology H&N surgery, HEGP, APHP, Paris, France, (3)Service ORL, HEGP, APHP., Paris, France, (4)Université Paris Descartes Sorbonne Paris Cité, Service de Radiothérapie - Oncologie, HEGP, APHP., Paris, France

The "survival / laryngeal preservation" trade-off in advanced laryngeal cancer: from the otorhinolaryngology patient to the managing physician.

Le troc "survie / préservation" dans les cancers de stade avancés du larynx: du patient ORL au médecin référent.

Background: To document trade-off between survival and laryngeal preservation in advanced-stage laryngeal cancer amenable to chemoradiation or total laryngectomy. Material and Methods: Prospective analysis based on a questionnaire filled by 209 laryngeal cancer specialists and 269 volunteers from an otorhinolaryngology clinic. Results: 34.5% of responders would not consider any decrease in survival to preserve their larynx. This percentage varied from 52% in otorhinolaryngologists to 27.3% in radiotherapists and 28.6% in volunteers (p < .0001). Among the responders prepared to trade, the percentage of survival they were willing to trade to preserve their larynx varied from 5% to 100% (median: 30%). On univariate analysis, three variables significantly affected this percentage: the living status (single or not), the existence of children and the group (volunteers, radiation therapists, otorhinolaryngologists,) to whom the responders belong. For the 313 responders willing to considered the larynx preservation strategy with chemoradiation (65.5% of the population), the accepted reduction in percentage survival ranged from 5% to 100% (median: 30% - s.d.: 23%). On univariate analysis (Table 3), three variables significantly affected the percentage survival that these responders were willing to trade in order to preserve their larynx: median percentage varied from 25% for those who were single to 20% for those who were not (p = .008), from 20% for those who had children to 30% for those who had not (p = .002) and between 10%, 20% and 25% (p < .0001) for radiation therapists. Conclusion: The significant variations noted should develop modes of practice which cater to this and stimulate further research in this field.
The role of supracricoid laryngectomy in treatment of laryngeal cancer

L.Ky*(1)

(1)National ENT Hospital, Hanoi, Vietnam

The role of supracricoid laryngectomy in treatment of laryngeal cancer.

Le Minh Ky*, Tong Xuan Thang*, Vu Truong Phong*, Vo Thanh Quang*

* National ENT Hosp. Hanoi, Vietnam

Supracricoid laryngectomy with Cricochoidepiglottopexy (SCL-CHEP) is an organ-preservation surgery indicated for early and selected advanced laryngeal cancers. With the advancement of transoral laser microsurgery, it has been played a role in treatment of laryngeal cancer.

Purpose: This study was to evaluate retrospectively the oncologic results of supracricoid laryngectomy, and to review indication of SCL in current practice. Patients and methods: the retrospective study on 115 patients had supracricoid laryngectomy, at National ENT hospital, Hanoi, from 2008 to 2012. Two procedures were applied: Supracricoid laryngectomy with Cricochoidepiglottopexy modified and Supracricoid laryngectomy with Epiglottoplasty. These procedures was performed with preserving posterior part of thyroid cartilage. Results: The most frequent age of patients was from 50 to 59 (98%), male was predominant (96%). 100% of lesions located at glottic level. Anatomopathology were squamous cell carcinoma. Indication: T2 stage was of 63,5%, T1b 36,5%. Ipsilateral or bilateral neck dissection was perform in 85,2%. The average time of hospitalization was 18,5 days. Post-op heamorrage complications was 4,3%. No post-op death report was noted. Decanulation was achieved 98%. Time of removing gastric tube was from10 to 31 days. The 3 years overall survival was 87%, 5 years was 53,9%. The 3 years survival with laryngeal preservation was 81%, 5 years was 79%. The local control after 3 years was 81 %, after 5 years was 79 %. 3 cases had distal metastasis (liver and brain). Conclusion: Supracricoid laryngectomy with CHEP modified represents an effective technique while maintaining physiologic speech and swallowing, in select patients with early and moderate stage laryngeal cancer. There is a acceptable results and good functional recovery with low morbidity.
Transoral CO2 laser treatment for early glottic squamous cell carcinoma with anterior commissure involvement

S.He*(1), Z.Yu(1)

(1)Nanjing Tongren Hospital, School of medicine, Southeast University, China, People's Republic of

Objective To explore the feasibility and effect of CO2 laser treatment for early glottic squamous cell carcinoma with anterior commissure involvement. Methods Twenty-eight Patients with T1a (18 patients) or T1b (10 patients) glottic SCC who underwent transpolar CO2 laser resection as the primary modality of treatment were reviewed from January 2008 to December 2014. All patients are male and the age ranged from 46 to 81 years old. The patients weren’t performed any others treatment and the pathological results are all squamous cell carcinoma. Preoperative enhanced CT scan was performed to assess the status of the tumors and the lamina of thyroid cartilage. All the patients without the lamina of thyroid cartilage involved underwent transoral CO2 laser resection. Of them, two patients underwent the ipsilateral selective neck dissection. Result All the patients were followed-up for 12 to 60 months and no recurrence. Granulation occurred four to six weeks post-operation in all patients. Among them, granulation was disappeared automatically three to six months in 24 patients and was resected with local anesthesia in others 4 patients, which the pathological results are inflammatory lesion. The adhesion of the anterior of the vocal cord result in the quality of voice, but the patients can communicate by telephone. Conclusion Transoral CO2 laser treatment for early glottic squamous cell carcinoma with anterior commissure involvement is an ideal procedure to make the patients recovery quickly. The endoscopic technique and satisfied exposure is the key for the successful operation.
Underweight and Risks of Larynx Cancer: A Nationwide Population-based Study

Y. Joo*(1)

(1) The Catholic University of Korea, , Korea, South

Background: Low BMI has been associated with head and neck cancer risk. BMI < 18.5 kg/m2 has the risk of head and neck cancer (HR; 3.31, 95% CI 1.40–7.82).

Objectives: To investigate the association of BMI with the risk of larynx cancer according to smoking status using the sample cohort data from the Korean National Health Insurance.

Methods: Patients with laryngeal cancer (ICD-10: C32) between Jan 1, 2007 and Dec 31, 2008 were retrospectively identified from the Korean Health Insurance claims database. To be included in the study population, patients were required to have had a histological diagnosis within one year before treatment. Patients treated with prior radiotherapy, surgery, or chemotherapy were excluded to reduce heterogeneity.

Results: The study cohort included 3,731 patients. Patients with underweight (BMI<18.5kg/m2) were at higher risk for incidence of laryngeal cancer than normal weight (18.5kg/m2<BMI<23kg/m2) (Hazard ratio [HR], 1.314; 95% confidence interval [CI], 1.124–1.536) after adjusting for confounders. Patients with current smoker (HR, 2.313; 95% CI, 2.158–2.479) and ex-smoker (OR, 1.436; 95% CI, 1.313–1.569) were also at higher risk for incidence of laryngeal cancer. The risk was greater in the higher category of underweight and current smoker (HR 3.53, 95% CI 2.96–4.20). Underweight was an independent risk factor for larynx cancer in subjects with aged 40-64 years and never smoker.

Conclusion: Underweight was an independent risk factor for the risk of laryngeal cancer. These findings suggest that underweight is associated with biological effects that contribute to the development of laryngeal cancer.
A New Translational Research Model for Mesenchymal Stem Cells of the Rabbit Palatum and 3 Dimensionally Printed Scaffolds for Head and Neck Reconstruction
B.Kim*(1), C.Baek*(1), J.Lee(1), W.Park(1)
(1)Samsung Medical Center, Seoul, Korea, South

Background: Hard palate, developed by embryo neural crest stem cells, is a tissue with strong regenerative abilities and has been considered an abundant source of stem cells forming various mesenchymal tissues of head and neck in rat and human. This research attempts to confirm the presence and properties of stem cells/mesenchymal progenitor cells obtained from the hard palate of rabbits, which are the most suitable animal candidate for regenerative translational research with regards to the regeneration of the bone and cartilage of the head and neck area using tissue engineered construction.

Methods: After Isolation and primary culture of rabbit hard palate stem cell, cell morphology, cell proliferation, immunophenotype, triplelineage differentiation potential, ability of culture and triplelineage differentiation in 3dimentionally printed polycaprolactone scaffolds were evaluated.

Results: We confirmed for the first time the presence and properties of Nestin-, Sox2-, p75-positive mesenchymal stem cells obtained from the hard palate of rabbits. Surface markers, CD29, CD44, CD81 were present and CD11b, CD34, CD90 were absent on the palatal stem cells. We could expand the stem cells and differentiate them into cells of mesenchymal lineages (bone, cartilage, fat) in vitro and in 3D printed PCL and PCL/TCP scaffolds.

Conclusion: These data showed neural crest stems originally forming the most of mesenchymal tissue of head and area in immunocompetent rabbit is a new promising tissue for stem cell-driven tissue engineering research combining scaffolds for head and neck defects.
A NOVEL ROLE FOR NANOG AS AN EARLY CANCER RISK MARKER IN PATIENTS WITH LARYNGEAL PRECANCEROUS LESIONS


(1)Hospital Universitario Central de Asturias-University of Oviedo, Oviedo, Spain, (2)Instituto Universitario de Oncología del Principado de Asturias-Universidad de Oviedo, Oviedo, Spain, (3)Hospital Universitario Central de Asturias, Oviedo, Spain, (4)Instituto Universitario de Oncología del Principado de Asturias, Oviedo, Spain, (5)CIBERONC; IUOPA, Oviedo, Spain, (6)IUOPA-Universidad de Oviedo, Oviedo, Spain, (7)IISPA-IUOPA-CIBERONC, Oviedo, Spain

Purpose of the study:

NANOG is a master regulator of embryonic stem cell pluripotency, found to be frequently aberrantly expressed in a variety of cancers, including laryngeal carcinomas. This study investigates for the first time the role of NANOG expression in early stages of laryngeal tumourigenesis and its potential utility as cancer risk marker.

Materials and methods

Immunohistochemical analysis of NANOG protein expression was performed on a set of 82 laryngeal dysplasias. In addition, an independent cohort of 86 patients with a diagnosis of laryngeal dysplasia was used as a validation series. Patients must meet the following criteria to be included in the study: i) pathological diagnosis of laryngeal dysplasia; ii) with lesions of the vocal folds iii) no previous history of head and neck cancer; iv) complete excisional biopsy of the lesion; v) a minimum follow-up of five years (or until progression to malignancy occurred). Immunostaining was scored blinded to clinical data by two independent observers as negative (0), weak (1), moderate (2) and strong protein expression (3).

Results:

During the follow-up period, 24 (29%) of 82 patients of the initial series developed an invasive carcinoma at the same site of the previous premalignant lesion, and in 10 (12%) patients of the validation series. NANOG expression was detected in 49 (60%) of 82 laryngeal dysplasias, whereas expression was negligible in patient-matched normal epithelia. Strong NANOG expression was found in 22 (27%) lesions and was established as cut-off point, showing the most robust association with laryngeal cancer risk (P = 0.003) superior to the histological classification (P = 0.320) the current gold standard in the clinic. These results were further confirmed using the independent cohort of 86 patients with laryngeal dysplasia.

Conclusions:

Our findings uncover a novel role for NANOG expression in laryngeal tumourigenesis, and its unprecedented application as biomarker for cancer risk assessment.
A rare case of extremely high counts of circulating tumor cells detected in a patient with an oral squamous cell carcinoma

R.Mastronicola*(1), X.Wu*(2), M.De carvalho*(3), G.Faure(2)

(1)institut de cancerologie de Lorraine, France, (2)chru, France, (3)chru nancy, France

Despite aggressive regimens, the clinical outcome of oral squamous cell carcinoma remains poor. The detection of circulating tumor cells possesses potential to improve the management of patients with cancer, including diagnosis, treatment strategy, and surveillance. In light of current evidences, the CellSearch® is the most widely used and only Food and Drug Administration-cleared system of detection, which normally find low count.

Case presentation: A 56-year-old white male, with no particular medical history, had been diagnosed a squamous cell carcinoma of oral cavity. According to the imaging results (computed tomography and 18F-fluorodeoxyglucose positron emission tomography / computed tomography) and panendoscopy, the TNM staging has been classified as T4N2M0. A noninterruptive pelvimandibulectomy has been conducted according to the multidisciplinary meeting advices and the postoperative observations were normal. The patient has been found a recurrence by computed tomography because of a painful cervical edema and a trismus 6 weeks after the surgery and died two weeks later. Since the patient was recruited into a clinical research, the detections of circulating tumor cells in 7.5ml peripheral venous blood by using the CellSearch® system have found very high count compared with known relative reports at all three time points (preoperative, 400; intraoperative, 150; postoperative day-7, 1400). Of note, all detected circulating tumor cells were epidermal growth factor receptor negative.

Conclusion: We firstly reported a rare case of circulating tumor cells with extremely high counts from a patient with oral squamous cell carcinoma by using the CellSearch® system. The absolute number of circulating tumor cells might predict a particular phase of cancer development as well as a poor survival, which eventually contribute to the personalized healthcare.
Altered microRNA signature expression in tumor and surrounding peritumor tissue identifies head and neck cancer patients with high risk of recurrence

V. Manciocco*(1)

(1) National Cancer Institute Regina Elena Rome, Rome, Italy

Purpose of the study: Head and neck squamous cell carcinoma (HNSCC) in typically characterized by a high incidence of local recurrences. It has been extensively shown that mucosa from HNSCC patients carries both genetic and gene expression alterations, that are mostly attributable to major etiologic agents of HNSCC. We previously identified a signature of microRNAs whose high expression in tumor is predictive of recurrence. Here, we set out to identify if deregulation of microRNA expression in tumor-surrounding mucosa is predictive of recurrence.

Materials and Methods: We analyzed microRNA and mRNA expression profiling by array on matched tumor, peritumor and normal tissue from, respectively, 66 and 22 HNSCC patients. Expression of selected miRNAs and association with recurrence was validated by RT-qPCR. Correlation between miRNA and mRNAs evidenced the functional pathways mainly impacted by miRNAs in HNSCC.

Results: We identified 35 microRNA deregulated in both tumor and peritumor tissue, compared to normal matched samples. Among them the expression level of 4 microRNA was able to predict local recurrence independently from other clinical variables, either when considered individually or as a group, not only in tumor samples, as previous demonstrated, but also in peritumor tissue. Interestingly, this capability was lost when we analyze their expression in normal samples obtained from surgical resection margins. Of note, the combination of the information on microRNAs signature expression in peritumor and tumor tissue significantly increases its capability to predict local recurrence in HNSCC.

Conclusions: Expression of microRNA in tumor-surrounding mucosa may strongly contribute to the identification of HNSCC patients at high risk of local recurrence.
Antitumor responses by HER-3-reactive CD4 helper T cells combined with HER inhibitor in vitro

T.Kumai*(1), M.Takahara(2), T.Hayahsi(1), H.Kobayashi(3), Y.Harabuchi(4)

(1)Department of Innovative Head & Neck Cancer Research and Treatment (IHNCRT), Asahikawa Medical University, , Japan, (2)Otolaryngology-Head & Neck Surgery, Asahikawa Medical University, , Japan, (3)Department of Pathology, Asahikawa Medical University, , Japan, (4)Department of Otolaryngology-Head & Neck Surgery, Asahikawa Medical University, , Japan

Human epidermal growth factor receptor 3 (HER-3), an oncoprotein, is commonly overexpressed in a variety of tumor including head and neck squamous cell carcinoma. The activation of HER-3 results in proliferation and survival of cancer through MAPK, JAK/STAT, or Akt pathway. In addition, this protein is known to regulate acquisition of resistance by tumor cells towards EGFR inhibitors, therefore, development of a HER-3-targeted therapy is desirable. In this study, we found that HER-3 expression on tumor cells was increased after EGFR inhibition. To establish a novel therapeutic approach for HER-3-positive head and neck squamous cell carcinoma, we identified a HER-3 helper epitope that could elicit effective helper T cell responses to the naturally processed HER-3-derived epitope presented in a HER-3 expressing tumors. This epitope induced potent cytolytic activity of human CD4 T cells against such tumor cells. HER-3-reactive CD4 T cells were existed in both healthy donors and head and neck carcinoma patients. Moreover, pan HER-family tyrosine kinase inhibitor augmented the responses of HER-3-reactive CD4 T cells via upregulation of HLA-DR protein on the surface of tumor cells. Our results revealed the immunogenicity of HER-3, and support the validity of CD4 T cell-dependent HER-3-targeted therapy combined with a broad inhibitor of HER-family.
Application of an electronic nose in the diagnosis of head and neck cancer

K. Kross*(1)

(1) Polyclinique Saint Odilon, Moulins, France

Van de Goor R.M*; van Hooren M.R*; Kremer B* and Kross K.W**

* Maastricht University Medical Centre, Maastricht, The Netherlands

** Polyclinique Saint Odilon, Moulins, France

Purpose of the study: Electronic nose technology (E-nose) is used in various applications such as in food and beverage industry, monitoring of air quality, and detection of explosive and chemical agents. We studied the diagnostic accuracy of volatile organic compounds (VOC) pattern analysis in exhaled breath by means of an E-nose in patients with Head and Neck Squamous Cell Carcinoma (HNSCC). E-nose technology might be of great potential to be a part of the diagnostic process of HNSCC since it is a cheap and non-invasive method.

Materials and methods: An e-nose device was used to collect samples of exhaled breath from patients who had HNSCC of the pharynx, oral cavity and larynx, after which the samples were analysed and compared. Forty seven patients with HNSCC of the larynx, 42 patients with HNSCC of the oral cavity, and 54 patients with HNSCC of the pharynx exhaled through an e-nose for 5 min. An artificial neural network was used for the analysis, and double cross-validation to validate the model.

The control group consisted of 115 patients visiting the outpatient clinic for other (benign) conditions. Air samples were analyzed using an E-nose (Diagnose, C-it, Zutphen. The Netherlands). All subjects were smokers and sober at the time of breath sampling.

Results: An artificial neural network was used for the analysis, and double cross-validation to validate the model. In differentiating larynx carcinoma from the control group, a sensitivity of 81% with a corresponding specificity of 81% was found. When differentiating Oral cavity carcinoma, the sensitivity was 86% with a corresponding specificity of 71%. A diagnostic accuracy of 80% was found when differentiating pharynx carcinoma from the control group.

Conclusion: E-nose application might show promising potential for application in the diagnosis of HNSCC due to its rapid, simple and non-invasive nature.
CD105 EXPRESSION IN GLOTTIC LARYNGEAL SQUAMOUS CELL CARCINOMA

E.Zvrko*(1)

(1)Clinical center of Montenegro, Podgorica, Montenegro

Purpose. There is increasing evidence that CD105-assessed microvessel density (MVD) can be considered an indirect marker of neo-angiogenesis and important prognostic marker in a variety of malignancies. The aim of this study has been to analyze the expression of CD105 in laryngeal squamous cell carcinoma (SCC) localized in glottic region.

Methods. Forty patients who underwent complete excision of glottic SCC were included in this study. Surgical specimens were immunostained for CD105 and MVD was calculated at 400x magnification. The rounded mean value of the vessel count in four fields for each case was used as the final MVD value. Clinicopathologic data were collected retrospectively.

Results. MVD varied among tissue samples from 5 to 21 (median 12.5). The mean MVD assessed by CD105 in considered glottic SCCs was 12.3 (standard deviation= 3.65). MVD was significantly higher in patients younger than 66 years than in a group of elderly (p= 0.02). The mean CD105+ MVD values were significantly higher in T3–T4 tumors (p= 0.001) and those in an advanced TNM stage (p= 0.009). Kruskal-Wallis test identified significant relation between pT stages and CD105- assessed MVD (p= 0.011). The mean CD105-assessed MVD were 15.25 and 11.6 in laryngeal SCC with and without malignancy recurrence, respectively (p= 0.023).

Conclusions. Our data suggest that CD105-assessed MVD may represent an additional prognostic factor in patients with glottic squamous cell carcinomas providing more accurate data to identify patients at risk of loco-regional disease recurrence.
CSC3436 inhibits TWIST-induced epithelial- mesenchymal transition in head and neck squamous cell carcinoma

W.Yu*(1), Y.Lai(2), T.Way(3), C.Chen(4)

(1)Department of Otorhinolaryngology-Head & Neck, Changhua Christian Hospital, , China, Republic of (Taiwan), (2)Institute of Bioinformatics and structural Biology, National Tsing Hua University, , China, Republic of (Taiwan), (3)Department of Biological Science and Technology, College of Life Sciences, China Medical University, , China, Republic of (Taiwan), (4)Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes, , China, Republic of (Taiwan)

Head and neck squamous cell carcinoma (HNSCC) is one of the leading causes of cancer deaths worldwide, especially in male. Many patients die because the recurrence and metastasis of tumor after standard therapy but not the original cancer. The main mechanism of the recurrence and metastasis in cancer cells is related with the phenomenon of Epithelial-mesenchymal transition (EMT) and the tumour-initiating abilities. A recent breakthrough in metastasis research revealed that induction of EMT also generates cells with stem-like properties. CSC3436, a flavonoid derivatives, displays strong and selective growth inhibition on the non-small cell lung and breast cancer cells by inhibiting tubulin polymerization. However, to date there is little evidence to show the possible effects of CSC3436 in HNSCC. Here, we treated CSC3436 in HNSCC FaDu cell- the ectopic expression of TWIST, a key transcriptional factor of EMT, that is triggered EMT and resulted in the acquisition of a mesenchymal phenotype.

Our results showed that CSC3436 can significantly change the cell morphology and the EMT marker (E-cadherin, N-cadherin and vimentin), decrease the expression of EMT transcription regulator (Twist and Snail), CD133 (a marker associated with tumour-initiating ability) and BMI1 (a biomarker of cancer stem cells) in FaDu-pCDH-TWIST cell. We also revealed that how CSC3436 inhibited the molecular mechanism during EMT, cancer stem-like abilities and migration/invasion in FaDu-pCDH-TWIST cell. CSC3436 can inhibit (a) the EMT, cancer stem-like abilities, migration/invasion through blocking Akt/β-catenin pathway. (b) the EMT through blocking the co-occupancy of Twist and BMI1 on the E-cadherin and to repressed E-cadherin transcription activity. (c) recover PTEN that inhibited by BMI1. In the future work, we will evaluate whether CSC3436 can inhibit TWIST-induced invasion in vivo. Therefore, CSC3436 might be applicable to anti-cancer therapy and could be a potential new therapeutic drug for HNSCC.
Detection of circulating tumor cells after surgery for head and neck squamous cells carcinoma: results of 40 patients

R.Mastronicola*(1), G.Dolivet*(2), S.Cortese(2), E.Beulque(2), X.Wu(3), G.Faure(2), J.Merlin(2)

(1)institut de cancerologie de Lorraine, France, (2)icl, France, (3)chru nancy, France

Metastasis is defined as the development of secondary tumor sites related to the ability of tumor cells to detach from primary tumor, to implant in another organ and to proliferate. The detection of isolated or microclustered tumor cells, the evaluation of the prognosis value, and their metastatic potential encounter difficulties. In this study, we focused mainly on the metastatic process related to surgery in epidermoid cancers of the upper aerodigestive tract. Indeed, in this type of cancers, the best method to establish diagnosis is the biopsy assessed by the anatomo-pathological analysis of a sample. The main physical barrier preventing cells from migrating is the membrane of the malignant tissue. During surgery, these barriers are destroyed, facilitating the invasion of the vascular system. Therefore tumor cells can locate in vessels and proliferate at distance from the primitive site, thus forming secondary tumors.

Generally, metastases are detected by imaging or serology at a very advanced stage of cancer disease.

The aim of this study was to detect isolated cells (CTCs) of head and neck squamous cell carcinoma (HNSCC) in blood stream using detection of circulating tumor cells before during and after surgery for HNSCC.

A total of forty patients were enrolled in this study. They underwent head and neck surgery at the Institut de Cancérologie del Lorraine Nancy between April 2014 and April 2015, all for HNSCC. The study was approved by Ethics Committee of patients protection (CPP). The median age was 66 (37 to 84). Concerning the cancer stage: two patients were II, 23 stage III and 15 IV. We taking of a blood sample before, during and after surgery for HNSCC. We have detect CTCs using two different methods: quantitative PCR in real time and Cellsearch system.

For the quantitative RT-PCR we using this markers: Elf3, EphB4, CEA, Ep-CAM, CK 18, CK19, PVA, EGFR, SCCA and GAPDH (p<0.05).

The surgical procedure for stage II and IV HNSCC is at the origin of DTCs in the blood and lymphatic vessels

Pending questions until the end of the clinical study: Is there a correlation between the presence of long lasting circulating cells and the development of distant metastasis?

- Is there an interest for a medical treatment (targeted or not) during the surgical period in order to struggle against those disseminating cells.

Potential clinical significance of tumor cells needs to be further investigated as their presence could affect pre-surgical and post-operative treatments.
Detection of disseminated tumor cells in aspirative drains after neck dissection

R. Mastronicola*(1), G. Dolivet*(2), S. Cortese(2), E. Beulque(3), E. Muratori(4), G. Faure(5), V. Gillon(2), J. Merlin(2)

(1) Institut de cancerologie de Lorraine, France, (2) ICL, Vandoeuvre-les nancy, France, (3) ICL, Italy, (4) ICL, Italy, (5) CHRU nancy, France

The dissemination of individual tumor cells is a common phenomenon in solid cancers. Detection of tumor cells in bone marrow disseminated tumor cells (DTC) and in peripheral blood circulating tumor cells (CTC) in non-metastatic situation is of high prognostic significance. Compared to breast, colon and prostate cancers, the studies on CTC and disseminated tumor cells in head and neck cancers are sparse. The objective of our study was to detect disseminated tumor cells in drains after neck dissection. Fourteen patients undergoing surgery for stages III and IV head and neck cancers were enrolled in this study—twelve presenting with squamous cell carcinoma and two with adenocarcinoma. Redon drain analysis was performed by the Cellsearch method using immunomagnetic and fluorescence approaches. A positivity threshold value was set at 2 DTC/7.5 ml of the sample. Tumor cells were detected in drains of 69% of patients a few days after surgery. The range of quantification was 3–2,094 DTC/7.5 ml and we showed morphological differences between the two types of carcinoma cells. DTC were detected after neck dissection both in squamous cell carcinoma and in adenocarcinoma. Potential clinical significance of tumor cells needs to be further investigated as their presence could affect pre-surgical and post-operative treatments.

C.Yuan*(1), C.Pan(2), F.Chen(3)

(1)Otolaryngology, Kaohsiung, China, Republic of (Taiwan), (2)Department of Otolaryngology, Kaohsiung Armed Forces General Hospital, Kaohsiung, China, Republic of (Taiwan), (3)Department of Pharmacy, Tajen University, Pingtung, China, Republic of (Taiwan)

Oral squamous cell carcinomas are the major causes of death during the last decade because their related metastasis and the difficult treatment. Gefitinib, a tyrosine kinase inhibitor has been reported to reduce metastatic effects on oral cancer treatments. In the present study, we attempt to investigate synergistic effects of gefitinib and combination with EGCG on CAR cells in vitro, and to elucidate the underlying molecular mechanisms associated cell migration and invasion. We found that combination or individual treatments with gefitinib and EGCG synergistically inhibited invasion and migration in CAR cells using transwell invasion and wound-healing scratch assays, receptively. Similarly, gefitinib in combination with EGCG synergistically attenuate enzymatic activity and protein expression of MMP-2 in CAR cells. Furthermore, EGCG and gefitinib individual or combined exposures suppressed the protein expression of p-EGFR as well as phosphorylated protein levels of ERK, JNK, p38 and AKT with inhibitory effects of metastatic actions on CAR cells. Combined effects of EGCG and gefitinib-altered anti-metastatic actions for related gene expression were observed using DNA microarray analysis. Importantly, EGCG is likely to sensitize gefitinib-suppressed phosphorylation of epidermal growth factor receptor (EGFR) in CAR cells in vitro. Taken together, our results suggested that the synergistic actions of metastatic effects in CAR cells after EGCG and gefitinib individual or combined exposures were mediated through mitogen-activated protein kinases (MAPKs) signaling. Our novel findings provide potential insights into the mechanism of synergistic responses of gefitinib and EGCG for progression of oral cancer.
Expression and Significance of CCL20 in Laryngeal Squamous Cell Carcinoma

B.Chen*(1)

(1)Department of Otolaryngology Head and Neck Surgery, Shanghai Ninth People's Hospital, Affiliated to Shanghai Jiaotong University School of Medicine, Shanghai, People's Republic of China

Objective: To evaluate the expression of chemokine CCL20 expression in laryngeal squamous cell carcinoma (LSCC) tissue and peripheral blood, explore their correlation with the clinicopathological features of LSCC.

Methods: LSCC and adjacent normal tissue samples from 70 LSCC patients underwent total laryngectomy were collected, CCL20 expression and its association with clinicopathological features were evaluated by immunohistochemistry. Serum CCL20 expression level of 36 LSCC patients and 42 healthy controls were measured by ELISA, and its relationship with clinicopathological features was evaluated.

Results: CCL20 was detected in all adjacent normal tissue and 66 LSCC tissue by IHC. CCL20 expression level of LSCC tissue was elevated in advanced stage patients (T3+T4, III+IV) and patients with metastatic lymph nodes compared with initial stage patients (T1+T2, I+II) and patients with non-metastatic lymph nodes. Besides, higher expression level of CCL20 in metastatic LSCC cells in lymph nodes was observed compared with that of primary tumor. ELISA results indicated a decrease of serum CCL20 in LSCC patients compared with healthy controls, and the level of serum CCL20 got lower in those LSCC with lymph nodes metastasis.

Conclusion: There may be a concentration gradient of CCL20 between tumor region and peripheral blood. High expression of tumor CCL20 in patients with LSCC may promote the migration and invasion of LSCC cells and facilitate the progression of LSCC. Down-regulation of peripheral serum CCL20 may favor the progression of LSCC.
Expression of E-cadherin and β-catenin in HPV-negative oropharyngeal squamous cell carcinoma


(1) Hospital Universitario Central de Asturias, , Spain, (2) Instituto Universitario de Oncología del Principado de Asturias (IUOPA), Hospital Universitario Central de Asturias, , Spain, (3) Servicio de Otorrinolaringología, Hospital Universitario Central de Asturias, Oviedo, Spain

Introduction and objectives: Among many predictive factors already identified in carcinomas of the oropharynx, some are particularly important and universally accepted, such as the HPV status, while other molecular markers, such as cadherin and catenin expression, are more controversial. Previous studies included tumors from different head and neck sites, few have been focused in oropharyngeal cancers, and none have addressed the prognostic significance of these proteins in a large series of cases in this location with known HPV status.

The aim of this work is to investigate the prognostic significance of E-cadherin and β-catenin expression in large series of HPV-negative oropharyngeal squamous cell carcinoma cases surgically treated in a single institution.

Methods: We studied 241 consecutive patients with oropharyngeal squamous cell carcinoma (135 of tonsillar and 106 of base of tongue origin) who underwent surgical treatment at the Hospital Universitario Central de Asturias between 1990 and 2009.

Tissue microarrays were constructed using three representative areas of each tumor, and expression of E-cadherin and β-catenin was assessed by immunohistochemistry.

Results: E-cadherin and β-catenin expression was evaluable in 232 cases. All but five carcinomas showed some E-cadherin expression and membranous β-catenin expression was present in 223 cases. Nuclear β-catenin expression was observed in 40 cases.

Patients with tumors with low β-catenin expression or with nuclear β-catenin expression had a significantly poorer disease-specific survival (HR=1.5; CI 95% 1.05-2.14; P=0.024, and HR=1.6; CI 95% 1.04-2.49; P=0.033). Patients with tumors with low E-cadherin expression also had a poorer disease-specific survival, although the differences did not reach statistical significance (HR=1.3; CI 95% 0.95-1.9; P=0.096).

In multivariate analysis only the presence of nodal metastasis (HR=2.25; CI 95% 1.4-3.6; P=0.001) and a low membranous β-catenin expression (HR=1.55; CI 95% 1.08-2.23; P=0.017) were significant independent predictors of reduced disease-specific survival.

Conclusions: Our data showed that only the presence of nodal metastasis and a low membranous β-catenin expression were significant independent predictors of reduced disease-specific survival.

Authors: García-Cabo, Patricia; García-Pedrero, Juana María; Allonca, Eva; Fernández-Vañes, Laura; Pedregal, Daniel; Reda, Sara; Álvarez-Marcos, César; Llorente, Jose Luis; Rodrigo, Juan Pablo.

Servicio de Otorrinolaringología, Hospital Universitario Central de Asturias, Oviedo, Asturias, España.
Expression of O-GlcNAc-cycling enzymes in human laryngeal cancer


(1)Medical University of Łódź, Poland, Łódź, Poland, (2)University of Łódź, Łódź, Poland, (3)Medical University of Łódź, Łódź, Poland, (4)University of Łódź, Poland, Łódź, Poland, (5)University of Łódź, Poland, Łódź, Poland

Aberrant protein O-GlcNAcylation may contribute to the development and malignant behavior of many cancers. This modification is controlled by O-linked Beta-N-acetylglucosamine transferase (OGT) and O-GlcNACase (OGA). The aim of this study was to determine the expression of O-GlcNAc cycling enzymes mRNA/protein and to investigate their relationship with clinicopathological parameters in laryngeal cancer. The mRNA levels of OGT and MGEA5 genes were determined in 106 squamous cell laryngeal cancer (SCLC) cases and 73 non-cancerous adjacent laryngeal mucosa (NCLM) controls using quantitative real-time PCR. The level of OGT and OGA proteins was analyzed by Western blot. A positive expression of OGT and MGEA5 transcripts and OGT and OGA protein was confirmed in 75.5% and 68.9% and in 43.7% and 59.4% samples of SCLC, respectively. Higher levels of mRNA/protein for both OGT and OGA as well as significant increases of 60% in total protein O-GlcNAcylation levels were noted in SCLC compared to NCLM (p<0.05). As a result, an increased level of OGT and MGEA5 mRNA was related to larger tumor size, nodal metastases, higher grade and tumor behavior according to TFG scale, as well as incidence of disease recurrence (p<0.05). An inverse association for OGT and MGEA5 transcripts was determined with regard to prognosis (p<0.05). In addition, the highest OGT and OGA protein level was observed in poorly-differentiated tumors (p<0.05). No correlations with other parameters were noted, but the results showed a trend of more advanced tumors to be more frequently OGT and OGA positive. The results suggest that increased O-GlcNAcylation may have an effect on tumor aggressiveness and prognosis in laryngeal cancer.
Features of circulating monocyte subsets in head and neck cancer

K. Sakakura*(1)

(1) Gunma University Graduate School of Medicine, Maebashi, Gunma, Japan

Purpose

Monocytes in peripheral circulation are classified to three subsets according to CD14 and CD16 expressions: classical, intermediate and non-classical monocyte. Since the characteristics of these subsets in cancer patients are still unclear, here we aim to elucidate trends of the 3 subsets in patients with squamous cell carcinoma of the head and neck (SCCHN).

Materials and Methods

Peripheral bloods from SCCHN patients and age-matched normal donors (ND) were collected. Expressions of HLA molecules, various surface receptors, maturation markers and angiogenic proteins in each monocyte subset were analyzed by flow cytometry. Primary tumor samples were stained immunohistochemically with HLA-G MFG-E8 and CD34. Correlations to clinicopathological parameters and survivals were statistically tested.

Results

Total 46 patients and 19 ND were enrolled to this study. In SCCHN patients, ratio of classical monocyte was decreased and mature intermediate and non-classical monocyte were increased. Immunosuppressive HLA-G and PD-L1 expressions in intermediate monocyte from SCCHN patients were significantly higher than those from ND. CD163 expression in peripheral intermediate subset from SCCHN associated with vascular invasion and angiogenic protein MFG-E8 expression in the primary tumors and disease free survival. Moreover, PD-L1 expression in intermediate monocyte correlated to perineural invasion positively, and to overall survival negatively. In non-classical monocyte from SCCHN patients, slan (a marker for patrolling monocyte) expression related to HLA-G and MFG-E8 expression in the tumors, and CD68 showed significant positive correlation to microvessel density in the tumor samples.

Conclusion

In SCCHN patients, ratios of intermediate and non-classical monocyte were significantly increased. These mature subpopulations of monocyte may associate with unfavorable prognosis of SCCHN as precursor cells of M2 macrophage in peripheral blood by immunosuppression and angiogenesis.
Genetic polymorphism of metallothionein 2A (MT2A) in a Polish population - a risk of laryngeal carcinoma

K.Starska-kowarska*(1), A.Krześlak(2), E.Forma(2), J.Olszewski(3), P.Pietkiewicz(3), M.Bryś(2)

(1)Medical University of Łódź, Poland, Łódź, Poland, (2)Department of Cytobiochemistry, University of Łódź, Poland, Łódź, Poland, (3)II Department of Otolaryngology and Laryngological Oncology, Medical University of Łódź, Poland, Łódź, Poland

Metallothioneins (MTs) are intracellular regulators of many biological mechanisms including differentiation, proliferation, angiogenesis and invasion, which are crucial processes in carcinogenesis. This study examines the association between three single nucleotide polymorphisms (SNPs) at loci –5 A/G (rs28366003) and –209 A/G (rs1610216) in the core promoter region and at locus +838 C/G (rs10636) in 3'UTR region of the MT2A gene with squamous cell laryngeal cancer (SCLC) risk, as well as with tumor invasiveness according to tumor front grading (TFG). Genotyping was performed using the polymerase chain reaction-restriction fragment length polymorphism technique in 323 genetically unrelated individuals with SCLC, and 418 randomly-selected healthy volunteers. Only one SNP (rs28366003) was significantly related to laryngeal cancer in the study population. Compared to homozygous common allele carriers, heterozygous and homozygous for the G variant had significantly increased risk of SCLC [adjusted odds ratio (OR) = 2.90, 95% confidence interval (CI): 1.53–5.21, p dominant < 0.001]. The A/G allele carriers at rs28366003 MT2A were at higher risk for SCLC development (OR = 2.63, 95% CI: 1.41–2.85, p < 0.001). There was a significant association between the rs28366003 and stage and TFG classification. Most carriers of minor allele had a higher stage (OR = 2.76, 95% CI: 1.11–7.52, p = 0.03), increased cancer aggressiveness, as defined by a higher tumor front grading TFG total score (> 18 points) (OR = 3.76, 95% CI: 1.15–12.56, p = 0.03) and diffuse tumor growth (OR = 5.86, 95% CI: 0.72 – 44.79, p = 0.08). The results of this study raise a possibility that a genetic variation of MT2A may be implicated in the etiology of laryngeal cancer in a Polish population.
GSTPI expression in squamous cell carcinoma of the head and neck and its association to alcohol and tobacco exposure

P. Soares*(1), R. Moyses(2), P. Maluf cury(3), R. López(4), C. Cernea(1), M. Garcia(5)

(1) Department of Head and Neck Surgery, Hospital das Clinicas, University of Sao Paulo Medical School / LIM-28, Sao paulo, Brazil, (2) Department of Head and neck Surgery, Hospital das Clinicas, University of Sao Paulo, Brazil, Sao paulo, Brazil, (3) Department of Pathology and Legal Medicine - Sao José do Rio Preto Medical School, Sao José do rio preto, Brazil, (4) Department of Epidemiology, University of Sao Paulo School of Public Health, Sao paulo, Brazil, (5) Department of Internal Medicine, Hospital das Clinicas, University of Sao Paulo Medical School, Sao paulo, Brazil

Introduction: Head and neck squamous cell carcinoma (HNSCC) presents a high prevalence worldwide, with high mortality and significant impact on individual and public health. Its main risk factors are tobacco, alcohol and human papillomavirus infection (HPV), however in a subset of patients, no risk factors can be identified. The ζ glutathione S-transferase (GSTPI) is a carcinogen-detoxifying enzyme with increased expression in several cancers, which seems to be activated by exposure to carcinogens. It has also been associated to a decreased response to toxic therapies, since it may detoxify chemotherapeutic drugs and is related to oxidative stress, an important anti-neoplastic mechanism of radiotherapy. We studied the expression of GSTPI in tumor and non-tumor tissue samples of patients with and without these risk factors.

Material and methods: The data were obtained from the Brazilian Genome Head and Neck Cancer Project (GENCAPO). Patients were classified as either non smokers and non drinkers (NSND) or smokers and drinkers (SD) and further matched by age, gender, tumor site, TNM stage, tumor grade and histological variants, in order to establish 47 pairs of matched patients. Patients have been previously tested for HPV. Samples were stained by immunohistochemistry for GSTPI and analyzed by a semi-quantitative method in scores ranging from 0 to 3 according to area of immunostaning (0: 0 to 10%; 1: 10% to 30%; 2: 31% to 60%; 3: >60%). Data were analyzed using McNemar test, Fisher test, Kaplan-Meier curves and long rank test.

Results: Tumor GSTPI expression was present in both groups, regardless of smoking or drinking habits. GSTPI expression in non-tumor margins was higher among SD (p = 0.004). There was no association between GSTPI expression and positivity for HPV in both groups. The survival rate was similar regardless of GSTPI positivity in tumor margins (p = 0.538). Due to the absence of deaths in the group with low tumor GSTPI, survival analysis according to tumor staining was not possible.

Conclusion: This study showed that GSTPI staining was present in HNSCC regardless of smoking, drinking or positivity to HPV, however tobacco and alcohol consumption were associated with greater expression in the tumor margin. Further studies could clarify whether this could be the result of an increase in GSTPI expression as a response to the exposure to these toxins or due to impairment in the detoxification ability of GSTPI in patients with unknown risk factors.
IMMUNOHISTOCHEMICAL EXPRESSION PATTERNS OF THE KI-67 AND P16 IN LARYNGEAL PRECURSOR LESIONS

B. Pavlovic*(1)

(1) University of Belgrade, Medical Faculty, Clinic of ORL and MFS, Clinical Center of Serbia, Belgrade, Serbia

Pavlovic B.1,2, Djukic V.1,2 Milovanovic J.1,2 Tomanovic N.3

1 Faculty of Medicine, Belgrade University, Belgrade, Serbia.
2 University Clinic of ORL and MFS, Clinical Center of Serbia, Belgrade, Serbia.
3 Institute of Pathology, Faculty of Medicine, Belgrade University, Belgrade, Serbia.

Laryngeal precursor lesions represent areas of altered epithelium with an increased likelihood for progression to squamous cell carcinoma.

The exact molecular mechanisms of malignant transformation of laryngeal mucosa are not completely clear, but are certainly due to deregulation of cell proliferation.

To assess the potential value of the p16 and Ki-67 as markers of malignant progression, we undertook a retrospective immunohistochemical and morphometric analysis on biopsy specimens from patients with precancerous lesions in the larynx.

A hundred and seven patients with diagnosis of laryngeal epithelial precursor lesions were included in this study.

Morphometric analysis of samples stained with p16 antibody showed epithelial cell positivity in 29 (100 %) of samples with simple hyperplasia, 31 (100 %) samples with basal/parabasal cell hyperplasia, 23 (88 %) samples with atypical hyperplasia and 20 (95 %) samples with in situ carcinoma.

There was a significant difference in percentage of p16-positive cells between samples with simple hyperplasia and samples with in situ carcinoma.

Morphometric analysis of samples stained with Ki-67 antibody showed epithelial cell positivity in 27 (93 %) of samples with simple hyperplasia, 30 (97 %) samples with basal/parabasal cell hyperplasia, 26 (100 %) samples with atypical hyperplasia and 18 (86 %) samples with in situ carcinoma.

There was a significant difference not only in the percentage of Ki-67-positive cells between samples with simple hyperplasia and samples with in situ carcinoma, but also between samples with simple and basal/parabasal cell hyperplasia.

Laryngeal epithelial precursor lesions show significantly opposite patterns in p16 and Ki-67 immunopositivity.
Investigating the role of the novel cytokine IL-35 in the regulation of anti-tumour immunity against head and neck cancer.

A.Al-hussaini*(1), A.Jones(2), D.Owens(3), X.Wei(2)

(1)UNIVERSITY HOSPITAL OF WALES, Cardiff, United Kingdom, (2)Oral and Biomedical Sciences, Dental School, Cardiff University, , United Kingdom, (3)University Hospital of Wales, , United Kingdom

Purpose of the study

Cancer cells have the ability to induce immune tolerance, which aids in tumour survival and proliferation. The mechanism by which immune tolerance occurs is not completely known; however, it has been suggested that cytokines produced by cancer cells may serve a key role. Interleukin (IL)-35 is a novel immune suppression cytokine composed of two subunits: Epstein-Barr virus-induced gene 3 (EBI3) and p35. Immune cells in tumour tissue include macrophages and dendritic cells that produce pro-inflammatory cytokines for tumour rejection.

The aim of this study was to explore whether IL-35 was expressed in head and neck squamous cell carcinoma (HNSCC) cell lines, whether pro-inflammatory cytokines produced by anti-tumour immune cells were able to up-regulate IL-35 expression, and to investigate cytokine secretion and cell behaviour in co-culture of macrophages/ dendritic cells (DCs) with HNSCC cells.

Materials and methods used

Human HNSCC cell lines (H357; H376; FADU; C1; VB6) were cultured and stimulated with or without IFNγ. The FADU cells were also stimulated with TNFα. The expression of IL-35 subunits (EBI3 and p35) was investigated by real-time quantitative polymerase chain reaction and Western blotting. Human THP-1 macrophages were co-cultured with human HNSCC cell lines (H357, FADU and C1) or their conditioned media with or without human dendritic KG-1 cells. Additionally, THP-1 cells were re-stimulated with bacterial Endotoxin to determine macrophage phenotype. The production of TNFα, IFNγ, IL-18 and IL-10 were measured by ELISA.

Results

All HNSCC cell lines expressed both IL-35 subunits. IFNγ stimulation up-regulated the expression of the p35 subunit in all HNSCC cell lines. TNFα up-regulated EBI3 expression in FADU cells; co-stimulation with IFNγ and TNFα synergistically up-regulated EBI3 expression in FADU cells. Culture of THP-1 cells with increasing concentrations of HNSCC conditioned media increased TNFα production. Co-culture of THP-1 and KG-1 cells with HNSCC conditioned medium stimulated IFNγ production, indicating production of biologically active IL-18 in the co-culture system. THP-1 cell aggregation was observed after co-culture with HNSCC cell lines. Prolonged co-culture for 5 days resulted in a tolerogenic macrophage phenotype demonstrated by diminished TNFα production by THP-1 cells in response to Endotoxin stimulation.

Conclusion

Anti-tumour immunity mediated by pro-inflammatory cytokines stimulates head and neck cancer cells to produce the immune-suppressing cytokine IL-35. Head and neck cancer cells induce a tolerogenic phenotype in macrophages, which may promote tumour survival and proliferation. Determination of the precise mechanisms by which this occurs may identify novel immuno-therapeutic targets.
Measurement of serum paraoxonase activity and MDA concentrations in 2 patients suffering with oral squamous cell carcinoma

I. Siddiqui*(1)

(1) Chiniot General Hospital Korangi Karachi Pakistan, Karachi, Pakistan

Purpose of study:
Oxidative stress is associated with many diseases including cancer. Oral squamous cell carcinoma (OSCC) is a prevalent cancer involving oral cavity. We evaluate the activity of paraoxonase 1 (PON1) in serum samples of subjects suffering from OSCC along with malondialdehyde (MDA) levels, a marker for oxidative stress. Antioxidant status in OSCC may reflect the role of oxidative imbalance in the disease.

Material & Methods:
Forty-five patients suffering with OSCC and 30 healthy control subjects were selected for the study. Serum paraoxonase (PON) and arylesterase (ARE) activities were measured in subjects suffering from OSCC and their healthy counterparts. To examine the status of lipid peroxidation, MDA concentrations were estimated and a correlation was determined between PON activities and MDA concentrations. MDA expression in cancer and normal adjacent tissue was studied through immunohistochemical analysis. Total reactive oxygen species (ROS) level was determined in serum from normal and diseased subjects.

Results:
revealed that both PON and ARE activities of PON1 were significantly decreased in OSCC patients. Serum MDA concentrations were inversely correlated to PON activity. Immunohistochemical analysis showed a higher expression of MDA in cancerous tissue. Total ROS levels were found to be significantly elevated in cancer subjects.

Conclusions:
Along with other antioxidants, PON levels may act as an indicator of oxidative stress in cancer.
Metformin suppressed oral squamous cell carcinoma via a novel signaling involving Late SV40 factor/Aurora-A in vitro and in vivo

H. Chuang*(1)

(1) Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan, Kaohsiung, China, Republic of (Taiwan)

Purpose:

Conventional therapeutic processes in patients with oral squamous cell carcinoma (OSCC) are associated with several unfavorable effects leading to patients with poor survival rates. Metformin is commonly used to treat type 2 diabetes mellitus and may reduce cancer risk. In this study, we investigated the therapeutic potential of metformin in OSCC patients and in the tumor-bearing xenograft model.

Material and Methods:

This retrospective chart review enrolled 201 consecutive patients who underwent primary surgical resection for the treatment of advanced OSCC (stage III/IVa/b) without previous radiotherapy or chemotherapy by a single surgeon between January 1999 and August 2006. 1x10^6 cancer cells treated with or without metformin were injected into the flanks of female nude mice for xenograft model.

Results:

In the study, 201 consecutive patients were enrolled and divided into metformin group and non-metformin group. The patients in the metformin group had a significantly better 5-year diseasespecific survival (p<0.001) and 5-year overall survival (p<0.001) than the other groups. Metformin suppressed cell growth and metastasis by inhibition of Aurora-A expression in vitro and xenograft model experiments. Furthermore, we identified LSF (Late SV40 Factor) as a novel upstream mediator of Aurora-A signaling and showed that LSF mediated Aurora-A-induced carcinogenesis in oral cancer. A significant correlation was observed between LSF and Aurora-A levels in a cohort of specimens of oral cancer.

Conclusion:

Taken together, we provided evidence that metformin suppressed cancer development in part through LSF/Aurora-A signaling in oral cancer. These findings imply that metformin could be considered as adjuvant therapy in the treatment of oral cancer to improve their survival.
MiR-128a represses the proliferation of laryngeal squamous cell carcinoma

H.Chen*(1)

(1) Eye and ENT Hospital of Fudan University, Shanghai, China, Shanghai, China, People's Republic of

Objectives
Since the function of micro RNA-128a (miR-128a) has never been investigated in laryngeal squamous cell carcinoma, this study was to identify the expression of miR-128a in laryngeal squamous cell carcinoma and to clarify its function on the proliferation capability of laryngeal cancer cells.

Materials and Methods
20 pairs of laryngeal tumor and adjacent normal tissue were collected. The miR-128a was over-expressed using lentiviral transfection. Through the proliferation CCK-8 assay, the colony formation assay and apoptosis assay, the function of miR-128a was evaluated. The tumorigenesis assay was performed to confirm the influence of miR128a on the proliferation in vivo.

Results
The miR-128a was significantly lowly expressed in laryngeal squamous cell tumor than adjacent normal tissue. The stable hsa-miR128a over-expressed Hep2 cell line was established. The proliferation and the colony formation assays both revealed that the over-expressed miR-128a cells proliferated severely less than the negative control cells. The apoptosis assay discovered that the up-regulated miR-128a cells were more likely to apoptosis. The tumorigenicity assay also proved that the over-expressed miR-128a cells were more difficult to generate tumors.

Conclusion
miR-128a represses the proliferation capability of laryngeal Hep2 cells and promotes the apoptosis both in vitro and in vivo, which reveals a novel molecular targets for possible cure of laryngeal squamous cell carcinoma.

Authors and affiliations:
Hui Chen(a), Guang-lun Wan(b), Liang Zhou(a), Jia-meng Huang(a)

(a) Department of Otolaryngology-Head and Neck Surgery, Eye and ENT Hospital of Fudan University, Shanghai, China

(b) Department of Otolaryngology-Head and Neck Surgery, Anhui Provincial Hospital, Anhui Medical University, Hefei, China
Nano-Photothermal Therapy for Treatment of Induced Oral Cancers.

H. Saleh*(1), A. Raafat*(2), M. El shazly(3), O. Soliman(2), A. Gohar(2), T. Salaheldin(4)

(1) Cairo University, Guiza, Egypt, (2) Cairo University, Egypt, (3) Cairo University, Egypt, (4) The British University in Egypt, Egypt

Introduction:

Many studies underlined the positive therapeutic effect of nano-photothermal therapy using a combination of gold nanorods and near infrared diode laser on malignant tumors. The majority of these experimentations were done on transplanted tumors, developed by injection of malignant cells in the subcutaneous tissue of animal models. Here, in a model of induced malignant tumors, developed in the oral cavities of Syrian golden hamsters, we compared different dosing and frequency regimens of nano-photothermal therapy using locally injected gold nanorods and near infrared diode laser.

Method:

34 Syrian golden hamsters were used in this study. Cancer was induced using a powerful carcinogenic material. For 12 to 16 weeks, the animal models had their left cheek pouches painted with 9,10-dimethyl-1,2-benzanthracene (DMBA) three times weekly. The non painted right cheek pouch was taken as a control. 10 animals were used exclusively for the toxicity studies to detect any systemic deleterious effect of injection of gold nanorods in the oral cavity. 12 tumor bearing animals were used to evaluate the effect of sequential local injections of gold nanorods followed by exposure to low power near infrared diode laser. Another 12 tumor bearing animals were used to evaluate the effect of a single injection of the same dose of gold nanorods followed by exposure to higher power near infrared diode laser. Tumor regression was documented by endoscopic observation, histopathology with image analysis, molecular pathologic techniques and evaluation of a tumor marker.

Results:

The animal model of chemically induced cancers was successfully developed in all animals. Local injection of gold nanorods in the cheek pouches of tumor bearing animals proved nearly non toxic on the assessed systemic parameters. Both regimens of nano-photothermal therapy resulted into tumor regression but to variable extents.

Conclusion:

Nano-photothermal therapy proved effective in producing tumor regression of chemically induced cancers developed in the oral cavities of Syrian golden hamsters.

Sequential application of gold nanorods followed by irradiation with low power diode laser is more effective than the single application of gold nanorods followed by higher power diode laser irradiation.
NF-κB ACTIVATION PATTERN IS DOCUMENTED IN THE PROCESS OF LARYNGEAL SQUAMOUS DIFFERENTIATION

K.Kourelis*(1), T.Kourelis(2), T.Papadas(3), A.Asimakopoulos(1)

(1)Otorhinolaryngology Department, "Karamandaneio" Hospital of Patras, Patras, Greece, (2)Medical Oncology Department, "Olympion" General Hospital of Patras, Patras, Greece, (3)Otorhinolaryngology Department, University Hospital of Patras, Patras, Greece

PURPOSE OF THE STUDY: Normal laryngeal mucosa is predominantly covered with respiratory-type, pseudostratified columnar epithelium, which serves the functions of lubrication and mucociliary clearance. Under stress conditions, e.g. smoking, metaplastic changes to the non-functional, highly resistant stratified squamous cell epithelium occur. Nuclear Factor-κB (NF-κB) is a key transcription factor residing quiescent in cytoplasm, and upon its activation translocates into the nucleus to initiate gene transcription. This study assesses the subcellular expression of NF-κB in the two histological types of epithelium.

MATERIALS AND METHODS USED: The study population consists of 129 patients with laryngeal benign or malignant lesions, who underwent biopsy or laryngectomy. Paraffin-embedded tissue samples from the above cases were subjected to immunohistochemistry for the p65 subunit of NF-κB. Immunoreactivity was evaluated on a semiquantitative scale under light microscopy, separately for the cytoplasmic and nuclear compartments. All tested areas of normal columnar and squamous epithelia were selected from sites as far as possible from pathologic foci, to avoid heavily distressed, yet morphologically intact tissues.

RESULTS: Squamous epithelium significantly demonstrates both an increase in nuclear NF-κB immunoexpression (P=0.041), and a decline in cytoplasmic localization (P=0.007), when compared to the native respiratory-type epithelial lining.

CONCLUSION: Squamous differentiation of columnar epithelial cells is associated with translocation of the p65 NF-κB subunit from the cytoplasm into the nucleus, suggesting a robust activation of this transcription factor in the metaplastic process taking place in smokers. Pharmacologic manipulation of the NF-κB pathway might be of benefit to populations at high risk for laryngeal cancer.
One Step Nucleid Amplification for detecting lymph node metastasis of head and neck squamous cell carcinoma

L.Peiñé*(1), F.Jegoux(2), F.Godey(3), F.Le gall(4), V.Parent(4), B.Laviolle(4)

(1)CHU Pontchaillou Rennes, Rennes, France, (2)CHU Pontchaillou, service d’ORL, Rennes, France, (3)Centre anticancéreux Eugène Marquis, Rennes, France, (4)CHU Pontchaillou, Rennes, France

Title: One Step Nucleid Amplification for detecting lymph node metastasis of head and neck squamous cell carcinoma

Objectives: To compare the OSNA assay and the pathological analysis in cN0 head and neck squamous cell carcinoma (HNSCC). The secondary objective was to assess the duration of the OSNA technique in clinical practice. Sensitivity, specificity, predictive positive and predictive negative values were calculated.

Method: From February 2015 to December 2016, lymph nodes of patients with cN0 HNSCC requiring cervical dissection were prospectively analyzed. Lymph nodes were cut into 4 equal pieces alternatively sent to pathological examination and OSNA technique. The duration of OSNA was measured.

PRELIMINARY RESULTS (END OF THE STUDY 31 DECEMBER 2016): 158 lymph nodes were analyzed. The true positive, true negative, false positive and false negative were respectively: 5,1% (8), 82,9% (131), 8,9% (14) and 3,2% (5). The discordance rate was 12,03% (19) with 5 lymph nodes OSNA negative and Hematoxylin Eosin (HE) positive and 14 nodes OSNA positive and HE negative. The sensitivity and specificity of the test were 61,5% and 90,3% respectively. The predictive positive value was 36,4% and the negative predictive value was 96,3%. The median time for OSNA analysis was 14min.

Conclusion: OSNA procedure may be helpful in the setting of sentinel node analysis. It allows rapid intra-operative definitive analysis of the nodes and is a potential concurrent of intra-operative pathological analysis of neck dissection to avoid two-stage procedure. However further analysis are needed to assess its benefit in terms of prognosis and disease control.
Pinostilbene hydrate inhibits oral cancer cell migration and invasion through matrix metalloproteinase-2 inhibition

C.En-hao*(1)

(1)Changhua CHRISTIAN Hospital, department of Otorhinolaryngology Head and Neck Surgery, , China, Republic of (Taiwan)

Background and Purpose: Oral cancer is a type of head and neck cancer that is characterized by cancerous tissue growth in the oral cavity. Cancer metastasis involves a complex series of steps, in which cancer cells leave the original tumor site and migrate to other body parts through the bloodstream, the lymphatic system, or direct extension. Metastatic tumors are extremely common in the late stages of cancer. Treatment for metastatic cancer aims to decelerate the growth or spread of cancer. Pinostilbene hydrate is a resveratrol derivative that induced apoptosis in several cancer cell lines. However, the pharmacological activities of pinostilbene hydrate in anti-metastasis remain unclear. Experimental approach: In this study, we used wound closure assay and Boyden chamber assay to determine the effects of pinostilbene hydrate on oral cancer cell migration and invasion. Key results: Pinostilbene hydrate treatment significantly inhibited the migration and invasion abilities of SCC9 cells in vitro. Gelatin zymography and Western blotting results revealed that pinostilbene hydrate inhibited MMP-2 activity and reduced its protein levels. This inhibitory effect was associated with the upregulation of the TIMP-2 and MAPK pathway mediated. In addition, pinostilbene hydrate suppressed carcinoma-associated epithelial–mesenchymal transition in SCC9 cells. Conclusions & Implications: Pinostilbene hydrate inhibits the invasion of human oral cancer cells and is a potential chemopreventive agent against oral cancer metastasis.

Keywords: Pinostilbene hydrate, migration, invasion, matrix metalloproteinase-2, oral cancer
Polymorphic Variants of miRNA Processing Genes as Larynx Cancer Risk Predictors in Polish Population

M.Litwiniuk*(1), E.Osuch-wojcikiewicz(2), A.Bruzgielewicz(1), D.Majszyk(1), I.Majsterek(3), K.Niemczyk(2)

(1)Otolaryngology Department, Warsaw Medical University, Warsaw, Poland, (2)Department of Otolaryngology, Warsaw Medical University, Warsaw, Poland, (3)Clinical Chemistry and Biochemistry Department, Medical University of Lodz, Warsaw, Poland

Purpose of the study
To assess whether single nucleotide polymorphic variants (SNPs) of pre-miRNA processing genes are associated with a higher prevalence of laryngeal cancer in Polish patients population.

Materials and methods used
135 patients treated for laryngeal cancer in Otolaryngology Department of Warsaw Medical University were included in the study. The control group consisted of 170 healthy volunteers. The following SNPs have been assessed in all of the samples using TaqMan SNP Genotyping Assay: DROSHA (rs6877842), DGCR8 (rs3757, rs417309, rs1640299), RAN (rs14035), DICER1 (rs13078, rs3742330), XPO5 (rs11077) and TARBP2 (rs784567).

Results
The prevalence of polymorphic variants GT and TT in XPO5 gene was statistically higher in laryngeal cancer patients than in control group.
Pretreatment level of peripheral neutrophils and monocytes is an independent prognostic factor in patients with head and neck cancer

Cristina Valero1 (Presenting author), Laura Pardo1, Montserrat López1, Jacinto García1, Miquel Quer1, Xavier León1

1 Otorhinolaryngology Department, Hospital de la Santa Creu i Sant Pau, Universitat Autònoma de Barcelona, Barcelona, Spain

Abstract

Purpose of the study:

Systemic inflammation is related with worse outcome in several solid tumors. The aim of this study was to analyze the prognostic capacity of the pretreatment level of peripheral neutrophils, lymphocytes, monocytes and neutrophil-to-lymphocyte ratio (NLR) in patients with head and neck squamous cell carcinoma (HNSCC).

Materials and methods:

We analyzed patients diagnosed and treated for an index HNSCC at Hospital de la Santa Creu i Sant Pau from 2000 to 2012. We only included those patients for whom we obtained the parameters within the 4 weeks before the start of treatment (824 patients were selected). Local, regional and distant recurrence-free survival and disease-specific survival were analyzed according to the different levels of neutrophils, lymphocytes, monocytes and NLR.

Results:

We observed an ordered decrease in specific survival as the quartile category of neutrophils, monocytes and NLR increased. In the case of lymphocytes, patients in the first quartile had a lower specific survival. Considering patients with 7.90 neutrophils x109/L had 1.91 times higher risk (CI95%: 1.29-2.80). In patients with low neutrophil count (neutrophils 0.52 x109/L, n=221, 27.1% failure). Neutrophil count was the variable with greater prognostic value. Monocytes had similar prognostic capacity to neutrophils. The value of NLR depended mainly on neutrophils. Lymphocytes had limited prognostic capacity.

Conclusion:

A high pretreatment count of circulating neutrophils or monocytes was independently related with poorer prognosis in patients with HNSCC. Classification based on pretreatment neutrophil and monocyte levels enabled identification of different prognostic profiles.
Primary Sarcomatoid Carcinomas of the head & neck: establishing a mutational profile by exploring somatic mutations using the LungCarta Panel

R. Taouachi*(1)

(1) Gustave Roussy, Villejuif, France

Purpose of the study:

Head & Neck Cancer (HNC) represents the sixth most frequent type of cancer in the world, and, with 350,000 deaths per year, it is considered a major public health issue. About 95% of cases are composed of squamous cell carcinoma (SCC), which present in 15% of cases a histological peculiarity that can be further grouped in various subtypes. Our study focuses on primitive sarcomatoid carcinoma (PSC), a rare subtype with a biphasic composition (epithelial and mesenchymatous). Its characteristics are still poorly known with no precise molecular characterization. The objective of this study is to establish a molecular mutational profile of PSC in HNC by exploring somatic mutations, and compare it with other SCCs.

Materials and Methods used:

Our study includes 45 patients followed for HNC with PSC between 2001 and 2014 at the Gustave Roussy cancer center. Anatomopathologists performed a centralized revision and a diagnostic confirmation before the study. The DNA mutation profiles of 72 samples from these patients (45 primary tumors, 5 metastatic cervical nodes and 22 healthy tissues) were established by MALDI-TOF mass spectrometry using Sequenom's LungCarta® panel. This panel studies 214 mutations on 26 genes. We compared our results with (a) those of a previous study performed on patients with pulmonary PSC and (b) conventional SCC in HNC.

Results:

We found that: 1) primary tumors presented a somatic mutation in 15/45 of samples and were polymutated in 3/45 cases; 2) the most frequently mutated genes were TP53 (11.1%), and PI3KCA (8.9%); 3) the presence of a mutation was not correlated with any clinical characteristic; 4) the analysis of comparing both the primary tumor and a metastatic cervical node revealed a concordance in 80% of cases (4/5), with 2 patients presenting the same mutations at the primary tumor site and at the metastatic cervical node.

Conclusion:

It appears that the mutational profile of the PSC in HNC is closer to that of conventional SCC in HNC rather than that of the pulmonary CSP. Consequently, our study does not advocate a standardization of the therapeutic approach of PSC independently of its origin, but rather for a conventional "organ" management. This study established the first mutational profile of the PSC in HNC, which will help to guide the future investigation of a new therapeutic arsenal that could target directly the discovered mutations.
Promoter mutations in the TERT gene occur frequently in oral cavity squamous cell carcinoma

K.Chang*(1), C.Pickering(2), J.Myers(2)

(1)Chang Gung Memorial Hospital, Taiwan, Republic of (Taiwan), (2)MD Anderson Cancer Center, Houston, United States

Purpose of the study: Telomeres are multiply repeated DNA sequences located at the ends of eukaryotic chromosomes that serve to protect against chromosome end-to-end fusion. The human telomerase reverse transcriptase (TERT) gene encodes the catalytic reverse transcriptase subunit of telomerase which catalyzes the synthesis of telomeres which normally decrease as cells divide. After multiple cell divisions, the loss of telomeres ultimately results in replicative senescence, which is overcome by the expression of TERT. One potential way to activate TERT expression is through mutation of the TERT promoter. Material and Methods: In order to determine the frequency of the TERT Promoter in a large cohort of oral cavity squamous cell carcinoma (OSCC), we performed Sanger sequencing of the TERT promoter sequence of 201 OSCC tumor and adjacent normal tissues for the presence of two previously described recurrent TERT promoter mutations (C228T and C250T, hg19). Results: We found that 51.7% (104/201) and 12.9% (26/201) of OSCC tumor tissues and only 6.0% (12/201) and 2.5% (5/201) of adjacent normal tissues contained C228T and C250T mutations (p=0.024 and 0.001), respectively. In addition, the C228T mutation was significantly associated with betel nut chewing (p=0.005). Conclusion: Our results show for the first time that mutations in the TERT promoter occur in OSCC patients at a high frequency of 64.7%. These data are consistent with findings that TERT promoter somatic mutations can lead to constitutive telomerase expression which can overcome the senescence associated with telomere shortening to immortalize incipient cancer cells. Further laboratory based-studies are needed to confirm the role of this promoter mutation and increased TERT expression in the pathogenesis and progression of OSCC. The potential utility of the TERT promoter to serve as a prognostic or predictive biomarkers needs to be further explored in large clinical cohorts.
Prospective study to unravel molecular principles in the pathogenesis and therapy failure of head and neck squamous cell carcinoma

K. Zaoui*(1)

(1) Department of Otorhinolaryngology, Head & Neck Surgery, University Hospital Heidelberg, Heidelberg, Germany

Karim Zaoui1,2, Kolja Freier3, Wilko Weichert4, Xavier P. Hostench5, Matthias Bieg5, Bouchra Tawk6, Benedikt Brors7, Amir Abdollahi6, Philippe A. Federspil1, Peter K. Plinkert1, Jochen Hess1,2

1 Section Experimental and Translational Head and Neck Oncology, Department of Otolaryngology, Head and Neck Surgery, University Hospital Heidelberg, Germany

2 Research Group Molecular Mechanisms of Head and Neck Tumors, German Cancer Research Center (DKFZ), Heidelberg, Germany

3 Department of Oral- and Cranio-Maxillofacial Surgery, University Hospital Heidelberg, Germany

4 Institute of Pathology, Technische Universität München (TUM), Munich, Germany

5 Heidelberg Center for Personalized Oncology, DKFZ-HIPO, German Cancer Research Center, Heidelberg, Germany

6 Heidelberg Institute of Radiation Oncology (HIRO), National Center for Radiation Research in Oncology (NCRO), Heidelberg, Germany

7 Division of Theoretical Bioinformatics, German Cancer Research Center (DKFZ), Heidelberg Center for Personalized Oncology (DKFZ-HIPO), Heidelberg, Germany

Background: Despite of histomorphological similar phenotypes of squamous cell carcinomas in the head and neck region (HNSCC), they often have different genotypes that can explain the different response rate to standard therapies. Current research strategies attempt to use this prognostically and therapeutically by means of decoding genetic and epigenetic changes and their impact on signal transduction cascades.

Methods: In this prospective study 79 patients with advanced HNSCC were included, who were treated with primary surgery followed by radio- (chemo) therapy in the context of the Heidelberg program for individualized personalized oncology (HIPO-POP). At the time of therapy, tumor and blood samples were taken and used for the analysis of genetic (whole-exome sequencing and SNP array analysis) and epigenetic aberrations (450K array) as well as global transcriptome profiling.

Results: The analyzes revealed frequent somatic mutations of the genes p53, TTN, CSMD3, PCLO, NOTCH1 and amplifications in known oncogenes, e.g. CCND1, and SOX2, which differed in quality and quantity depending on the HPV status. Similarly, HPV positive and HPV negative tumors differed in the gene regulatory networks. Integrated data analyzes demonstrate a complex interaction of genetic amplification and DNA methylation in the regulation of tumor-relevant candidate genes.

Conclusions: Multimodal profiling techniques are able to define molecular phenotypes of tumors. In particular, the results of future studies in HNSCC patients in the recurrence stage are to be used diagnostically or therapeutically for clinical failure.
Relationship between the transcriptional expression of myeloperoxidase and the appearance of distant metastases in patients with head and neck squamous cell carcinoma.

A.Sumarroca-trouboul*(1), M.Camacho(2), S.Alcolea(3), X.León(4), J.Costa(5), M.Quer(4)

(1)Hospital Universitari Mútua de Terrassa, Terrassa, barcelone, Spain, (2)Laboratoire d'angiologie, biologie vasculaire et inflammatoire, Institut de Recherche Biomédicale (IIB Sant Pau), Barcelone, Spain, (3)Laboratoire d'angiologie, biologie vasculaire et inflammatoire, Institut de Recherche Biomédicale (IIB Sant Pau)., Barcelone, Spain, (4)Hospital de la Santa Creu i Sant Pau, Barcelone, Spain, (5)Hospital de Sant Joan Despí Moisés Broggi, Sant Joan Despi, Barcelona, Spain

Purpose of the study. Tumor-associate neutrophils (TAN) represent a significant portion of the inflammatory cell infiltrate in head and neck squamous cell carcinoma (HNSCC). Several studies have shown a significant association between TAN and poor clinical outcome in HNSCC patients. Myeloperoxidase (MPO) is a peroxidase enzyme expressed in TAN. MPO expression could be a biomarker for the identification and quantification of TAN.

Objectives. To evaluate the relationship between the transcriptional expression of MPO in patients with a HNSCC and the appearance of distant metastases.

Materials and methods used. RT-PCR was used to determine mRNA expression levels of MPO in 160 consecutive patients with HNSCC treated in our center between 2004 and 2011. Continuous values of mRNA expression were analyzed using a classification and regression tree (CART) method considering the appearance of distant metastases as the dependent variable. During the follow-up period, 23 patients (14.4%) presented with distant metastases.

Results. There were no significant differences in MPO expression values as a function of primary tumor localization, nodal involvement, HPV status or histological grade (P> 0.05). The mRNA expression level of MPO for patients with distant metastases was significantly higher than for patients without (P = 0.001). The CART method classified patients in two categories, namely high (n = 60, 37.5%) or low (n = 100, 62.5%) expression level of MPO. The 5-year distant metastasis-free survival was 66.7% for patients with MPO high-expression level and 93.3% for patients with MPO low-expression level (P <0.001). In a multivariate study considering the appearance of distant metastases as the dependent variable, the MPO category was the only variable that was significantly related to the appearance of distant metastases. Considering patients with a low MPO expression as the reference group, patients with a high MPO expression had a 7.70 fold higher risk of distant metastases (CI 95%; HR: 2.55-23.24). We define a group of patients with a high risk of distant metastases according to clinical or pathological variables (cT3-4, cN2-3 or extracapsular spread) and a high expression level of MPO, which presented a 5-year distant metastasis-free survival of 57.45% (95% CI: 1.96 - 8.8%).

Conclusions. We found a significant relationship between mRNA MPO expression level and the appearance of distant metastases in HNSCC patients. The combination of clinical-pathological data with the MPO expression can be used to identify patients with high risk of distant metastases.
Role of Interleukin-1 in the development of distant metastasis in patients with head and neck squamous cell carcinoma

C.Bothe*(1), M.Camacho(1), S.Alcolea(1), J.Garcia(1), L.Vila(1), M.Quer(1), X.Leon(1)

(1)Hospital Sant Pau, Spain

1. Purpose of the study

The presence of IL-1 in human cancers is associated with aggressive tumor biology but its prognostic value is unknown. We studied whether IL-1α expression is a prognostic marker of distant metastasis in patients with head and neck squamous cell carcinoma (HNSCC).

2. Materials and methods

Tumor biopsies were obtained from 154 patients with HNSCC treated at Hospital Sant Pau between 2004 and 2010. IL-1α mRNA and protein levels were determined in tumor samples and cancer cell lines using RT-PCR and ELISA and then related with distance metastasis free survival. The transcript levels of some genes related with metastatic process were analyzed in association of IL-1α levels. Tumor-cell-adhesion and trans-endothelial migration assays were performed in a panel of HNSCC lines.

3. Results

IL-1α mRNA and protein secretion were higher in tumor samples from patients who later developed distant metastasis than in patients who did not. By using distant metastasis as a dependent variable, patients were classified into two categories of IL-1α transcript-levels. The high-IL-1α group had a significantly lower five-year distant metastasis-free survival than the low-IL-1α group [70.0% (CI 95%: 55.9-84.1%) vs 94.7% (CI 95%:90.2-99.2%)]. When IL-1α transcript-levels were combined with clinical factors related to tumor metastasis, the predictive power of the model increased significantly. Additionally, transcript levels of IL-1α correlated significantly with those of the IL-1 family genes and genes related to the metastatic process. IL-1 treatment of microvascular endothelial cells increased adhesion of HNSCC cells but no differences were found based on constitutive IL-1α expression by tumor cells. Nevertheless, IL-1α produced by tumor cells effectively increased their transmigration across the endothelium.

4. Conclusion

We found a significant relationship between IL-1α expression and development of distant metastasis in HNSCC patients. IL-1α expression could help to define a subset of patients at high risk of distant metastasis who could benefit from adjuvant treatment.
S100A2 and BASP1 are chemoresistance factors in head and neck squamous cell carcinoma.

D.Inukai*(1), K.Nishimura(1), Y.Uchida(1), T.Ogawa(1), H.Ueda(1), K.Yoshikawa(2)

(1)Aichi Medical University Hospital, Nagakute, aichi, Japan, (2)Aichi Medical University, Nagakute, aichi, Japan

Background: Front-line treatment of head and neck squamous cell carcinoma (HNSCC) includes induction chemotherapy as a means of chemoselection. However, some patients are chemoresistant. Determining chemoresistance prior to treatment can help tailor a patient’s treatment strategy. Here, we investigated chemoresistance factors at the protein level using cisplatin-sensitive and -resistant cell lines. We also looked at mRNA levels to gain higher precision in our search, and investigated expression of these factors in human tumors.

Material and Methods: We used four human HNSCC cell lines, including a cisplatin-sensitive cell line, a cell line with acquired cisplatin resistance, a naturally cisplatin-resistant cell line, and a cell line with acquired 5-fluorouracil resistance. Extracted proteins were labeled with iTRAQ® and analyzed by tandem mass spectrometry, LC-ESI-MS/MS. MS/MS data searches were conducted using the ProteinPilot® software. We also performed microarray analysis to examine chemoresistance factors at the mRNA level and performed database analysis on the results. Protein expression was confirmed by immunostaining biopsy specimens of HNSCC tumors.

Results: We identified 20 potential chemoresistance factor candidates by iTRAQ® analysis. Seven proteins were specific for cisplatin chemoresistance and 13 proteins showed resistance to both cisplatin and 5-fluorouracil. The microarray revealed hundreds of potential chemoresistance factor candidates. When we combined the results of the iTRAQ® and microarray analyses, we found two common factors: S100A2, a potential cisplatin-specific chemoresistance factor, and BASP1, a potential multi-chemoresistance factor. We performed immunostaining on biopsy specimens, and the expression of both of these factors was higher in chemoresistant tumors than in chemosensitive tumors after induction chemotherapy.

Discussion: Previous studies have reported S100A2 and BASP1 as cancer- and apoptosis-related factors, but this is the first report to suggest them as chemoresistance factors. These proteins were detected using both, mRNA- and protein-level screens and were analyzed in-depth, which provided highly precise identification. Our findings indicate that these proteins can be used as criteria biomarkers for chemoresistance. Through immunostaining, the determination of the expression levels of these proteins in tumors can provide information to physicians that will allow them to offer new treatment strategies in advance of induction chemotherapy.
SERPINE1 expression as a prognostic factor in head and neck carcinoma

M. Quer*(1), M. Pavon(2), I. Arroyo-solera(2), R. Mangues(2), J. Garcia(3), M. Lopez(3), X. Leon(4)

(1) Hospital de la Santa Creu i Sant Pau. Universitat Autonoma de Barcelona., Barcelona, Spain, (2) Grup d’Oncogènesi i Antitumorals, Institut d’Investigacions Biomèdiques Sant Pau (IIB-Sant Pau), Barcelona, Spain, (3) Department of ORL. Hospital de la Santa Creu i Sant Pau., Barcelona, Spain, (4) Department of ORL. Hospital de la Santa Creu i Sant Pau., Barcelona, Spain

High SERPINE1 expression is a common event in head and neck squamous cell carcinoma (HNSCC); however, whether it plays a role in determining clinical outcome remains still unknown. We studied SERPINE1 as a prognostic marker in two HNSCC patient cohorts. In a retrospective study (n = 80), high expression of SERPINE1 was associated with poor progression-free (p = 0.022) and cancer-specific (p = 0.040) survival. In a prospective study (n = 190), high SERPINE1 expression was associated with poor local recurrence-free (p = 0.022), progression-free (p = 0.002) and cancer-specific (p = 0.006) survival. SERPINE1 expression was identified as an independent risk factor for progression-free survival in patients treated with chemo-radiotherapy or radiotherapy (p = 0.043). In both patient cohorts, high SERPINE1 expression increased the risk of metastasis spread (p = 0.045; p = 0.029). The association between SERPINE1 expression and survival was confirmed using the HNSCC cohort included in The Cancer Genome Atlas project (n = 507). Once again, patients showing high expression had a poorer survival (p < 0.001). SERPINE1 over-expression in HNSCC cells reduced cell proliferation and enhanced migration. It also protected cells from cisplatin-induced apoptosis, which was accompanied by PI3K/AKT pathway activation. Downregulation of SERPINE1 expression had the opposite effect. We propose SERPINE1 expression as a prognostic marker that could be used to stratify HNSCC patients according to their risk of recurrence.
Study of PI3K / pAKT / mTOR cell signaling pathway in nasosinusal epidermoid carcinomas

M. Muñoz Cordero*(1)

(1) Central University Hospital Of Asturias, Oviedo, Spain

Introduction: Nasosinusal carcinomas are tumors with high morbidity and, genetically, heterogeneous. Alterations in the expression of PI3K / pAKT / mTOR signaling pathway components and pTEN, COX2, NF-kB and MAPK could favor oncogenic phenomena and be related to various clinical-pathological markers. The objective of this study was to evaluate the involvement of the PI3K / pAKT / mTOR pathway and its different components in the oncogenesis and prognosis of nasosinusal epidermoid carcinomas.

Material and Methods: The immunohistochemical expression of different components of the PI3K / pAKT / mTOR pathway was studied in 54 patients with nasosinusal squamous carcinomas and their relationship with various clinical-pathological parameters, as well as long-term survival.

Results: Tumor-specific survival was 19% at 5 years. Loss of pTEN expression was observed in 33 cases (61%) and was associated with a worsening of survival of 16% compared to 33% in which there was no loss of expression of this protein (p = 0.07). When analyzing pAKT expression, it was observed that it was overexpressed in 36% of cases and mTOR in 15% but was not associated with a worsening of survival. However, when analyzing pS6 expression, it was observed that it is overexpressed in 86% of cases and is related to a reduction of survival of 11% compared to 60% when this protein is not overexpressed (p = 0.008).

Conclusions: Alterations in the expression of PI3K / pAKT / mTOR pathway components are common in a subgroup of nasosinusal tumors. The study of this route could be useful in the determination of molecular markers that characterize this type of tumors. This group of patients may be able to benefit from biological therapies directed against such proteins.


Department of Otorhinolaryngology–Head and Neck Surgery. Central University Hospital of Asturias. University Institute of Oncology of the Principedom of Asturias, Oviedo.
The c.*229C>T gene polymorphism in 3'UTR region of the topoisomerase IIbeta binding protein 1 gene and its effect on the risk and progression of human laryngeal carcinoma

K.Starska-kowarska*(1), E.Forma(2), M.Nowacka-zawisza(2), I.Lewy-trenda(1), P.Ciesielski(2), M.Bryś(3)

(1)Medical University of Łódź, Poland, Łódź, Poland, (2)University of Łódź, Poland, Łódź, Poland, (3)Department of Cytobiochemistry, University of Łódź, Poland, Łódź, Poland

Topoisomerase IIbeta binding protein 1 (TopBP1), a multiple-BRCT-domain, protein plays crucial roles in chromosome replication, DNA damage repair, apoptosis and cell cycle checkpoint signalling. The aim of this study was to identify five SNPs at loci potentially located in the 3'UTR region of the TopBP1 gene (rs185903567, rs116645643, rs115160714, rs116195487, rs112843513), their relationship with the risk of squamous cell laryngeal cancer (SCLC), tumor invasiveness and prognosis. Genotyping was performed in 323 genetically unrelated individuals with SCLC, and 418 randomly-selected healthy volunteers. Allele-specific TopBP1 mRNA and protein expressions were determined by using real-time PCR and Western blotting techniques, respectively. Compared to homozygous common allele carriers, heterozygosity for the T variant was associated with increased risk of SCLC (adjusted odds ratio [OR]=9.83, 95 % confidence interval [CI]: 3.12–22.16, pdominant<0.0001). The presence of risk allele at rs115160714 TopBP1 determined a higher incidence of nodal metastases (OR=7.98, 95 % CI: 3.94–16.00, p=0.001) and higher tumor grade (OR=6.48, 95 % CI: 0.86–48.01, p=0.03). The heterozygotes displayed diffuse tumor growth with no distinct borderline (OR=3.10, 95 % CI: 0.92–10.62, p=0.049) and higher depth of invasion (OR=2.66, 95 % CI: 0.78–9.03, p=0.04). Relationships were also identified between TopBP1 mRNA/protein expression and overall survival (p<0.0001). The results of this study suggest that rs115160714 TopBP1 may be a genetic marker of etiology and progression in laryngeal cancer.
The relationship of glucose transporter-1 and glucose transporter-3 with regulatory hypoxia-inducible factor-1alpha expression, tumor invasiveness and patient prognosis in laryngeal cancer

K.Starska-kowarska*(1), E.Forma(2), P.Jóźwiak(2), M.Bryś(2), A.Krześlak(2)

(1)Medical University of Łódź, Poland, Łódź, Poland, (2)University of Łódź, Poland, Łódź, Poland

Increased glucose uptake mediated by glucose transporters and reliance on glycolysis are common features of malignant cells. Hypoxia-inducible factor-1alpha supports the adaptation of hypoxic cells by inducing genes related to glucose metabolism. The contribution of GLUT and HIF-1alpha activity to tumor behavior and their prognostic value in head and neck cancers remains unclear. The aim of this study was to examine the predictive value of GLUT1, GLUT3 and HIF-1alpha mRNA/protein expression as markers of tumor aggressiveness and prognosis in laryngeal cancer. The level of hypoxia/metabolic marker genes was determined in 106 squamous cell laryngeal cancer (SCC) and 73 non-cancerous matched mucosa (NCM) controls using quantitative real-time PCR. The related protein levels were analyzed by Western blot. Positive expression of SLC2A1, SLC2A3 and HIF-1α genes was noted in 83.9%, 82.1% and 71.7% of SCC specimens and in 34.4%, 59.4% and 62.5% of laryngeal cancer samples. Higher levels of mRNA/protein for GLUT1 and HIF-1alpha were noted in SCC compared to NCM (p<0.05). SLC2A1 was found to have a positive relationship with grade, TFG score, depth and mode of invasion (p<0.05). SLC2A3 was related to grade and invasion type (p<0.05). There were also relationships of HIF-1alpha with pTNM, TFG scale, invasion depth and mode, tumor recurrences and overall survival (p<0.05). In addition, more advanced tumors were found to be more likely to demonstrate positive expression of these proteins. In conclusion, the hypoxia/metabolic markers studied could be used as molecular markers of tumor invasiveness in laryngeal cancer.
The tumor suppressor capability of p53 is dependent on Non-muscle Myosin IIA function in Head and Neck Cancer.

D.Neskey*(1)

(1)Medical University of South Carolina, Charleston, United States

Background: Over 300,000 patients develop squamous cell carcinoma of the head and neck (HNSCC) worldwide and nearly half of these patients die from their disease each year. Currently, molecular biomarkers are not used in HNSCC but several genes have been identified including mutant TP53 (mutp53), where a subset of oncogenic or high-risk mutations have been associated with increased tumorigenicity and decreased patient survival. More recently MYH9, which encodes the nonmuscle myosin heavy chain component of Myosin IIA (NMIIA) has been identified as a tumor suppressor in HNSCC. Inhibition of NMIIA led to a reduction in wildtype p53 (wtp53) expression with an associated increase in cell migration and decrease in overall survival in HNSCC patients.

Objective/hypothesis: To correlate the tumor suppressor effects of NMIIA with p53 function and demonstrate the oncogenic characteristics of high-risk mutp53 are partially due to NMIIA dysfunction. Our hypothesis is the oncogenic phenotype of high-risk mutp53 is due in part to the loss of the tumor suppressor capability of NMIIA which is functional in low-risk p53 alterations and contributes to improved patient outcomes and decreased cell motility.

Results: In the current study, we demonstrate patients with low risk (functional) p53 mutations and Myh9 expression in the lower quartile (25% quartiles). The expression level of Myh9 did not impact the survival of patients with high-risk (oncogenic) p53 mutations. Furthermore we demonstrate low-risk but not high-risk mutations upregulate p53 target genes implying low-risk mutp53 retain some wtp53 function. Interestingly, this target gene activation observed in low-risk mutp53 is lost with inhibition of NMIIA, which may be due in part to a decrease in nuclear localization of low-risk but not high-risk mutp53. These findings are supported by NMIIA’s increased association with low-risk mutp53 in the nucleus following Nutlin activation and concomitant decreased association in the cytoplasmic fraction. The increased interaction in the nuclear fraction was decreased with inhibition of NMIIA ATPase activity.

Conclusion: Overall the implication of this work is that the tumor suppressor capability of non-muscle Myosin IIA appears to be dependent upon a functional p53. Furthermore loss of NMIIA in cells harboring low-risk mutp53 leads to gain of function phenotype as demonstrated by decreased patient survival and target gene activation. This suggests that the gain of function characteristics of high-risk mutp53 may be due in part to the loss of an NMIIA association.
TLR induced PDL-1 expression in HNSCC as a potential tool of immunomodulation

B.Wollenberg*(1)

(1)UKSH, Lübeck, Germany

Purpose of the study

Head and neck squamous cell carcinoma (HNSCC) is one of the most common solid neoplasms worldwide. Its occurrence is being associated with exposure to smoking and alcohol consumption. Even though enormous progress concerning the treatment of HNSCC has been made, the mortality rates are still high due to local tumor invasion, development of metastases and failure of chemo- and radiation therapies.

We therefore asked whether Toll-like receptors act as PD/PD-L1 regulators in HNSCC and which consequence this finally has for the immuno-activity of natural killer (NK-) cells.

Materials and methods used

Different established HNSCC cell lines were treated with the TLR3 ligand Polyinosinic:polycytidylic acid (PolyI:C) and TLR4 ligand LPS through both extracellular and intracellular ways. PD-L1 expression was analyzed on the mRNA- as well as on the protein level using RT-PCR and Western hybridization experiments. NK cells were analyzed for cytolytic activity using the CytoTox-96 Non-Radioactive Cytotoxicity Assay (Promega). This colorimetric assay quantitatively measures lactate dehydrogenase (LDH), a stable cytosolic enzyme that is released upon cell lysis. Released LDH in culture supernatants were measured using a coupled enzymatic assay, which resulted in the conversion of a tetrazolium salt (INT) into a red formazan product.

Results

We observed that TLR3 as well as TLR4 agonists resulted in significantly increased expression levels of PD-L1 in permanent HNSCC cell lines. These data could be corroborated by immunohistochemical analyzes of the sub-cellular PD-L1 expression in response to TLR stimulation. Increased expression of PD-L1 correlated with modulated NK-cell activities and strongly affected cytolysis of the analyzed target cells.

Conclusion

When considering innovative antibody-based immunotherapy approaches, check-point regulators such as the PD-1/PD-L1 pathway have recently shown very promising results. Our data underline the requirement of combined therapeutic strategies, namely to inhibit the PD1 function on the immune cell side as well as to block the TLR dependent up-regulation of check point inhibitors on the tumor side.
Towards prognostic classification of laryngeal squamous cell carcinoma through retrospective and prospective validation of the four gene classifier


(1)Department of Surgical Sciences and Integrated Diagnostics of University of Genoa, Genoa, Italy, (2)IRCCS AOU San Martino – Istituto Nazionale per la Ricerca sul Cancro, Genoa, Italy, (3)Department of Otorhinolaryngology Head and Neck Surgery of University of Genoa, Genoa, Italy, (4)Department of Otorhinolaryngology Head and Neck Surgery of University of Brescia, Brescia, Italy, (5)Department of Otorhinolaryngology, Head and Neck Surgery, University of Brescia, Genoa, Italy

Laryngeal squamous cell carcinoma (LSCC) represents 2% to 5% of all diagnosed tumors worldwide with a peak incidence in men aged between 55 and 65 years. Laryngeal cancer is the most common malignancy of the head and neck. LSCC accounts for most laryngeal cancers, of which 67% arise in the glottic region, 31% in the supraglottic region, and 2% in the subglottic region. LSCC is a very aggressive cancer, considered to be a subtype of the head and neck squamous cell carcinoma (HNSCC). Despite significant advances in the understanding and treatment of cancer, prognosis of patients with LSCC has not improved recently.

We previously reported on a prognostic gene expression signature (Mirisola et al. Cancer letters 307:37-46, 2011) containing the long non-coding gene H19, two small nucleolar RNAs, SNORD14C and SNORA16A, and the histone gene HIST1H3F. Here we report on the retrospective validation on 86 cases from The Cancer Genome Atlas (TCGA) RNA-seq data collection and the prospective validation of the signature on new LSCC cases from 75 consequent untreated patients who underwent resection at the Department of Otorhinolaryngology Head and Neck Surgery, Genoa University Hospital, from May 2012 to October 2016. A sample of each tumor was collected in a RNA-later test tube for gene expression analysis on Affymetrix HT-HG-U113A arrays followed by R-BioConductor/TMEV microarray statistics.

The retrospective validation on the TCGA cohort showed that SNORD14C was not present in the dataset, SNORA16A was expressed in only very few cases but H19 and HIST1H3F were significantly associated with disease status (complete remission versus progressive disease) confirming the association observed in our original report.

The application of the four gene classifier to the prospective cohort reveals the presence of two clearly distinct clusters compatible with a classification into low and high risk cases. The correlations between the four classifier genes are highly similar to those observed in our original report. Expression of classifier genes is clearly independent from clinical and pathological features. Extended follow-up will allow for the validation of the prognostic power of the classifier.

The comparison of cases with and without perineural invasion or vascular embolization revealed several differentially expressed genes that might explain locally aggressive behavior.

The larger datasets used here will allow for the identification of additional genes whose expression values may add to the prognostic power of the classifier.
Tumor and plasma levels of TERT mRNA in patients with head and neck squamous cell carcinoma

P.Boscolo- rizzo*(1), M.Da mosto*(2), E.Rampazzo(3), P.Vialetto(2), S.Giunco(3), A.De rossi(3)
(1)University of Padova, Italy, (2)University of Padova, Treviso, Italy, (3)University of Padova, Padova, Italy

Purpose of the study

A growing body of evidence indicates that the expression of TERT, i.e. the catalytic subunit of the enzyme telomerase with telomere specific reverse transcriptase activity, is a biological marker of progression in several malignancies. The aim of the present study was 1. to quantify the levels of TERT mRNA in cancer tissue, adjacent mucosa, and plasma and 2. to investigate their prognostic roles in patients with head and neck squamous cell carcinoma (HNSCC).

Materials and methods

In this prospective study, 90 patients with HNSCC were recruited between 2009-2012. The expression of TERT mRNA was quantified by real-time PCR and normalized using HPRT1 as housekeeping gene. TERT levels were quantified in all 90 cases both in cancer tissue and in the adjacent histologically normal mucosa, and in plasma samples from 40 patients. Median follow-up in survivors was 58 months.

Results

TERT levels in cancer tissues (median 1288 copies/105 copies of HPRT1) were significantly higher than those in adjacent mucosa (median 393 copies/105 copies of HPRT1) (P<0.001). High TERT levels in cancer tissues were associated with lymph-nodes metastases (P<0.001), advanced stage (P<0.001) and less differentiated state (P<0.001). Low TERT levels in cancer tissues were correlated with better regional control (HR:0.36; P=0.023), overall survival (hazard ratio (HR) for death:0.52; P=0.030), and disease specific survival (HR:0.47; P=0.023). No correlation was found between TERT levels in cancer tissue and in the plasma. High levels of TERT in plasma were predictors for both better overall survival (HR:0.23; P=0.011) and progression-free survival (HR:0.26; P=0.043).

Conclusion

High TERT levels in cancer cell is a marker for aggressive HNSCC. Conversely, high levels of TERT transcripts in plasma seem to be associated with a more indolent clinical outcome. If TERT levels in plasma reflects a status of immune activation remains to be defined. These observations, if confirmed in larger series of patients, may lead to new perspectives in risk stratification, treatment, and surveillance strategies in patients with HNSCC.
Tumor microenvironment factors involving prognosis of Head and Neck Squamous carcinoma patients

J. Boucek*(1)

(1) Department of Otorhinolaryngology, Head and Neck Surgery. The First Medical Faculty of the Charles University, University Hospital Motol, Prague, Czech Republic

J. Boucek1,2, J. Betka1, T. Eckschlager3, B. Rihova2, M. Zabrodsky1

1 Department of Otorhinolaryngology, Head and Neck Surgery. The First Medical Faculty of the Charles University, University Hospital Motol, Prague

2 Institute of Microbiology ASCR, v.v.i., Prague

3 Department of Paediatric Haematology and Oncology, The Second Medical Faculty of the Charles University, Prague

Introduction: Head and Neck squamous cell carcinoma (HNSCC) are malignancies with the poor prognosis for majority of stages. Regarding the etiology, we are facing various clinical manifestation, behavior and overall survival. This fact can be explained by the differences in the tumor microenvironment. Presence cancer stem cells (CSCs) and subpopulations of immune cells can predict prognosis of the patients HNSCC. One of the most important subpopulation of immune cells increased in the microenvironment of many types of cancers are Th17 lymphocytes.

Material and methods: Samples of primary tumors, metastatic and non-metastatic lymph nodes were collected from 178 patients with primary HNSCC. The tissues were examined by flow cytometry with the focus on infiltration of the lymphocyte subpopulation before the commencement of anti-tumor therapy. The levels of the markers of cancer stem cells (CD44+, CD133+, CD29+) on the surface of the cancer cells were measured. The correlation of the selected markers with the prognosis of the patient was analyzed by the Cox regression with a special interest. Mean follow-up was 40 months.

Results: Except the standard oncological parameters, as a T and N stadium of the disease (p=0.02, resp. p=0.03), radicality of the surgery (p=0.006) and presence of the adverse histological factors (p=0.01), strongest negative prognostic factor was the level of the Th17 cells (CD4+ CD161+) in the tumor microenvironment (p=0.005). CD44+ keratinocytes directly correlated with the presence of adverse histological features (p=0.007). Conversely, CD133+ cells in the primary tumor negatively correlated with N stage (p=0.04), thus suggesting that a higher proportion of CD133+ cancer cells in the primary tumor yields lower metastatic potential.

Conclusion: Th17 lymphocytes infiltrating tumor microenvironment negatively correlate with prognosis of the patients with HNSCC. Cells with CSCs characteristics can be shown in the HNSCC tumor tissue and can elucidate the patient’s prognosis. The therapy targeted to the cancer stem cells, in combination with immunotherapy, could increase the survival of the patients with HNSCC.

Acknowledgments: The research was supported by AZV MZ CR (grant No. NV16-28594A and NV16-28600A).
Vitamin D deficiency in head and neck cancer patients – prevalence, prognostic value and impact on immune function

M.Linxweiler*(1), F.Bochen(1), B.Balensiefer(1), S.Körner(1), F.Neumann(1), J.Bittenbring(1), B.Schick(1)

(1)Saarland University Medical Center, Department of Otorhinolaryngology, Homburg, Germany

Purpose of the study:

Vitamin D deficiency is frequent in human cancer patients and is associated with a higher incidence of lung, bladder and kidney cancer. However, the role of vitamin D in head and neck squamous cell carcinomas (HNSCC) has hardly been investigated so far. In our study, we analyzed the prevalence of vitamin D deficiency in HNSCC patients and its influence on the patients’ immune system and their prognosis.

Materials and Methods:

The level of 25-OH-vitamin D was analyzed in the serum of 227 patients (115 HNSCC patients and 112 control patients) and correlated with clinical data including the patients’ survival. For 58 patients with low vitamin D serum level (15 ng/ml), we investigated the immune cell infiltration of the tumor tissue and the tumor microenvironment in respective tissue samples using immunohistochemistry targeting CD4, CD8, CD11c, CD68 and CD163. Additionally, 11 HNSCC patients with low vitamin D serum levels were substituted for 3 months with vitamin D and the antitumoral activity of their natural killer cells (NK cells) was analyzed before and after vitamin D substitution with or without the addition of cetuximab.

Results:

HNSCC patients showed significantly lower 25-OH-vitamin-D serum levels compared with the control patients. Thereby, low vitamin D levels correlated with a significantly shorter overall survival, the formation of lymph node metastases and a negative HPV status. When comparing the immune infiltrate between the low vitamin D and high vitamin D group, HNSCC patients with a higher vitamin D serum level showed a significantly larger intra- and peritumoral infiltration with CD4, CD8, CD11c and CD68 positive immune cells. In our functional analyzes of NK cell function, we found that the substitution of HNSCC patients with vitamin D significantly increased the antitumoral activity of their NK cells with or without the addition of cetuximab.

Conclusion:

Vitamin D deficiency is highly frequent in HNSCC patients and has a crucial influence on the antitumoral activity of their immune system and their prognosis. Vitamin D substitution cannot only stimulate the immune infiltration of the tumor and the peritumoral tissue in general but also enhance the antitumoral activity of the patients’ NK cells.
«Prebiotic Chemistry» as component of tumor microenvironment: An ethmoidal carcinoma case study, literature review, and proposal of cancer as evolutionary adaptation to unicellularity.

W. Álvarez-gaviria* (1)

(1) CLÍNICA LAS AMÉRICAS, UNIVERSIDAD CES, Medellín, Colombia

BACKGROUND AND AIM:

The link between harmful environmental exposure and cancer is not yet clarified in the context of unicellular atavistic genes activation. The aim of this work, in addition to the presentation of the clinic case, is to try to identify and analyze, from an evolutionary perspective, if elements akin to the primal physical chemistry that created life on Earth («Prebiotic Chemistry») can be inducers of such genetic activation.

CASE DESCRIPTION AND METHOD:

A 65-year-old agronomist with a histopathological diagnosis of ethmoidal non-keratinizing squamo-cellular carcinoma was sent to our consultation. His personal history included chronic rhinitis, sleep apnea, gastroesophageal reflux, passive smoking, residing in areas of environmental high pollution and having occupational exposure to pollutants from the extraction of gypsum (calcium sulfate) and processing-industry concentrates for animals (hollen, serrines, microparticles, glucose, salt, urea, flours, odorants, flavorings, sweeteners, preservatives, pesticides, herbicides, chlorofluorinated water and CO2) during fifteen years.

Therefore, compare the unicellular hypothesis of cancer with the available literature (relevant books, and articles published in PubMed data base) among other things, based on juxtaposition concordant of «Prebiotic Chemistry» with tumor microenvironment.

FINDINGS:

In a preliminary inspection, we corroborate that such a background, including hypoxia and high stomach acidity in his previous pathology corresponds to most of the known carcinogenic agents. A more exhaustive analysis of his habitual environment of the patient, the cancerous phenotype, and the ethmoidal labyrinth morphology led us to proposal that the tumor microenvironment is akin to the «Prebiotic Chemistry», and, consistently, that sporadic cancer in general corresponds to a unicellular adaptive reversion induced by this environment. In this descriptive research, data was gathered qualitatively by observations, and literature reviews. But, data analysis was quantitative, based on concordant juxtaposition of «Prebiotic Chemistry» versus tumor microenvironment.

CONCLUSIONS:

This case study, and literature review, summarizes the updated scenarios of the risk factors of cancer. The implications of these outcomes, and the hypothesis of cancer as evolutionary adaptation to unicellularity, are discussed.

The medical evolutionary analysis derived from this preliminary investigation can contribute to the clarification of carcinogenesis, and to redirect its prevention and treatment.
A meta-analysis of narrow band imaging in the detection of Nasopharyngeal Carcinoma

J.Chan*(1), D.Yeung(2), E.Wong(2), S.Ng(2), A.Vlantis(2)

(1)The Chinese University of Hong Kong, Shatin, Hong Kong, (2)The Chinese University of Hong Kong, , Hong Kong

Purpose of the study:

Narrow band imaging (NBI), an endoscopic technique featuring an augmented definition of microvasculature and mucosal patterns. NBI is increasingly advocated as a tool to characterize neoplasia and intestinal metaplasia in endoscopic standards, such as for colorectal polyps and tumors. Recently NBI has also been studied in the detection of Nasopharyngeal Carcinoma (NPC). Here we aimed to assess the diagnostic utility of NBI for the diagnosis of NPC.

Materials and Methods:

A meta-analysis of studies which compared NBI and White light endoscopy(WL) diagnosis of Nasopharyngeal Carcinoma by abnormal microvascular patterns with histopathology as the gold standard was performed. Two reviewers were involved in defining the inclusion and exclusion criteria, as well as the complete process of study screening and analyses. Studies were included if they were a published article, included raw data of NBI and white light endoscopy with histological confirmation, and specifically for diagnosis of NPC. Case reports and foreign language studies were excluded. Data was recorded with Review Manager (RevMan) [Computer program]. Version 5.3. Copenhagen: The Nordic Cochrane Centre, The Cochrane Collaboration, 2014

Results:

Five studies including 2480 patients meeting the inclusion criteria. Risk of bias and applicability concerns was assessed with the majority of studies with unclear or low bias on patient selection. Forest plots of the sensitivity and specificity of the included studies was performed. For diagnosing NPC, the pooled sensitivity, specificity, positive predictive value, negative predictive value and diagnostic odds ratio (DOR) for NBI are 0.897 (95%CI 0.856-0.938), 0.974 (95%CI 0.967-0.980), 0.761 (95%CI 0.708-0.814), 0.990 (95%CI 0.986-0.994), and 319.35 (95%CI 191.69-532.01) respectively. For WL the pooled sensitivity, specificity, positive predictive value, negative predictive value and diagnostic odds ratio (DOR) are 0.773 (95%CI 0.716-0.830), 0.792 (95%CI 0.775-0.808), 0.256 (95%CI 0.222-0.290), 0.974 (95%CI 0.967-0.981), and 16.29 (95%CI 11.63-22.81).

Conclusion:

NBI detection of microvasculature abnormalities shows a higher specificity and positive predictive value for Nasopharyngeal Carcinoma compared to WL. However further investigation with a uniform diagnostic criteria and terminology is needed for NBI in the detection of NPC.
A pilot study to assess the feasibility of producing a useful 3-D reconstruction of the complex anatomy of the nasopharynx from ultra-high resolution axial human datasets

A.Vlantis*(1), C.Tong(2), Q.Meng(3), Y.Chan(3), P.Heng(3)

(1)The Chinese University of Hong Kong, Shatin, Hong Kong, (2)Department of Otolaryngology, Head and Neck Surgery of the Chinese University of Hong Kong, Shatin, Hong Kong, (3)Department of Computer Science and Engineering of the Chinese University of Hong Kong, Shatin, Hong Kong

Purpose of the study: Increasingly, endoscopic nasopharyngeal, extended paranasal sinus and skull base surgery is becoming mainstream. Unlike open surgery where structures of interest are approached from the known and the normal, endoscopic surgery relies on navigation systems or at least a spatial awareness of deeper unseen structures by the surgeon to avoid their damage or encounter. The purpose of this preliminary pilot study was to assess the feasibility of producing a useful 3-D reconstruction of the complex anatomy of the nasopharynx from an ultra-high resolution axial human dataset.

Materials and methods: Ultra-high resolution axial slices of 0.01mm intervals of a digital human dataset of the nasopharynx were used for the project. Structures of interest including muscles, vessels, bone and mucosa were outlined using a computer interface.

Results: A 3-D model of the human nasopharynx and surrounding structures was reformatted from the digitized slices.

Conclusion: A 3-D reconstruction of the nasopharynx with transparency giving visibility to deeper structures and an appreciation of their spatial relationship to each other, and especially to the course of the internal carotid artery, the structure at risk of the greatest consequence of exposure or damage with subsequent rupture and stroke or death, is an essential aid to understanding the complex anatomy of this region.
Atypical localizations of undifferentiated nasopharyngeal carcinomas: about 2 cases

R.Bencheikh*(1), I.Boumendil*(2), N.Belhaj(3), L.Essakalli hosseyni(1)

(1)Mohammed V University, Rabat, Morocco, (2)Mohamed V University, Rabat, Morocco, (3)mohammedV University, Rabat, Morocco

Undifferentiated carcinoma of the nasopharyngeal type is mainly known in its nasopharyngeal localization, but can also be encountered in other upper and lower aerodigestive sites.

The aim of this work is to study the characteristics and therapeutic methods of atypical cervical localization of UCNT.

Materials and methods: We report two cases of undifferentiated carcinoma of nasopharyngeal type of atypical cervical localization admitted in our ENT department.

Observation: It is about a 67 years-old man, chronic smoker, hypertensive and diabetic. The second is a 41 years-old man with no known history. The reason of consultation was chronic dysphonia associated to severe dyspnea requiring tracheotomy in emergency. In the second case, it was bilateral lateral-cervical lymph nodes evolving for one year with dysphonia.

A scannographic and pan-endoscopic assessment under general anesthesia with biopsy was carried out, returning in favor of an undifferentiated carcinoma of nasopharyngeal type located at glotto-sus-glottic level invading the left piriform sinus. In the other patient, it was without abnormality apart from enormous cervical nodes. A cervicotomy with extemporaneous had objectified an UCNT lymph node metastasis.

The nasopharynx was free. The treatment consisted of neoadjuvant chemotherapy followed by surgery (total laryngectomy / lymph node dissection) with postoperative radiotherapy.

Conclusion: The rarity of atypical cervical localization of undifferentiated nasopharyngeal carcinoma, makes it difficult to define its clinical characteristics and its therapeutic methods. The latter should depend on the localization and the tumor stage.
Clinico-radiologic characteristics of head and neck tumours with perineural spread

R.Lim*(1), J.Shenoy(2), D.Loke(2)

(1)Khoo Teck Puat Hospital, Singapore, Singapore, (2)Khoo Teck Puat Hospital, , Singapore

Background

Perineural spread is an often overlooked route where head and neck tumours can metastasize. As a result of perineural spread, these tumours can present in an unusual fashion. This is associated with poorer prognosis, a higher recurrence rate and more aggressive treatment is necessary for such patients.

Methods

We describe a series of patients with a variety of tumours arising from different sites in the head and neck with perineural spread and examine the clinical characteristics, radiological findings and anatomy behind this unique entity.

Results

Perineural spread can occur in patients with nasopharyngeal carcinoma, squamous cell carcinoma, adenoid cystic carcinoma, mucoepidermoid carcinoma, lymphoma and melanoma.

In addition to local symptoms, patients with such tumours may present with symptoms due to involvement of cranial nerves including facial pain or numbness, facial palsy, diplopia, increased lacrimation or nasal secretions. In some patients, there may not be additional symptoms despite extensive perineural disease on imaging.

The spread of tumour along the peripheral nerves can occur in both a retrograde and anterograde fashion, and because a single peripheral nerve can have contributions from more than one cranial nerve, these peripheral nerves can act as a bridge that result in extensive tumour spread.

In view of the histological cell types and the widely infiltrative nature of such tumours, surgery is usually not indicated. Radiation and chemotherapy is the primary modality of treatment.

Conclusion

Some head and neck tumours have a predilection for perineural spread. It is important to have awareness the anatomy of peripheral and cranial nerves in the head and neck in order to understand the more eccentric presentations of these tumours.

Without a high level of suspicion and knowledge of such a disease entity, delayed treatment may result in higher morbidity and mortality.
Computer-assisted surgical planning of juvenile nasopharyngeal angiofibroma: Case report

J.Aguilar cantador*(1), J.Solivera vela(2), S.Heredero jung(3), J.Gutierrez jodas(4), R.Carlos(4), F.Muñoz del castillo(1)

(1)UGC de Otorrinolaringología, Hospital Universitario Reina Sofía., Córdoba, Spain, (2)UGC de Neurocirugía y Neurofisiología. Hospital Universitario Reina Sofía., Córdoba, Spain, (3)UGC de Cirugía Oral y Maxilofacial. Hospital Universitario Reina Sofía., Córdoba, Spain, (4)UGC de Otorrinolaringología. Hospital Universitario Reina Sofía., Córdoba, Spain

Purpose of the study. Juvenile nasopharyngeal angiofibroma (JNA) is a rare, benign, vascular tumor that affects young males. It arises in the nasopharynx and has a locally invasive behavior with expansion routes along the mid-coronal plane of the skull base. We describe a computer-assisted systematic method for preoperative surgical planning and postoperative image processing.

Case report. We present a 16 years old boy who had been previously operated for JNA one year ago. During outpatient follow-up, a tumor recurrence was detected on serial MRI and CT studies. The tumor arose from the left pterygomaxillary fissure and extended as a multilobulated mass into the sphenoid sinus, nasal cavity, pterygopalatine fossa, infratemporal fossa, and parapharyngeal retropterygoid space, staged as a Fisch IIIb. The tumor was embolized 48h prior to surgery with Onyx. The post-Gd T1 MRI, post-contrast CT and 3D rotational angiography were imported into a Brainlab iPlanb 3.0 planning station and fused. The automatic segmentation tool was used to create the bone frame and an object was drawn for every critical structure such as carotid artery, vidian nerve and V2/V3. A different object was created for each of the tumor compartments. Endoscopic and open approaches were simulated prior to the surgery using the craniomaxillofacial software.

Results. Based upon the preoperative computer planning, a combined approach was finally used both endoscopic and biroconal transzygomatic. A Brainlab Colibri navigation unit was used to ensure accuracy and anatomical orientation during surgery. Immediate postoperative imaging was fused with previous studies and a macroscopic total resection was verified.

Conclusion. In addition to intraoperative navigation, computer-assisted preoperative planning is paramount to better understand the extent and individual surgical needs of JNA. Also postoperative image fusion gives immediate feedback to the surgeon.
Epidemiology and prognostic factors of head and neck mucosal melanomas in France. Should the therapeutic guidelines be modified?

R. Obongo*(1)

(1) Gustave Roussy Cancer Campus, Bois-guillaume, France

Epidemiology and prognostic factors of head and neck mucosal melanomas in France. Should the therapeutic guidelines be modified?

R. Obongo1, R. Taouachi1, J. Thariat2, A. Baglin3, B. Baujat4, O. Casiraghi5, L. de Gabory6, P. Herman7, S. Vergez8, F. Janot1, A. Moya-Plana1 (and the REFCOR group)

1 Department of Head and Neck, Gustave Roussy Cancer Campus, France

Purpose: Head and neck mucosal melanoma is an aggressive and rare neoplasm of melanocytic origin, accounting for 1% of all melanomas and 4% of sinonasal malignancies. Risk factors such as pre-existing melanosis and formaldehyde exposure have been described. Treatment usually combines surgical resection with post-operative radiotherapy which seems to improve locoregional control without any evidence of prolonged survival. Prognosis is poor with five-year overall survival between 20% and 30%, median overall survival of 24 months and median disease free survival around 21 months. Death comes from both local recurrence and metastatic disease. Given its scarcity, multicentric cohort studies are mandatory in order to obtain a better understanding of this tumor so as to improve the management and the oncologic outcomes. The aim of our study is to evaluate the epidemiological characteristics of head and neck mucosal melanomas from a national database, analyzing their molecular profile and looking for prognostic factors that could lead to better oncological management.

Materials and methods: This is a national, retrospective, multicenter study (36 centers) including 209 patients diagnosed and treated from 2000 to 2016 in France, made from REFCOR organization (Réseau d’Expertise Français des Cancers ORL Rares).

The mutational profile was collected on the KIT, NRAS and BRAF genes. Every file was reviewed in a Tumor Multidisciplinary Board. Overall and disease-free survival rates were analyzed according to the Kaplan-Meier method. The main prognostic factors studied were epidemiological criteria, localization, TNM stage, histological subtypes, molecular profile, type of surgery, lymphatic nodes management, surgical excision margins and use of radiotherapy.

Results: Over the 81 first patients that have been reviewed yet, disease was mainly localized in the nasal cavity (50%), the five-year overall survival was 31%, the median overall survival of 24 months. The stage was initially localized (80% without lymphatic node) and 47% of patients presented metastasis during their follow-up. NRAS mutation was most frequently found (22%).

Conclusion: This study, carried out on a large national cohort, allows us to refine our epidemiological knowledge of head and neck mucosal melanomas. Our guidelines should be adapted in order to improve the poor outcomes of this tumor.
Extracts of Raspberry Suppress Metastatic Abilities of Nasopharyngeal Carcinoma Cells by Inhibition of MMP-2 via ERK1/2 Pathway

C.Hsin*(1), C.Huang(2), S.Yang(3)

(1)CHUNG SHAN MEDICAL UNIVERSITY HOSPITAL, Taichung, Christmas Island, (2)Department of Otolaryngology, Chung Shan Medical University Hospital, Taichung, China, People's Republic of, (3)Department of Medical Research, Chung Shan Medical University Hospital, Taichung, China, Republic of (Taiwan)

Nasopharyngeal carcinoma (NPC) remains prevalent in Southeast Asia and is characteristic by a high incidence of metastasis to the neck lymph nodes, resulting in a poor prognosis and challenge for treatment. Among metalloproteinases (MMPs), MMP-2 and MMP-9 can degrade most components of the extracellular matrix and are profoundly involved in the metastasis of NPC cells. In this study, we investigated the in vitro anti-metastatic properties of Rubus idaeus extract (RIE) on human nasopharyngeal carcinoma cells.HONE-1, NPC-39 and NPC-BM cells were subjected to RIE treatment, and effects on the migration and invasion of tumor cells were analyzed. The results of wound healing assays and boyden chamber assays showed that RIE suppressed the migration and invasion of NPC cells. Gelatin zymography assay, real-time PCR and Western blotting showed that enzyme activity and the levels of mRNA and MMP-2 protein were down-regulated by RIE treatment. To identify the signaling pathway, mitogen-activated protein kinase proteins were examined, which showed that phosphorylation of ERK1/2 was inhibited after the addition of RIE. Moreover, blocking of the ERK1/2 pathway also enhanced the anti-metastatic ability of RIE in NPC cells. In summary, our data showed that RIE inhibited the migration and invasion of NPC cells by suppressing the expression and activity of MMP-2 through down-regulating the ERK1/2 signaling pathway, suggesting that Rubus idaeus may serve as chemotherapeutic and chemopreventive agent for NPC.
Glial tumor presenting as temporal lobe necrosis in a patient with nasopharyngeal cancer: A case report

S. Alicura tokgoz*(1), G. Saylam(1), O. Bayir(1), L. Akan(1), C. Saka(1), E. Cadalli tatar(1), M. Korkmaz(2)

(1) Diskapi Yildirim Beyazit Training and Research Hospital, Department of Otorhinolaryngology, , Turkey,
(2) Yildirim Beyazit University, Department of Otorhinolaryngology, , Turkey

Temporal lobe necrosis is one of the late complication related to radiation therapy used in the treatment of nasopharyngeal carcinoma. This late complication is very important in terms of treatment plan to distinguish between nasopharyngeal carcinoma recurrence and intracranial masses. A 64 year old male patient was admitted to our department with a headache complaint that began 5 years ago. After the examinations he was diagnosed with T3N0M0 nasopharyngeal carcinoma. Concomitant chemoradiotherapy was performed. No complaint was developed during the treatment. Five years after the treatment, the temporal lobe lesion was observed in magnetic resonance imaging without any neurological symptoms. There was hypointense in T1-weighted sequences and hyperintense in T2-weighted sequences mass with peripheral edema and contrast enhancement in the left temporal bone. Positron emission tomography imaging revealed that there was hypodense, asymmetric, hypometabolic mass without clear borders in the same region. After this, diagnostic mass excision was performed by the neurosurgery department. The histopathologic examination was reported as 'low grade glial tumor'. No problem was found on the 6th month follow up visit of the patient.

Complications may develop early and late depending on the RT involved in treatment approach in nasopharyngeal carcinomas. One of these, temporal lobe necrosis, is a rare late intracranial complication. It is sometimes asymptomatic although it usually gives neurological findings. It is important to be able to distinguish nasopharyngeal carcinoma relapses from other possible primary intracranial tumors. Glial tumours should be considered in the differential diagnosis of the late complication of nasopharynx carcinoma treatment.
HODGKIN LYMPHOMA OF THE NASOPHARYNX: a case report

H.Jaafoura*(1)

(1)Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia, Tunis, Tunisia

OBJECTIVE
Hodgkin lymphoma of the nasopharynx is very rare with studies putting the frequency of occurrence <1% of total cases of Hodgkin lymphoma. It has a relatively favorable prognosis.

The aim of our work is to study the epidemiological, clinical and therapeutic features of Hodgkin lymphoma of the nasopharynx

MATERIAL AND METHODS
It is a retrospective study of a case of Hodgkin Lymphoma of the nasopharynx, in the Charles Nicolle Hospital of Tunisia in 2015.

RESULTS
A 57-year-old man presented with a 6-month history of bilateral nasal obstruction and night snoring, which was then followed by a cervical lymph node. Endoscopic examination of the nasal cavity revealed a smooth budding mass arising from the nasopharynx. Computerized tomographic scan of the nasopharynx revealed a soft tissue mass of 2.5 cm extending to the right nasal fossa. This mass was further examined under general anesthesia and then biopsied. Further scanning of neck, chest, abdomen and pelvis find a mediastinal and pulmonary localizations. His nasopharyngeal biopsy together with immunohistochemistry analysis confirmed the diagnosis of nasopharyngeal Hodgkin’s disease. Our patient received six cycles of chemotherapy. This was followed by irradiation of his Waldeyer’s ring and supraclavicular lymph nodes.

CONCLUSION
The literature review and our case report discuss the optimal management of this rare and atypical localization of Hodgkin’s disease, which should be differentiated from lymphoproliferations associated with Epstein Barr virus and non-Hodgkin’s lymphoma.

H.Jaafoura, S.Mannoubi, A.Kesantini, S.Najjar, I.Riahi, K.Khamassi, R.Lahiani, M.BenSalah

Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
Malignant tumors of the nasal cavity: a retrospective study in a Tunisian population

A.Zehani*(1), A.Bani(2), J.Marrakchi(2), M.Mejebri(2), I.Chelly(2), G.Besbes(2), S.Haouet(2), N.Kchir(2)

(1) hôpital la rabta, Tunis, Tunisia, (2) La Rabta’s hospital, Tunisia

Purpose of the study
To review and discuss the clinical and histological characteristics of malignant primary tumors of the nasal cavity in a Tunisian population.

Material and methods
Retrospective study of the histologically proven cases of nasal cavity cancers, diagnosed between January 1991 and January 2017 in the Pathology Department of La Rabta’s Hospital. Clinical data were reviewed for each patient and the following parameters were evaluated: gender, age at diagnosis, initial clinical symptoms and histological features.

Results
A total of 49 patients with malignant primary tumors of the nasal cavity were included. A slightly male predominance was noted (55%) and the mean age at the time of diagnosis was 56.2 (ranges between 9 and 89). The most frequent symptom in our patients was a chronic unilateral nasal obstruction with nosebleeds. Intranasal endoscopy found multiple polypoid lesions. Diagnosis was histologically proven in all cases. There were 20 cases of squamous cell carcinoma, including three cases of degenerated inverted papilloma, 12 cases of esthesioneuroblastoma, 8 cases of adenocarcinoma, 6 cases of adenoid cystic carcinoma, two cases of melanoma and one case of sino nasal undifferentiated carcinoma.

Conclusion
Cancerous nasal cavity tumors are rare, representing about 3% of tumors in the upper respiratory tract. Their proximity to vital structures such as the brain, optic nerves, and internal carotid artery pose significant challenges for their treatment and may be the source of significant morbidity to the patients. Malignant tumors of the sinonasal tract are derived from diverse histologic elements within the nasal cavity, the most common of which are squamous cell carcinoma and variants of adenocarcinoma. Our outcomes suggest that nasal cavity malignant tumors show a male predominance, occurs mostly between 40-70 years. The most frequent histological types in our study were squamous cell carcinoma followed by olfactory neuroblastoma. The pathological diagnosis approach must be based on morphology and immunohistochemistry but due to the rareness and the diversity of those tumors, the prognostic features are often difficult to be precised.
Modern trends in the surgical treatment of skull base angiofibroma

K.Abdulkerimov*(1), K.Kartashova(1), Z.Abdulkerimov(1), A.Kolesnikova(1)

(1)Ural state medical University, Ekaterinburg, Russia

Surgical treatment of skull base angiofibroma remains complex and significant problem in modern otolaryngology.

Materials and methods. Thirty six patients with histologically confirmed diagnosis skull base angiofibroma were observed. Observation time more than seven years. The age of patients ranged from 8 to 22 years old. All patients were male. All patients were examined with computed tomography studies with 3D and VRT - reconstruction, MRI.

Results. The tumor localization, the type of spread and destruction degree were observed. The surgical treatment was carried out with blood vessels pre-occlusion in each cases. The tumor was removed with the use of trans-maxillary buccal approach without any facial incisions. Soft tissue incision was carried out using a high frequency surgical device with a radio waves effect "Fotek E 80 M" (Russia, Ekaterinburg). The maxillary sinus were observed after a removal of the front and medial walls and frontal process of the maxilla and nasal bone resection. After the tumor removal bleeding patches were coagulated with argon using "Fotek E A 141" system (Russia, Ekaterinburg). Surgical treatment took place using endoscopic equipment.

Conclusion. The use of modern diagnostic tests combined with new surgical tumor removal technologies leads to better surgical outcomes and minimize recurrences.
**Nasopharyngeal chordoma in a patient with facial paresthesia: A case report.**

M.Torres aguiar*(1), C.Colina etala(2), I.Romero sanchez(3), M.Valido quintana(3)

(1)Hospital Universitario Doctor Negrín, Spain, (2)Hospital Universitario Dr. negrin, Spain, (3)Hospital Universitario Dr Negrin, Spain

**PURPOSE OF STUDY:**

Nasopharyngeal chordoma is a rare type of malignant neoplasm that originates in the remnants of the notochord. Located in the midline of the body, one-third of chordomas appears arising from the sacrum, this being the most frequent location, secondly followed by the chordoma in the skull base.

We try to review this type of tumor when it is located in the nasopharynx, where it is characterized by a slow growth. Coming from the clivus region gradually invades the nasopharyngeal cavity, contributing to a delayed oncological diagnosis. The initial clinic can be a cervical lymphadenopathy, unilateral serous otitis media, nasal obstruction or neurological symptoms.

**MATERIAL AND METHODS:**

The current study presents the case of a 56-year-old female patient with paresthesia and loss of sensitivity in left hemicara as well as decrease of homolateral auditory acuity of two weeks of evolution.

**RESULTS:**

Through study by flexible nasofibrolaryngoscopy it’s evident mass of the cavum. To know its extension was requested TC and RMN. Also cavum biopsy by CEN was performed. The patient was submitted to four surgical procedures that were performed in several times to try to achieve the greatest tumor resection. We propose to supplement this treatment with radiotherapy with protons.

**DISCUSSION AND CONCLUSION:**

The low incidence of clival chordomas makes it difficult to carry out random clinical studies of its management. The treatment of choice is surgery, supplemented by radiotherapy in selected cases. Specific knowledge about the limitations of each approach is essential in order to avoid unnecessary morbidity and incomplete resections.

**AUTHORS:** Torres Aguiar,MJ (sisu_torres@hotmail.com); Colina Etala, C, Valido Quintana,M; Romero Sanchez, I.
Nimbolide induce apoptosis in human nasopharyngeal cancer cells

M.Hsieh*(1)

(1) changhua christian hospital, otolaryngology department, Changhua city, China, Republic of (Taiwan)

Background and Purpose: Nasopharyngeal carcinoma (NPC), a tumor arising from the epithelial cells that cover the surface and line the nasopharynx, is a rare malignancy throughout most of the world but prevalent in certain geographic areas, such as southern Asia (Taiwan, Hong Kong, Singapore, Malaysia, southern China) and north Africa. Despite advances in diagnostic techniques and improvement in treatment modalities, the prognosis remains poor. Therefore, an effective chemotherapy mechanism that enhances tumor sensitivity to chemotherapeutics is urgently needed. Nimbolide, from Azadirachta indica, which wide range of beneficial effects, including anti-inflammatory and anti-cancer properties. Experimental approach: The aim of the present study was to determine the antitumor activity of nimbolide on NPC and its underlying mechanisms. Key results: Our results show that treatment of HONE-1 cells with nimbolide potently inhibited cell viability. Moreover, nimbolide leading to cell cycle arrest, which subsequently activates caspase-3, -8, -9 and PARP to induce cell apoptosis. Meanwhile, we also demonstrate that nimbolide induces Bik, Bax and t-Bid expression in HONE-1 cells. The results also indicate nimbolide-induced apoptosis by modulation of p38 MAPK, ERK1/2 and JNK1/2 pathways. Conclusions & Implications: nimbolide induces apoptosis of human NPC cancer cells and is a potential chemo-preventive agent against NPC cancer proliferations.
Postradiation nasopharyngeal necrosis in patients with nasopharyngeal carcinoma: a new indication for L-PRF application?

J. Meulemans*(1)

(1)University Hospital Leuven, department of otorhinolaryngology, head and neck surgery, Leuven, Belgium

Purpose: Reporting a new clinical application for L-PRF (leukocyte-platelet rich fibrin) in a case of progressive postradiation nasopharyngeal necrosis after (chemo)radiation for nasopharyngeal carcinoma.

Materials and methods: A 68-year old male patient presented with a cT2N1M0 squamous cell carcinoma of the nasopharynx. After tumor board discussion, primary chemoradiation was offered. A baseline MRI, 4 months after the end of treatment, showed a complete tumor response, but revealed a deep ulceration in the right sided posterolateral nasopharynx, suggesting postradiation nasopharyngeal necrosis. Because the extent of this ulceration progressed as was shown on a MRI 6 and 9 months after end of treatment, with the ulceration extending to the right internal carotid artery, implying a possible future development to postirradiated carotid blowout syndrome, it was decided to perform a transnasal endoscopic inspection and debridement of the nasopharynx with placement of L-PRF membranes in the ulceration. During this procedure, an extensive tissue defect in the right posterolateral nasopharynx was visualized, which was obliterated with necrotic debris. Biopsies of the deep aspect of the ulceration showed signs of purulent infection and presence of dense fibrous tissue without epithelial cells. After debriding the lesion, 2 L-PRF cylinders and 4 L-PRF membranes, were placed in the defect and fixed with tissue glue (Tisseel®).

Results: Three months after the operation, a MRI of the neck revealed a persistent but stable nasopharyngeal ulceration with signs of peripheral contrast-uptake, suggesting formation of granulation tissue. The patient was offered a second procedure 5 months after the first. On inspection of the nasopharynx, the nasopharyngeal ulceration had a complete different aspect when compared to the first procedure: it was now lined with granulation tissue and healthy mucosa, without presence of necrotic debris. Biopsies confirmed the presence of granulation tissue and excluded local tumor recurrence. Again, 3 L-PRF cylinders and 2 L-PRF membranes were placed in the defect and fixed with tissue glue. A MRI of the neck performed 1 month after this second procedure clearly showed a less deep aspect of the ulceration, illustrating a positive evolution.

Conclusion: This case report illustrates preliminary experience with L-PRF application for difficult-to-treat postradiation nasopharyngeal necrosis. In our preliminary experience, L-PRF application led to increased and accelerated wound healing, possibly preventing the evolution towards postirradiated carotid blowout syndrome.

J. Meulemans(1,2), V. Vander Poorten(1,2)

1. Otorhinolaryngology-Head and Neck Surgery, University Hospital Leuven, Leuven, Belgium
2. Department of Oncology, section Head and Neck Oncology, KU Leuven, Leuven, Belgium
PRESENTATION OF TWO CASES OF ACINIC CELL CARCINOMA IN NASOPHARYNX

A.Trimoska-radevska*(1), R.Filipovski(2), Z.Karatasev(3), N.Atanasova(4), M.Malinova(5)

(1)City General Hospital "8th of September", ENT department, Skopje, Macedonia, (2)City General Hospital 8th September, ENT department, , Macedonia, (3)City General Hospital, Department of Pathology, , Macedonia, (4)City General Hospital 8th September, ENT department, , Macedonia, (5)Private Hospital, Neuromedika, Skopje, Macedonia

Acinic Cell Carcinoma is a low grade malignant tumor of salivary gland. Most common location is parotid gland, but in very rare cases it can be found in minor salivary glands. It has malignant potential and has high tendency to recur locally.

We describe two cases of Acinic Cell Carcinoma in minor salivary gland with different location in nasopharynx and different clinical manifestation. In a period of one month these two patients were operated in our Hospital. The first patient, 20 year old female with non pedunculated mass located in Fossa Rosenmuller. The second patient, 53 year old female with pedunculated mass located in the choanal part of nasal septum. The main symptoms of the patients were nasal obstruction. CT scan was performed on the patient’s prior surgery.

In order to prove the diagnosis biopsy was taken before the operation. The treatment involves total excision under endoscopic visualization. Histopathological results proved the same diagnosis.

After the surgery patients were referred to postoperative radiation therapy indicated by Oncological Institute. In a follow up of 4 mounts no recurrence of process was observed.

In our Hospital these are the only two cases of Acinic Cell Carcinoma, but it should be taken into consideration as pathohistological diagnosis, although localization in the nasopharynx is very rare.
Prognostic Significance of Combined Platelet Counts and Neutrophil-Lymphocyte Ratio in Nasopharyngeal Cancer Patients treated with Intensity-Modulated Radiotherapy

Y.Lin*(1), T.Chang(2)

(1)National Cheng Kung University Hospital, Tainan, Republic of (Taiwan), (2)Kaohsiung Veterans General Hospital, Kaohsiung, China, Republic of (Taiwan)

Background

Increased cancer-related inflammation has been associated with unfavorable clinical outcomes. Although combined platelet count and neutrophil-to-lymphocyte ratio (COP-NLR) has been related outcomes in several cancers but not nasopharyngeal carcinoma (NPC). This study evaluated the prognostic value of COP-NLR in predicting outcome in NPC patients treated with Intensity Modulated Radiotherapy (IMRT).

Method

We analyzed data collected from 232 NPC patients treated 2006 - 2015. Pretreatment total platelet counts, neutrophil-to-lymphocyte ratio, and COP-NLR score were evaluated as potential predictors. Optimal cut-off values for NLR and platelets were decided by receiver operating curve. Patients with both elevated NLR (>3) and platelet counts (>300x10^9/L) were assigned a COP-NLR score of 2; those with one elevated or no elevated value a score 1 or 0. Cox proportional hazards was used to test the association of these factors and relevant three-year survivals.

Results

Patients (COP-NLR Scores 1 and 2 = 85; Score 0 = 147) were followed 31.36 months. Univariate analysis showed no association between pretreatment NLR >2.23 and platelet counts >290.5x10^9/L and worse outcomes. Multivariate analysis revealed those with COP-NLR scores of 0 had better three-year disease free survival (p=0.02), overall survival (p=0.024), locoregional free survival (p=0.004), and distant metastasis free survival (p=0.046). Further subgrouping by tumor stage also revealed COP-NLR to be an independent prognostic indicator of three-year failure free survival (p=0.001) for locally-advanced NPC.

Conclusion

COP-NLR score, but not neutrophil-to-lymphocyte ratio alone or total platelet count alone, predicted survival in NPC patients treated IMRT-based therapy, especially those with stage III/IVA, B malignancies.
Quality of Life by the Use of Middle Turbinate Free Mucoperichondrium Graft for Resurfacing After Salvage Endoscopic Endonasal Nasopharyngectomy

S.Luo*(1), W.Chen(2), Y.Su(2)

(1)Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, China, Republic of (Taiwan), (2)Kaohsiung Chang Gung Memorial Hospital, , China, Republic of (Taiwan)

Background

Endoscopic endonasal approach is a minimal invasive technique for salvage treatment for locally recurrent nasopharyngeal carcinoma. The surgical wound is difficult to recover and causes a persistently postoperative headache, accompanied by crusting and heavy odor in the nasal cavity and frequent clearance because of prior radiation dose. Therefore, we designed a new technique to resurface the nasopharyngeal defects using a middle turbinate free mucoperichondrium graft. In this study, we also evaluate the post-operative quality of life (QoL) by the use of SNOT-22 and EORTC QLQ-C30.

Methods

From May 2013 to Nov 2016, 12 patients with locally recurrent nasopharyngeal carcinoma received EEA with en bloc resection of tumor and 0.5-1.0cm margins through bilateral nostrils. After complete resection of tumor, the nasopharyngeal mucosal defect was covered and fixed with middle turbinate free mucoperichondrium graft by the use of tissue adhesive glue. The Taiwan Chinese versions of questionnaires of QLQ-C30 and SNOT-22 have been tested in Taiwanese patients with NPC and excellent reliability and validity were obtained.

Results

All cases have achieved en bloc resections of the tumors with negative surgical margins and no post-operation radiotherapy followed. The wounds healed in 4-8 weeks in patients with this graft resurfaced, and no severe complication was observed. With mean 26.6 months follow-up (range: 2 to 42m), there was also no recurrence noted and better outcomes with significant statistics of QoL were noted after salvage nasopharyngectomy by the use of free middle turbinate mucoperichondrium graft for nasopharyngeal resurfacing.

Conclusion

Endoscopic endonasal approach is a minimally invasive, safe, and effective surgical modality for locally recurrent nasopharyngeal carcinoma. And, middle turbinate free mucoperichondrium graft is also effective to recover the nasopharyngeal wound in less than two months with less sinonasal symptoms and better quality of life.
Sinonasal mucosal melanoma: a study of 44 cases and review of the literature

M.Dreno*(1), M.Georges(2), F.Espitalier(1), C.Ferron(1), B.Dreno(3), O.Malard(4)

(1)CHU Service ORL et Chirurgie cervico-faciale, Nantes, France, (2)CHU Service d'Anatomopathologie, Nantes, France, (3)CHU Service de dermatologie, Nantes, France, (4)CHU Nantes, Nantes, France

Objectives:

Sinonasal mucosal melanoma is a rare disease. Indeed, it represents 4% of the malignancies of nasal cavity and paranasal sinuses. The aim of this study was to evaluate the clinical characteristics of this disease, its evolution, its treatment and to identify prognostic factors.

Material and methods:

This retrospective review presents a cohort of 44 patients treated for a melanoma arising from the nasal cavity and paranasal sinuses, in the ENT department and Neck Surgery of Nantes University Hospital between 1988 and 2015.

Results:

The mean age at the time of diagnosis was 71,2 years. Epistaxis and unilateral nasal obstruction were the main signs at diagnosis. Initially, 25% of patients were classified T4.

Surgical treatment was performed in 42 patients. Postoperative radiotherapy was performed in 19 cases and adjuvant immunotherapy in 14 cases.

The mean follow-up was 50 months. The cumulative overall survival rate was 71.5% at 1 year, 33% at 5 years. Clinically, the presence of headache, facial pain or anesthesia of trigeminal V2 nerve were associated to poor prognostic factor. The absence of extension from nasal cavity to the sinus was related to a better prognosis. Adjuvant radiation therapy provided a non significant local control improvement.

Conclusion:

Mucosal melanomas of sinonasal cavities are tumour of bad prognosis due to their high metastatic potential. Surgical resection is the main treatment but there is no consensus about new systemic adjuvant treatments compared to cutaneous melanoma.

Key words:

Mucosal melanomas, sinonasal cavities, treatment
The Effectiveness of Myringotomy and Ventilation Tube Insertion versus Observation in Post-radiation Otitis Media with Effusion

P. Charusripan*(1), L. Khattiwittayakun(1)
(1) Chulalongkorn University, Bangkok, Thailand

Objective: To compare the effectiveness of myringotomy and ventilation tube insertion versus observation in post-radiation otitis media with effusion (OME) in nasopharyngeal carcinoma (NPC).

Methods: NPC patients who finished radiotherapy treatment and had persistent OME were randomized in 2 groups. Myringotomy and ventilation tube insertion was performed in the intervention group, whilst the control group underwent observation only. The resolution rate of OME was evaluated at 6-month follow-up. Air conduction pure tone average (air-PTA), bone conduction pure tone average (bone-PTA) and air-bone gap (A-B gap) were compared between groups.

Results: 43 patients (23 in control group and 20 in intervention group) were analyzed altogether. Only one patient in the control group obtained a resolution of OME. The remaining patients in the control group had persistent middle ear fluid. Fourteen patients in the intervention group (70%) had retained ventilation tubes without suffering otorrhea. Ventilation tubes had spontaneously extruded in the remaining six patients and all patients had recurrent OME. Mean air-PTA in the control group was 52.04 dB (SD11.61), significantly different from the intervention group (air-PTA 38.15 dB (SD19.10); p=0.01). Mean bone-PTA in the control group was 24.74 dB (SD10.35), compared to 28.85 dB in the intervention group (SD14.56; p=0.002). Mean A-B gap in the control and intervention groups were 27.30 dB (SD9.59) and 9.30 dB (SD9.59) respectively (p<0.001). Mean air-PTA improvement was 9.34 dB (SD14.83; p=0.006) in the control group and 17.20 dB (SD13.47; p<0.001) in the intervention group. Mean bone-PTA improvement in the control group was 6.74 dB (SD7.61; p<0.001), without any significant change in the intervention group (-1.75 dB (SD7.49); p=0.309). Mean A-B gap improvement in the intervention group was 18.95 dB (SD11.98), significantly different (p<0.001) from 2.60 dB in the control group (SD11.98; p=0.308). Two patients in the intervention group (10%) developed complications, with one patient suffering suppurative otitis media whilst another had otorrhea, which resolved after 1-week course of antibiotic treatment.

Conclusions: Post-radiation OME is common in patients with NPC and tends to persist long-term. Conservative management is safe but is plagued by frustrating effects of hearing impairment and aural fullness. Myringotomy with ventilation tube insertion leads to hearing improvement with few complications. Our study shows that myringotomy with ventilation tube continues to play an effective role for symptomatic relief in NPC patients with post-radiation OME and should continue to be offered as a therapeutic option.
Total nasal reconstruction following oncologic surgery. A case review.

C.Pietrosanu*(1), V.Zainea(2), N.Popescu(2), I.Ionita(2), L.Popa(2), C.Zamfir(2), R.Hainarosie(2)

(1)Prof Dr. D Hociota Institute of Phonoaudiology and Functional ENT Surgery, Bucharest, Romania, (2)“Prof. Dr. D. Hociota” Institute of Phonoaudiology and Functional ENT surgery, Bucharest, Romania

Purpose of the study

Oncologic surgery implies extensive resections with safety margins that may lead to large tissue defects. The management of such cases is especially challenging in the facial region due to the complex local architecture and the cosmetic aspects. The reconstruction can be performed in the same intervention or in a second approach.

The purpose of this paper is to present a clinical case where a tissue expander allowed us to use a mediofrontal flap for a total nasal reconstruction. All the steps of the intervention will be documented, with emphasis on the risk factors and the cosmetic challenges.

Materials and methods used

Total nasal reconstruction is a difficult intervention, due to the large variety of tissues involved – bone, cartilage, muscle and skin. Another aspect is the functional outcome, that must be a good one. In our case, after a complete imagistic and endoscopic evaluation and a confirmed oncologic diagnosis, we chose as a therapeutical method a complete resection. The first step consisted in the mounting of a tissue expander, followed by resection and reconstruction in the same surgical intervention.

Results

Both cosmetic and functional results were excellent, allowing our patient to resume a normal life. The preoperative steps, preparing the flap and managing the comorbidities, are essential in achieving the desired outcome.

Conclusion

The tissue expansion technique is extremely valuable when dealing with reconstructive surgery. It allows us to close large defects in oncologic patients that required extensive resections. Although the main purpose of the intervention is to achieve the disease-free status, we must take into account the cosmetic aspect as well, which is crucial for the quality of life of our patients. This is even more important in interventions with an important cosmetic impact, such as total nasal resections.
Treatment of recurrent intranasal melanoma with topical imiquimod in two patients

B.Stanek*(1), A.Magele(1), C.Maurer(1), S.Edlinger(1), B.Gradl(1), G.Sprinzl(1)

(1)University Hospital St. Pölten, Austria

Background:
Mucosal melanomas are malignant tumors arising from aberrant growth of melanocytes of mucosal membranes and make up 1% of all melanomas. In mucosal melanomas of the nasal cavity or sinuses, late occurrence or lack of specific symptoms, lead to late diagnosis and advanced stage of disease. Surgery is the treatment of choice, but complete resection can be challenging and mutilating, depending on localization and spread. Especially in cases of recurrent non-resectable mucosal melanoma, treatment could be very difficult.

Imiquimod, a toll-like receptor agonist, was shown to be effective in cutaneous lentigo maligna in “poor surgical candidates”. This lead to the assumption, that topical imiquimod might also be an option for treating recurrent intranasal mucosal melanoma.

Material and Methods: We present two cases of recurrent intranasal multicentric melanoma. Both patients underwent surgical treatment but negative resection margins could not be achieved without mutilation. Radiotherapy and targeted therapy was no option in both patients. Topical treatment with imiquimod was started. 5% imiquimod cream was put on a PVA sponge and applied intranasal daily for one week in three following months.

Results: No severe complications occurred. Patients mentioned mild fatigue and mild burning of the nasal mucosa due to the inflammatory reaction.

After three month no evidence of mucosal melanoma in previously effected regions in clinical examination could be found. Follow-up is still continuing.

Conclusion:
Topical treatment with imiquimod could be an effective treatment in non-resectable mucosal melanoma.
Aggressive Non-Hodgkin’s lymphoma presenting as an abscess in the tongue base

A.Kaprana*(1), G.Lyronis(2), R.Leuwer(1)

(1)Helios Klinikum Krefeld, Germany, (2)Kerckhoff Klinik, Germany

Introduction

The expression non-Hodgkin lymphoma is used to cover a wide group of lymphoid neoplasias with the tendency to affect organs and tissues that does not physically contain lymphoid cells. The intraoral location is not frequent (3–5% of cases) and the initial manifestations of the disease rarely take place here.

Case report

An otherwise healthy 45 years old man was admitted to our emergency department with one week of dysphagia, shortness of breath and right-sided pain radiating to the ear. Oral examination showed redness and swelling of the tongue base and epiglottis with an ulceration of the right side of tongue base. A cervical computed tomography scan revealed asymmetry of the tongue with a soft-tissue mass on the left with loss of intermuscular fat planes. A CT-scan revealed a asymmetry of the tongue with a diffuse on the right with loss of intermuscular fat planes. After treatment 4 days with intravenous Antibiotic there was no improvement of the clinical findings. The patient underwent surgery for an incisional biopsy. The histological report indicated an aggressive NHL. The patient was extensively investigated for other sites of involvement and was referred to the oncological department for treatment.

Conclusion

Although NHL involving the oral region is uncommon, it should be considered in the differential diagnosis of pathological lesions in this region, because treatment and prognoses for these conditions are quite different.
Barium Swallow: use and value in current ENT practice.

C. Slinger *(1)

(1) Queen Elizabeth University Hospital, Glasgow, Glasgow, United Kingdom

Title: Barium Swallow: The use and value in current ENT practice.

Authors: Slinger CA & Smillie I (Clinical Research Fellow QEUH, West of Scotland ENT Trainee respectively)

Introduction: With globus/ and feeling of something in the throat (FOSIT) comprising 4% of ENT referrals, around 45% of population will have experience with these symptoms at some time. Barium swallow use is widely accepted in dysphagic patients but over use as an exclusion test for inappropriate symptoms remains in common practice.

Aim: to establish current use, cost and identification of significant pathology.

Method: This was a retrospective study of 98 patients over a 12 month period in a District General Hospital.

Results: 55% of referrals for barium swallow were for non-dysphagic symptoms (FOSIT 18%). Risk factors (smoking/alcohol) had no variation on referral or influence on positive findings. 77% of scans were reported as normal, with no diagnoses of malignancy. The majority of positive findings were in dysphagic patients. The cost of investigating non dysphagic symptoms was £9830.

Conclusions: barium swallow is still being over used in ENT practice. Despite no complications within this cohort there is still significant cost and radiation exposure (equivalent to 75 CXRs). This is of limited benefit as positive findings in non dysphagic patients are rare and exclusion of oesophageal/post cricoid malignancy is not possible.
Clinical outcome of surgical management for base of tongue cancer

M. Park*(1), Y. Rho*(2), J. Park(3), O. Kwon(3), K. Kwon(3)

(1) Ilsong Memorial Head and Neck Thyroid Cancer Hospital, Hallym University Medical Center, Seoul, Korea, Seoul, Korea, South, (2) Ilsong Memorial Head and Neck Thyroid Cancer Hospital, Hallym University Medical Center, Seoul, Korea, South, (3) Ilsong Memorial Head and Neck Thyroid Cancer Hospital, Seoul, Korea, South

Objectives The surgical treatment for base of tongue cancer is challenging for difficult approach. Our study aimed to assess the oncological and functional result of surgical management for base of tongue cancer as the initial treatment.

Methods Total 59 BOT cancer patients underwent surgery-based treatment in our institution from 1997 to 2015. Of these, 45 patients were retrospectively analyzed except patients with salvage treatment (n=12) and insufficient data (n=2). Mean age was 57.9 years old. Mean follow-up duration was 29.4 months.

Results The majority of the patients have Stage IV disease. Postoperative radiotherapy was performed to 19 patients, and chemoradiation to 19 patients. Primary tumor was removed by transoral approach in 1 patient, transcervical approach in 37 patients and transmandibular approach in 6 patients. Eight patients underwent total glossectomy, and 37 patients underwent partial or hemi-glossectomy. Thirty-four patients could preserve larynx and 4 patients sacrificed larynx. The 5-year disease free survival rate and overall survival rate were 64.7%, 64.2%, respectively. Articulation function using correct consonants showed significantly better results in partial glossectomy compared to total glossectomy (partial glossectomy: 90.4%, total glossectomy: 67.4%, p=0.041). 3 patients need percutaneous gastrostomy tube. Advanced T-stage, larynx invasion and positive surgical margin are significantly associated with higher recurrence rate.

Conclusions Primary surgical treatment is good option for BOT cancer with acceptable oncological and functional results.
Confirmation of 8th edition AJCC/UICC TNM staging system for HPV-related oropharyngeal cancer in Japan

T. Mizumachi*(1)

(1) Department of Otolaryngology-Head and Neck Surgery, Hokkaido University Graduate School of Medicine, Japan

Background: Several studies demonstrated that the current 7th edition AJCC/UICC TNM staging classification system does not consistently distinguish prognostic subgroups for human papillomavirus (HPV)-related oropharyngeal squamous cell carcinoma (OPSCC). The 8th edition AJCC/UICC TNM staging is effective for HPV-related OPSCC after January 1, 2017. This study confirms that the 8th edition AJCC/UICC TNM staging for HPV-related OPSCC reflects disease outcomes.

Patients and methods: We retrospectively analyzed 175 patients with OPSCC treated in Hokkaido University Hospital, Sapporo, Japan between 1998 and 2014.

Results: Median age was 63 years (range, 40-87 years). 152 patients were male and 23 were female. Of the 152 OPSCC patients, 83 (47.4%) were positive for HPV, and 92 (52.6%) were negative. 3-year overall survival rate was significantly lower in the HPV-negative patients with stage III and IV as compared with stage I and II (85.6% vs 52.7%, p<0.05). According to 7th edition AJCC/UICC TNM staging system, 3.6%, 8.4%, 13.3%, and 74.7% of the patients with HPV-related OPSCC were stage I, II, III, and IV, respectively. 3-year overall survival rate was not significantly different between stage I-III versus stage IV (100% versus 89.5%, p=0.19). According to 8th edition AJCC/UICC TNM staging system, 63.9%, 19.2%, and 16.9% were stage I, II, and III, respectively. 3-year overall survival rate was relatively distinguishable between stage I-II and III (95.5% versus 74.0%, p<0.01).

Discussion and Conclusions: The 7th edition AJCC/UICC TNM staging system is acceptable for HPV-negative patients, however, unsuitable for HPV-positive patients. The 8th edition AJCC/UICC TNM staging system is suitable for HPV-related OPSCC in Japan.
**Contralateral tonsil tumours - fact or fiction?**

S.Healy*(1)

(1)Royal Gwent Hospital, , United Kingdom

**Purpose of the study:**

To review the available evidence in support of contralateral tonsillectomy in cases of proven or suspicious tonsil malignancy. Also to analyse data and assess the rates of synchronous primary tumours in patients treated by the ENT Department in two centres in South Wales over the past 5 years, where bilateral tonsillectomy is a standard of care in this group of patients.

**Materials and Methods used:**

- Literature review on contralateral tonsil malignancy rates and the evidence for performing a bilateral tonsillectomy in a select group of patients.
- Survey to assess current practice amongst ENT Head and Neck Consultants in South Wales.
- Retrospective review of patients treated by Swansea and Newport ENT Departments. Patients identified using specific search terms on the TOMS theatre system. Patients were included if they had a contralateral tonsillectomy in the work-up of suspected tonsillar squamous cell carcinoma. Pathology results, including p16 status were reviewed on the Indigo Review results database.

**Results:**

There is evidence in the literature to support contralateral tonsillectomy. Current practice is variable, although results do show a pick-up rate of contralateral tonsil malignancies.

**Conclusion:**

Results indicate that our rates of synchronous primary are in keeping with those published in the literature, and that this is a sound practice in the management of tonsil squamous cell carcinoma, and Clinicians should consider adopting this approach.

**Discussion:**

Limitations of the study will be discussed in addition to explanations for the results. Future plans including as extending the study to other centres will be recommended.

**Authors:**

S. Healy ENT ST8, Royal Gwent Hospital, Newport, South Wales.

L. Pope, Consultant ENT Surgeon, Morriston Hospital, Swansea, South Wales.

C. Marnane, Consultant ENT Surgeon, Morriston Hospital, Swansea, South Wales.

D. Ingrams, Consultant ENT Surgeon, Royal Gwent Hospital, Newport, South Wales.

C. Passant, Consultant ENT Surgeon, Royal Gwent Hospital, Newport, South Wales.
Delirium prevalence and related risk factors in patients with head and neck cancer Surgery

G. Mohammadi*(1)

(1) Tabriz university of medical science, Tabriz, Iran, Tabriz, Iran

Abstract

Background & Aims:

Delirium is a common problem in hospitalized patients and may threaten the patient’s life. Patients who have undergone surgery it is a common complication. Given the high mortality rate of delirium in patients and their relatives and medical institutions as well as the lack of a rapid recovery from the disease, reveals the importance of attending this problem. So the purpose of this study is to show the risk factors in the major head and neck cancers surgery that causes delirium, then to help the patients' health.

Materials & Methods:

In this study, 104 patients with head and neck cancer candidate’s for surgery in Imam Reza Hospital in Tabriz university of medical sciences. Sampling and questionnaires of demographic characteristics and risk factors of delirium and a personality test of MMPI were used. All samples selected patients were studied. Data based on statistical methods, T-TEST and the mean and standard deviation and were analyzed by ANOVA.

Results

Based on information obtained %49.4 of study participants were female and %59.6 of men.

More than 16% of them had the previous disease such as hypertension, Diabetes, Cardiac infarction, atrial fibrillation and pulmonary disease.

Results showed that %90.4 of patients without delirium and %9.6 of having experienced delirium. Findings also showed that the most frequent diagnosis in terms of MMPI test sequence is related to anxiety disorder – Schizoid-affective and severe depression.

Results indicated a significant relation between literacy and the likelihood of patients experiencing delirium is $P=%05$. A significant relation between the type of surgery and the risk of delirium exists in the Cancer of the larynx is higher $P=%01$..and also there was meaningful relation between the factors of the MMPI and delirium experiencing MA ($p=%05$) Pd ($p=%05$) There is no remarkable affinity between Delirium and the existence of Hypertension, Diabetes, the residing period in ICU and the duration of Cardio Pulmonary diseases, potassium, sodium and glucose. The other findings also indicated that the MMPI test can be used as a tool to diagnose Delirium.

Conclusion:

This study shows that Semi literacy was a prevalent characteristic in most of the delirious patients. Also the kind of surgery was meaningful.

Because of high mortality and morality in delirious patients we can get cognitive tests and recognize high risk person to preventing. Psychic and psychotherapy is one of first step treatment.
Detecting Pathological Level IV lymph node metastases in Oropharyngeal Carcinoma- A New Approach

C.Rassekh*(1), C.Aguilar(1), B.O’malley, jr.(2), G.Weinstein(1)
(1)University of Pennsylvania, Philadelphia, United States, (2)University of Pennsylvania, Philadelphia, Uruguay

The purpose of this study was to evaluate the prevalence of level IV nodal metastasis in a group of patients whose necks were oriented by a single surgeon with a new technique which was utilized to identify substation lymph node metastases in level I and also used a specific strategy for defining the level III/IV boundary. Level IV dissection can be associated with chyle fistula. The hypothesis is that false positive level IV adenopathy would be much less likely with this orientation strategy and perhaps some patients can avoid the risk of level IV dissection.

Methods: 266 neck dissection specimens from patients with oropharyngeal carcinoma were identified from a database during this study from September 2011 to July 2015. Patients whose neck dissections were not oriented by the surgeon who devised the new orientation strategy were excluded from this study.

Results: Of the 198 neck dissections that were oriented using the level I substation strategy, 15 were found to have metastasis in level IV (7.6%). Metastases were found in tonsillar carcinoma (n=4), base of tongue carcinoma (n=8), and glossotonsillar sulcus cancer (n=3). NO metastases were seen in level IV from primary soft palate carcinoma but that is a rare site in our series. Multiple nodal metastases were found in 4 of the 15 patients (tonsil, n=2, base of tongue n=1, glossotonsillar sulcus n=1). More than 2 nodes were only found in two patients, both with tonsil carcinoma, each of whom had 5 nodes in level IV.

Conclusion: The importance of dissecting level IV has been stated in the literature. Our orientation strategy had a very high likelihood of excluding false positives, however the boundary between level III and IV is admittedly difficult to identify clearly. Our data do support the continued practice of dissecting level IV in carcinoma of the tongue base, tonsil and glossotonsillar sulcus. Level IV metastasis may have an impact on prognosis. Additional study is warranted to determine the predictors of level IV metastasis and the outcome of patients with level IV metastasis. The importance of careful orientation, nodal yield and techniques for avoidance of complications such as chyle fistula are detailed. Limitations of the study are addressed.
Evaluation of dysphagia in patients treated with CT+RT versus surgery and adjuvant therapy for oropharyngeal cancer

M.Biafora*(1), B.Stefano(2), B.Ramella(2), M.Gemma(2), M.Bussi(2)

(1)Ospedale San Raffaele, Milano, Italy, (2)Ospedale San Raffaele, Milano, Italy

Biafora M1, Bondi S1, Ramella B1, Gemma M2, Bussi M1.

1ENT Department, Ospedale San Raffaele, Milan.

2ICU Department, Ospedale San Raffaele, Milan.

Introduction: patients with oropharyngeal cancer undergoing radio and chemotherapy treatment in the first place even though it’s expected by international guidelines the surgical approach with adjuvant therapy in advanced stages. In the past was prevalent surgical treatment but today, due to the new discoveries concerning the aetipathogenetic role of HPV in oropharyngeal cancer, is preferred conformational radiotherapy with concomitant chemotherapy.

Material and methods: 22 patients treated with rt + ct (group A) and 12 patients who underwent surgical treatment and subsequent adjuvant treatment (group B). Patients are evaluated by self-administered questionnaires (H & N 35 and H & N C30). The degree of dysphagia was evaluated in FEES through the use of DOSS scale.

Results: 81.8% of patients in group A were HPV+ in the tumor while in Group B the percentage was 83.3%. The 54.5% of patients in group A were smokers while in Group B the percentage rises to 66.7%. The DOSS scale is significantly (p = 0.0065) higher in patients of group A (mean value of 6.7 versus 6 in group B). The items evaluated with the H%N C30 questionnaire are not significantly different in the two groups but instead are significantly higher a few items of the questionnaire H & N 35 (the items D49,52,53,54, 57, 59, 62) in the group B.

Conclusions: treatment with radiotherapy and chemotherapy is less invasive ensuring a better quality of life and better state of swallowing (measured with the DOSS scale in FEES) with equal oncological outcomes.
Histopathologic predictor factors for occult lymph node metastases in patients with cT1-2- N0 squamous cell carcinoma of anterior tongue

C.Righini*(1), I.Atallah(1), A.Kaderbay(1), E.Reyt(1), E.Berta(1), A.Coffre(1)

(1)Grenoble University Hospital, Otolaryngology-Head and Neck Surgery Department, Grenoble, France

Objectives: Management of cervical lymph nodes (cN0) in the setting of small tumors (T1-T2) of the oral cavity remains controversial. The aim of our study is to define the predictive histopathological factors for occult lymph node metastases (pN+) in squamous cell carcinoma of the anterior tongue (cT1-2 N0) and consequently to deduce lymph nodes therapeutic management.

Materials and methods: Cases with invasive squamous cell carcinoma of the anterior tongue with various degree of differentiation and with no history of prior treatment were included in our retrospective study (2000-2010). Four locations were distinguished: the tip, the lateral border, the ventral and dorsal aspect of the anterior tongue. A postoperative histological examination was performed by two pathologists who analyzed the tumor long and short axis, thickness, volume, and degree of differentiation as well as the presence of vascular emboli and/or perineural invasion. Statistical analysis was done using the stat view 5.1 software.

Results: 45 patients (25 men) with a mean age of 59 years were included. The cT classification was: cT1 23 (51%) and cT2 22 (49%). 25 cases (55%) underwent unilateral selective neck dissection (level I to IV) while 20 cases (45%) underwent a bilateral neck dissection with an average 17 lymph nodes dissected per side. Correlation between cT and pT classification was 93%. 13 patients (29%) were classified pN+. In 42 cases (93%), at least one lymph node was located in level I to III and only in 3 cases, at least one lymph node was located in level IV. 3 cases (7%) presented capsular rupture. In all cases, lymph node metastases were found to be ipsilateral to the lesion. In 3 cases with tongue tip lesion (7%) bilateral lymph node metastases were identified. Statistical analysis showed that tumor size (pT1/pT2) (p = 0.00001), the short axis (p = 0.02), the long axis (p = 0.04), the tumor thickness (p = 0.009), the tumor volume (p = 0.04), and the presence of vascular emboli (p = 0.019) and perineural invasion (p = 0.0007) were predictive of lymph node metastases. The location and the degree of tumor differentiation were not correlated with the pN + status.

Conclusion: Our results show a high rate of lymph node metastasis. These results prompt treatment of lymph nodes with ipsilateral neck dissection (level I to IV), especially in the setting of cT2N0 tumors, Bilateral neck dissection is recommended for tongue tip lesions.
Incidence of Helicobacter pylori and HPV in Oropharyngeal Carcinoma.

J.Astl*(1)

(1)Dept. of Otorhinolaryngology and Maxillofacial Surgery 3rd Faculty of Medicine of Charles University and Military Faculty Hospital, , Czech Republic

Helicobacter pylori is well known as pathogen of GIT. His relationship to cancer has been declared and H. pylori considered cancer-inductor. A number of studies described H. pylori residence in oropharyngeal area (tonsils, adenoids). Human papillomaviruses (HPV) are reported as cancer inductor in oropharyngeal area. HPV high risk type HPV16(group A9) considered especially for oropharyngeal area.

The aim of this study is providing comparison of incidence of H. pylori and HPV pathogens in oropharyngeal and laryngeal cancer in the same individuals.

Methods. we used real-time PCR-based tests. We collected 63 specimens from oropharyngeal malignancies. We detected the DNA of H. pylori and HPV (groups A9, A7 and A A5/6)

Results: The H. pylori was detected in in 53 samples (84,1%), HPV infection was detested in 38 cases (60,3 %) only.

The many recent studies described the HPV as a cancer-inductor for oropharyngeal cancer. In our study the sole HPV infection was detected in 3 cases (4,8%) only.

Conclusions: considering result data we believed, that the H. pylori infection must be revised for oropharyngeal are according to the knowledge of the cancer-inductor role of HPV. Helicobacter pylori contribution in induction of malignant process should be aware. The most data showed Helicobacter pylori is a long-therm resident in oropharynx and tonsils. The role of residency of Hylicobacter pylori on the immune system and concomitant infection of HPV is unknown, but we reported the high presence of concomitant infection in oropharyngeal cancer 35 cases (55,6%).

This work was supported by project Ministery of defance MO 1012.
Localization of HPV E6/E7 Oncogenes in Surgically treated Oropharyngeal Squamous Cell Carcinoma.

H.Channir*(1), K.Kiss(2), N.Rubek(3), B.Wittenborg charabi(3), C.Von buchwald(3), C.Braemer lajer(3)

(1)Department of Otorhinolaryngology, Head and Neck Surgery and Audiology, Rigshospitalet, Copenhagen University Hospital, Copenhagen, Denmark, (2)Department of Pathology, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark, (3)Department of Otorhinolaryngology, Head and Neck Surgery and Audiology, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark

Purpose of the study: To investigate whether human papillomavirus (HPV)-positive oropharyngeal squamous cell carcinoma (OPSCC) exhibits a distinct expression of transcriptionally-active HPV E6/E7 mRNA compared to the dysplastic epithelium and non-neoplastic tissue components in a cohort of surgically treated patients.

Materials and methods used: We retrieved formalin-fixed paraffin embedded whole slide sections from the primary tumour in a selected cohort of patients with early-stage OPSCC who have undergone primary transoral robotic surgery. Detection of HPV E6/E7 mRNA was performed using RNA in-situ hybridization (ISH) by a validated manual and automated RNAscope assay, and a HPV High-Risk 7 probe (HPV16, 18, 31, 33, 35, 52, and 58). The HPV E6/E7 mRNA expression was assessed in all areas comprising normal tissue, dysplastic epithelium and carcinoma. In addition, the RNAscope HPV results were validated against HPV-DNA detection by PCR and p16 immunohistochemistry.

Results: HPV E6/E7 mRNA was dot like positive in the nuclei in the entire tumour area and corresponded strongly with both HPV-DNA by PCR and p16 expression. In addition we also found expression in areas of dysplasia. There was no expression in the adjacent surface epithelium or non-neoplastic tissues.

Conclusion: Oncogenic HPV detected by RNA ISH is consistently expressed in the distinct growth pattern of OPSCC, arising strictly from the tonsillar crypts and involving dysplastic areas, but is absent in the normal surface epithelium. This supports our understanding of the causal role of HPV in OPSCC carcinogenesis arising from the reticulated epithelium deep in the tonsillar crypts, and the lack of field cancerization in HPV derived OPSCC.
Lymphoma of the tonsil (Two cases reports)

B. Rabie(1)

(1) CHU Nabeul, Nabeul, Tunisia

Introduction:
Non-Hodgkin’s lymphoma of the Waldeyer’s ring is a relatively rare entity and the palatine tonsil is the most frequently involved site.

The oropharyngeal sites of other malignant lymphomas (Hodgkin’s disease, plasmacytoma) are very rare.

There is no direct relationship to smoking or alcohol consumption.

Material and methods
We report two cases of lymphoma of the tonsil.

Observation
The first case is a 74-year-old man who consulted for dysphagia to solids. On physical examination, a mass was observed in the right palatine tonsil, associated with a swelling under the right mandibular angle.

It was supplemented by CT and MRI cervico-facial which showed a tissue process at the expense of the right tonsil lodge.

The second case is a 21-year-old patient who consulted for odynophagia. On examination, presence of Unilateral tonsil ulceration resistant to medical treatment.

The two patients underwent tonsillectomy. Histological examination confirmed a diagnosis of non-Hodgkin’s lymphoma diffuse large cell type of B phenotype.

Conclusion: A combined treatment consisting of chemotherapy and radiotherapy leads to a satisfactory outcome. The prognosis depends on the stage, with an overall survival rate at 5 years of 50 to 60%
Malignant melanoma of the palatine tonsil: a case report.

C.Colina etala*(1)

(1)Hospital Universitario de Gran Canaria Dr. Negrín, Spain

Purpose:

Mucosal melanomas are rare and aggressive tumors. They constitute about 1.3% of all melanomas. The most common site of mucosal melanomas is head and neck, anal canal, rectum, female genitalia. About 25-50% of all cases occur in head and neck region. They present with advanced stage, and more aggressive, due to their hidden location and asymptomatic early stage. It presents worse prognosis and a higher mortality rate than cutaneous melanoma. Most published reports documenting a 5-year survival rate of 10-15%.

Case report:

An 82-year-old female patient with a personal history of nodular melanoma of the hard palate, operated through a lesion on the palate with a right radial forearm free flap and 2 sentinel lymph nodes removed in April 2006. Needs wider excision of surgical margins and bilateral neck dissection one month later. In complete remission until the present moment. She presented with complaints of left asymmetric tonsillar hypertrophy. No other complaints. There was an hypertrophic, asymmetric, and erythematous left tonsil. No other lesions in the upper aerodigestive tract. The lesion was biopsied.

Biopsy of the lesion is reported as metastasis of melanoma, with immunohistochemistry for S100, MelanA, HMB45, which showed focal positivity. We made an extension study with total body CT.

The neck CT reported a mass in the left tonsillar region (2.8 x 1.6 cm) which arise from the tonsillar pillar, contacting the back of the tongue without appreciating signs of infiltration. Minimally significant millimetric lymph nodes.

According to the clinical and radiological examination, without evidence of lesions at other levels, tonsillectomy is considered.

Discussion:

Mucosal melanomas have an equal gender distribution and a peak incidence between 60-80 years, being our patient in the expected range. Most malignant melanomas manifest in the palate and gingival area of the maxilla. There are few published cases in the national and international literature of mucosal melanomas in several simultaneous locations.

Surgical treatment is being promoted as the primary therapeutic approach, with a growing consideration for postoperative radiotherapy, as wide surgical resection in the head and neck region is often difficult.

Due to the high aggressiveness and the advanced stage at the diagnosis of mucous melanomas, a high suspicion, a medical history and a complete physical examination are essential to perform an early treatment.

Colina Etala, C; Dominguez Sosa, S; Torres Aguiar, MJ; Díaz Rodriguez, D; Miranda Fandiño, S; Valido Quintana, M

Department of Otorhinolaryngology, Hospital Universitario Gran Canaria Dr. Negrín
Mandibular reconstruction after oral oncologic surgery

S.Radoi*(1), V.Zainea(2), N.Popescu(3), A.Iliescu(3), R.Pulpa(1), L.Popa(1), R.Hainarosie(4)

(1)*Carol Davila* University of Medicine and Pharmacy, Bucharest, Romania, (2)1. “Carol Davila” University of Medicine and Pharmacy; 2. “Prof. Dr. D. Hociota” Institute of Phonoaudiology and Functional ENT surgery, Bucharest, Romania, (3)Prof. Dr. D. Hociota” Institute of Phonoaudiology and Functional ENT surgery, Bucharest, Romania, (4)1. “Carol Davila” University of Medicine and Pharmacy 2. “Prof. Dr. D. Hociota” Institute of Phonoaudiology and Functional ENT surgery, Bucharest, Romania

1. Purpose of the study

Loss of mandibular continuity determines alterations in speech, swallowing, mastication, and in the appearance of the patient. The goal of reconstructive surgery is to replace bone and soft tissue lost by ablative surgery in such fashion that reintegration (function and aesthetics) of the patient in the society to be easier. The benefits of surgical reconstruction should offer the patient a good quality of life that is worth the operatory risk.

The purpose of this paper is to present an evaluation of the reliability of a composite osteomyocutaneous flap using pectoralis major muscle and the 5-th left rib to reconstruct the mandible.

2. Materials and methods used

The reconstruction of soft and hard tissue defects of the mandible after tumour extirpation is challenging.

We wish to present the case of a patient who was diagnosed with spinocellular keratinized carcinoma, G1, located at the mouth floor with mandibular extension, which needed resection of the mouth floor along with the anterior part of the mandible followed by mandibular reconstruction.

3. Results

The composite 5-th rib osteo-pectoralis major myocutaneous flap was a viable one. No problems were encountered during harvesting and in the postoperative period.

Both functional and cosmetic results were god, allowing our patient to resume a normal life.

4. Conclusion

The reconstruction using composite ostomyocutaneous flap is a valuable technique. It allows us to close large defects in oncologic patients that required extensive resections.

The goals of the reconstructive surgery is replace the bone and soft tissue lost by ablative surgery in such a fashion that the quality of life should equal or surpass the quality of life without the reconstruction. The reconstruction is preferably made in the same operatory time and can be performed by the same surgical team.

Authors: Silviu Rădoi1, V.Zainea1,2, Novac Popescu1,2, Anca L. Iliescu1,2, Raluca Pulpa1, Laura Popa1, R. Hainarosie1,2

1. “Carol Davila” University of Medicine and Pharmacy

2. “Prof. Dr. D. Hociota” Institute of Phonoaudiology and Functional ENT surgery
Mixed adenoneuroendocrine carcinoma in the oral cavity

G.Kecskés*(1), A.Westerborn(2), J.Reizenstein(3)

(1)Department of Otolaryngology, Division for Head and Neck Oncology, Örebro University Hospital, Sweden, Örebro, Sweden, (2)Department of Otolaryngology, division for Head and Neck Oncology, Örebro University Hospital, Örebro, Sweden, (3)Department of Oncology, Örebro University Hospital, Örebro, Sweden

INTRODUCTION

Mixed adenoneuroendocrine carcinoma (MANEC) has a phenotype when neuroendocrine tumor coexists with adenocarcinoma. The incidence of MANEC has not yet been epidemiologically analyzed since it is one of the rarest types of neuroendocrine tumor, only case reports can be found in the literature. The few reported cases was all found in the gastrointestinal tract and none of them was ever described in the oral cavity.

CASE REPORT

68 year–old male patient with history of hypertension and irradiation therapy for prostate cancer in 2007. The patient described a sensation of a slow, gradual thickening of hiu tongue in the last 6 to 12 month period. He was presenting with voluminous lesion in the oral cavity, below the tongue involving the floor of the mouth. CT scan showed a 4,5 cm, mostly low attenuation lesion without cervical lymphadenopathy. Preoperative core needle biopsy suggested a neuroendocrine malignancy which has been surgically removed with clear but small margins. Histopathologic examination revealed a MANEC tumor. He did not receive any chemotherapy. The patient is clinically and radiologically tumor-free at 30 month postoperatively.

DISCUSSION

Due to the rarity of these neoplasm the clinical behavior of MANEC is poorly understood, the optimal strategy of management of MANEC is largely unknown. Our patient had a rare case of MANEC arising from the oral cavity. To the best of our knowledge, this case is the first of its kind.
Non-invasive and label-free detection of oral squamous cell carcinoma using saliva surface-enhanced Raman spectroscopy and multivariate analysis

K. Davies*(1)

(1) University college hospital Galway, Dublin, Ireland

Karen Davies, BA, MB, BCh, BAO, MRCSI (DOHNS), Jennifer M. Connolly, PhD, Agne Kazakeviciute, PhD, Antony M. Wheatley, PhD, Peter Dockery, PhD, Ivan Keogh, MB, BCh, BAO, MD, FRCSI (ORL-HNS), FRSCI, Malini Olivo, PhD

School of Physics, National University of Ireland, Galway, University Road, Galway, Ireland

Academic Department of Otorhinolaryngology, National University of Ireland Galway and Galway University Hospital, Ireland

Department of Anatomy, School of Medicine, National University of Ireland Galway, University Road, Galway, Ireland

Bio-Optical Imaging Group, Singapore Bio-Imaging Consortium (SBIC), Agency for Science, Technology and Research (A*STAR),

Objective: Recently, the use of saliva combined with Raman spectroscopy, a technique that provides a chemical spectral-based fingerprint of biofluids at the molecular level, has been demonstrated as a promising tool in the diagnosis of oral pathology. We report using silver nanoparticle-based surface enhanced Raman spectroscopy (SERS) as a label-free, non-invasive technique for detection of oral squamous cell cancer (OSCC) using saliva and desquamated oral cells.

Method: Saliva samples were collected from cohorts of smokers, those with confirmed oral or oropharyngeal squamous cell carcinoma and from healthy age and sex-matched controls. Saliva was centrifuged to remove oral cells and the remaining saliva was stored frozen until analysis. For SERS spectral measurement, saliva was placed on a silver nanoparticle based substrate. Raman spectra were then collected from saliva using a Witec Raman Spectroscope and statistically analyzed.

Results: A total of 180 SERS spectra were acquired from saliva and 120 SERS spectra from oral cells collected from normal healthy individuals and from confirmed oropharyngeal cancer patients. Notable biochemical peaks in the SERS spectra were tentatively assigned to various components and subjected to multivariate statistical techniques including principal component analysis, linear discriminate analysis (PCA-LDA) and logistic regression (LR) revealing a sensitivity of 89% and 68% and a diagnostic accuracy of 73% and 60% for saliva and oral cells, respectively.

Conclusion: By combining the recent advances in biomedical optics and nanotechnology, our results demonstrate the potential of saliva and oral cell SERS as a promising clinical adjunct for the non-invasive detection of oral cancer.
Objective evaluation of swallowing after transoral robotic surgery for oropharyngeal cancer

J.Granell*(1), R.Gutierrez-fonseca(1), C.Rivera(2), B.Garcia-botran(1), V.Ostilla(1), L.De toro(1)

(1)Rey Juan Carlos University Hospital, Mostoles (madrid), Spain, (2)Central Military Hospital, Mexico city, Mexico

Purpose of the study. Transoral robotic surgery (TORS) seems to bring a functional benefit in the treatment of oropharyngeal cancer. Nevertheless the outcomes research on swallowing is usually done based either on surrogate markers (gastrostomy dependence) or on specific dysphagia questionnaires. None of these methods accurately reflects a physiologically normal swallow. The aim of this study is to present a systematic and objective evaluation of swallowing in TORS.

Materials and methods used. We designed a prospective study including patients with new diagnoses of oropharyngeal cancer who received primary TORS (July 2013-July 2016). Patients with previous malignancies in the head and neck or synchronous tumours elsewhere were excluded. They underwent a standardized evaluation in the Dysphagia Unit with instrumental examinations (dynamic swallow studies with videoendoscopy and videofluoroscopy, both with volume-viscosity testing) before reintroducing oral diet and on late follow-up. Safety and efficacy parameters were extracted: we used the penetration-aspiration scale described by Rosenbek, and measured swallowing times (opharyngeal transit time, OPTT, total pharyngeal transit time, TPTT) on high speed recordings.

Results. Twenty-one patients meet the inclusion criteria. Almost two thirds were advanced tumours (57% in stage IVA). The number of cases by T classification was 4/12/1/4 for T1 / T2 / T3 / T4a respectively. The most frequent subsite was the base of the tongue (38%) followed by the pharyngeal tonsil (33%). Safety problems were exceptional: 85% were classified as Rosenbek 1 on early evaluation. Mean OPTT was 0,245 seconds (SD 0,152) and TPTT 0,754 seconds (SD 0,240). Only two patients showed delayed transit times. Five cases were managed without any type of feeding tube. The only gastrostomy is long-lasting. With the exception of this patient and another one who remains on a soft diet, all others are on basal (normal) oral diet. No patient has had a tracheostomy except for one (temporary) with severe sleep apnea. Half of the patients received adjuvant therapy. Local control is 100%. With a median follow-up of 26 months all patients except for two (one neck recurrence, one died of unrelated cause) are alive and free of disease.

Conclusions. Regardless of the TNM classification, we only use robotic surgery in the oropharynx for base of tongue or extended resections, since smaller tumours in favourable locations can usually be managed with conventional instrumentation. With oncological results that support the primary TORS approach, 90% of patients in the series have preserved a physiologically normal swallow.
ABSTRACT

INTRODUCTION:
Carcinoma of oral cavity is amongst the first ten commonest malignancies in Pakistan. Oral cavity sub sites includes lips, gum, floor of mouth, mucosa of cheeks, vestibule, anterior two third of tongue, retro molar trigone, hard and soft palate and uvula these sub sites show a variation of trend, onset of cancer. Causes are Aerica nut, tobacco and low consumption of alcohol in our society as compared to developed part of the globe.

Objective: To determine the frequency of oral cancer in sub sites of oral cavity.

Study design: Cross sectional study

Setting Venue: Ear nose throat, Head and Neck surgery Department, Jinnah Postgraduate Medical Centre Jinnah Sind Medical University Karachi.

Duration: Four years, from 1st January 2013 to 1st January 2016.

Subject and Methods: A total of 105 patients having chronic oral ulcer of three months or more duration, growth in oral cavity, either gender reporting for treatment at ENT JPMC OPD were registered for the study. Detail like sub site oral lesion, technique of sampling like punch biopsy to be done by expression biopsy and Histo pathologically reports were entered.

RESULTS:
The average age of the patients was 48.52 ± 5.24 years. There were 61% male and 39% were female. The commonest sites involved were cheek mucosa, lips, tongue, gum with (36.2%), (25.7%), (20%), (18%) respectively.

Conclusion:
Cheek mucosa is the commonest site of oral cancer with middle age group and male predominance. These results are similar to previous studies with acceptable differences in proportions and common sites involved. However, most of the studies have shown male predominance and middle to old age involvement.

Key Works: Carcinoma, Oral cavity, Cheek mucosa, Oral Cancer, Oral Subsites, Intra Oral,

L. Santini*(1)

(1) APHM, Marseille, France

Introduction

Oropharyngeal cancer is a common head and neck cancer. Its management remains an oncological and functional challenge. Treatments sequela, whether surgical or based on radiotherapy or radio-chemotherapy, are frequent and can severely impact the quality of life after cancer. All upper aerodigestive tract functions can be achieved: swallowing, oral feeding, voice and speech, sleeping quality.

Materials and methods

During a 2-year period (2011-2013), 44 patients underwent a systematic analysis during a multi-disciplinary meeting involving phoniatrician, speech pathologist, psychologist and dietician. Goals were to investigate the presence of functional sequela and to measure their impact on quality of life. This evaluation included an analysis of swallowing (fiberoptic endoscopic evaluation of swallowing, video fluoroscopy, EORTC and SWAL-QOL questionnaires), voice and speech analysis (acoustic analysis of the fundamental frequency, intensity, nasal airflow, oral airflow, shimmer and jitter, VHI-10 and EORTC questionnaires) and a quality of life analysis (EORTC questionnaires).

Results

Concerning swallowing, 68% of patients had dysphagia and 50% presented aspiration. Predictors of swallowing disorders were age (p <0.05), limitation of lingual protraction (p = 0.02), and xerostomia (p = 0.02). These results were correlated with self-assessments of quality of life.

In terms of voice and speech, the intelligibility, the fundamental frequency and the nasal airflow were normal or subnormal. 37% of patients had articulatory errors, which were more frequent after surgery (p = 0.02). 26.25% of patients reported poor voice quality in self-assessment. The history of surgical treatment (p = 0.02) and the tumor stage (p = 0.02) were predictive factors of vocal disability.

The mean overall quality of life score was 60.58%. The figures were comparable to those of the reference population of the EORTC. The average rate of symptoms specific to VADS cancers was 37.85%

Conclusion

Sequela after oropharyngeal cancer treatment are frequent. Both objective and subjective assessment are necessary in order to take it in charge and to improve the quality of life after cancer.
Outcomes of Transoral Laser Microsurgery for Oropharyngeal Squamous Cell Carcinoma in Ireland

R.Woods*(1), L.Geyer(1), A.Ionescu(1), P.Sheahan(1)

(1)South Infirmary Victoria University Hospital, Cork, Ireland

Purpose of the Study: There is ongoing debate as to the optimal treatment approach for oropharyngeal squamous cell carcinoma. While nonsurgical management is often advocated in these cases, increasing evidence suggests minimally invasive surgery, whether robotic or transoral laser microsurgery (TOLM, can offer improved outcomes with reduced morbidity. We report single institution outcomes of a minimally invasive approach involving TOLM.

Materials and Methods: All patients with oropharyngeal carcinoma undergoing TOLM at the South Infirmary Victoria University Hospital in Cork were identified within a prospective database monitoring outcomes of head and neck cancer. Human papillomavirus (HPV) status was determined by p16 immunohistochemistry. Kaplan-Meier survival analysis was used to evaluate locoregional control and disease specific survival. Complications following surgery and gastrostomy tube dependence were also evaluated.

Results: Between 2010 and 2016, 25 patients underwent TOLM. In terms of subsite, 68% were tonsillar and 16% were from the tongue base, with the remaining cases from the soft palate or posterior oropharyngeal wall. The mean age was 56 years old (range 29-71). Immunohistochemistry for p16 was positive in 74% of cases. Tumour stage was T1-2 in 92% of cases. In cases where neck dissection was performed, only 13% had negative regional disease. There was one haemorrhage necessitating return to theatre, one lower respiratory tract infection related to aspiration and four tracheostomies, three of which were simultaneous with the primary surgery. No patient was PEG dependent at latest follow up. Adjuvant treatment was carried out in 22/25 patients (20 with radiation alone and two with chemoradiation). Mean follow-up was 27 months (range 1-79 months). By Kaplan-Meier estimation, locoregional control was 96% while disease specific survival was 84%.

Conclusion: Good oncologic outcomes from our institution support use of TOLM in the treatment of oropharyngeal SCC. While many cases also require adjuvant treatment, usually with radiation alone, such approaches offer an alternative to primary treatment in the form of chemoradiation and its associated morbidity.
Photodynamic therapy as treatment method of malignant head and neck tumors.

D.Zabolotnyi(1), E.Lukacs*(2), I.Fekeshazi(2), V.Troyan(2)

(1)State institution «O.S. Kolomiychenko Institute of Otolaryngology of National Academy of Medical Sciences of Ukraine», Kiev, Ukraine, (2)State institution «O.S. Kolomiychenko Institute of Otolaryngology of National Academy of Medical Sciences of Ukraine», , Ukraine

Photodynamic therapy (PDT) is used as a treatment for malignant head and neck tumors (MHNT) since 90's /Loukatch E., Troyan V (1996); Tomoki Yoshida (2012); Stranadko E.F.(2013)/. Once effective photosensibilizers (PS) had been emerged – as Chlorine-6 and others – usage of which had a significant positive effect on the therapy results, PDT had become a part of protocols for MHNT treatment.

Materials and methods.

19 patients with different stages of laryngeal part of phaynx cancer had been exposed to PDT intraoperationally. 0,4% water solution of methylene-blue had been used as a PS. Malignant regions were radiated with He-Ne laser (633 nm) with 0,25 W/cm² power administered with 200 J/cm² final dose.

3 patients with nose skin cancer, 1 patient with laryngeal cancer in situ, 4 patients with oropharyngeal cancer had been administered PDT with chlorine-6 as PS. Diode laser (600 nm) was used in this case with 0,3 W/cm² and lase dose of 300 J/cm².

Results.

Intraoperative PDT had been increasing the 3-year survival by 50% compared to a control group. PDT contributed to complete regression of laryngeal cancer recidive-free period of 4 years. 4 patients with recurrent oropharyngeal tumors photodynamic therapy contributed to partial tumor regression.

Repeating PDT was not performed as patients refused to take further PDT and other treatment methods were used. Oropharyngeal cancer patients suffered from swelling of oral mucous membrane and tongue. Therefore anti-swelling and pain medications should be used after PDT.

PDT had eliminated the recurrent basecell nose cancer in one patient, which normally was a high risk of recidive case.

Conclusion.

At the early stages of ENT cancers PDT can be successfully carried out with good results. Recurrent and neglected forms of cancer require repeated sessions of photodynamic therapy.
Quality of carcinological resection and surgical approaches to oropharyngeal cancers: results of a retrospective study in an oncologic referral center between 2010-2015

C.Rieu*(1)

(1) CHU amiens, Amiens, France

Auteurs: J.Bettoni, C. Rieu, A. Algrin, N. Lavagen, M. Erlem, S. Dakpé, A. Biet, J. Davrou, B. Devauchelle

Object: Oropharyngeal cancers account for 15 to 20% of cancers of the upper aerodigestive tract, ie 1600 to 2400 new cases per year in France. Carcinological resection in negative margins (basic principle of tumor resection) is sometimes made difficult due to in depth extension in this topography. The question of the most efficient surgical approach for a better exposition is fundamental.

Materiel and methods: The classic transmandibular bucco-pharyngectomy (TMBP) can be replaced by a strict endobuccal approach if tumor extension does not descend under the dental arch; the latter will be combined with a pull-through procedure in case of lower involvement.

Results: A retrospective study was carried from 2010 to 2015 out in the Maxillofacial Surgery and Otorhinolaryngology departments of the Amiens University Hospital in order to evaluate each approach (strict endobuccal, TMBP and pull-through) regarding oropharyngeal cancer resection quality (primary endpoint: R score).

Conclusion: Ninety patients (27 women and 63 men) were included: 18 T1, 42 T2, 18 T3 and 12 T4. A total of 32 TMBPs, 31 strict endobuccal and 27 combined pull-through procedures were performed with respective resection rates R1 of 50%, 32.5% and 14%. A significant difference was observed between combined pull-through and TMBP techniques. (p< 0.05).

Our results showed a statistically significant difference between combined pull-through and TMBP techniques in terms of complete tumor resection. Though further investigations are needed, proof is made of the existence of efficient alternatives to the classic TMBP for oropharyngeal carcinoma surgery.
INTRODUCTION: Simultaneous pharyngeal carcinoma occurs very rarely. Three cases of synchronous bilateral tonsillar carcinoma have been described in literature till now, with metastatic carcinoma of unknown primary location. However, we haven’t found that simultaneous pharyngeal carcinoma and carcinoma of contralateral hypopharynx are described.

METHOD: Case report and literature review.

RESULTS: The patient BM, a male, aged 55, a waiter by profession, healthy by now. Smoker for 35 years, approximately up to 15 cigarettes a day. He drinks up to 5-6 glasses of alcoholic drinks every day. He negates gastric or oesophageal problems. One his brother died of lung carcinoma.

During the clinical inspection infiltrative tumor of the left palatine tonsil with rampart like edges and soft palate, spreading towards the base of the tongue was found. On the right lateral wall of hypopharynx uneven exophytic tumor measuring 3x3x0.5cm, spreading to the back wall. During clinical and radiologic investigation cervical and remote metastasis haven’t been found. By Fiber oesophagoscopy gastroesophageal reflux disease (GERD) was found. In both specimens pathohistologic diagnosis is Squamous cell carcinoma (SCC), G 1. Immunohistologic finding on the Human Papilloma Virus (HPV) is negative. The treatment started with chemoradiation.

CONCLUSION: We describe an exceedingly rare case of bilateral simultaneous pharyngeal SCC, which are HPV negative. Clinical presentation of carcinoma indicates existence of separate entities, regardless on identical pathohistologic characteristics.
Surgical Anatomy of the Lingual Artery: Transoral and Transcervical Considerations

J.Sims*(1), J.Morris(1), E.Moore(1)

(1) Mayo Clinic, Rochester, United States

Purpose: With the increasing prevalence of HPV-related oropharyngeal squamous cell carcinoma and growing utilization of less-invasive transoral approaches to the base of tongue, it is more important than ever to have a detailed understanding of the vascular anatomy in this region. This study seeks to clarify the anatomical course of the lingual artery (LA) and its major branches from both a transoral and transcervical perspective.

Materials and Methods: A total of 10 lingual arteries were dissected in latex-injected, fresh-frozen cadaver specimens. The LA was initially located at its origin at the external carotid artery (ECA), and then carefully dissected to its distal branches. Spinal needles were used to correlate the three-dimensional position of the lingual artery in the tongue with surface landmarks transoral surface landmarks.

Results: The LA branch point from the ECA was most commonly just superior (median 0.2cm, IQR 0.2-0.4) to where the hypoglossal nerve crossed the ECA. The LA then coursed in a narrow loop posterior and superior 0.9cm(IQR 0.6-1.1) from the greater horn of the hyoid bone before dropping inferiorly within 0.2 cm of the hyoid bone as it passed behind the hyoglossus muscle. The dorsal lingual artery branched from the LA approximately 1.7cm(IQR 1.4-1.8) anterior and 0.5cm(IQR 0.4-0.7) superior to the greater horn of the hyoid. From a transoral perspective, the dorsal lingual artery branch point from the LA was 1.7 cm(IQR 1.5-1.9) lateral from the midline, 1.0cm(IQR 0.7-1.1) anterior to the foramen cecum, and 2.8cm(IQR 2.6-3.0) deep from the surface of the tongue. The dorsal lingual artery quickly arborized into multiple small branches proceeding posteriorly and superficially to vascularize the base of tongue. The main LA remained lateral to the lingual tonsillar tissue and intrinsic muscles of the tongue until just posterior to the attachment of the palatoglossus muscle. At the level of the vallecula, the LA was 2.4 cm(IQR 1.9-2.8) lateral to the median glossoepiglottic fold, deep to the lateral pharyngeal wall.

Conclusions: The LA remains lateral to the base of tongue and relatively deep until just posterior to the attachment of the palatoglossus muscle or approximately 1.0 cm anterior to the foramen cecum. During transoral surgery, the LA is at risk for injury anterior to this area in the tongue base musculature or laterally in the pharyngeal wall near the level of the hyoid bone. For transcervical ligation, the most consistent location of the lingual artery is at its branch point from the ECA near the level of the hypoglossal nerve.
The role of HDTV-NBI in the identification of primary tumor in SCCUP

M. Filauro* (1)

(1) San Martino Hospital, Genoa University Medical School, Genoa, Italy

Squamous cell carcinoma of unknown primary of the head and neck (SCCUP) is defined as the presence of malignancy in one or more nodes within the neck region that are not solely in the supraclavicular region without an identifiable primary tumor. SCCUP accounts for 1% to 4% of all cancers of the head and neck. From 1.4% to 54% of patients will develop a detectable primary tumor, so “true” SCCUP represent only 1-2% of all head and neck cancers. Fine-needle aspiration (FNA) of the lymph node is the first line approach for the diagnosis.

We retrospectively evaluated the diagnostic accuracy of HDTV-NBI in the identification of primary tumor in the head and neck, not detectable by standard endoscopy white light (WL) and radiological evaluation.

From June 2013 to September 2016, at the Department of Otorhinolaryngology Head and Neck Surgery, Genoa University Hospital, we evaluated 17 consequent untreated patients affected by SCCUP. Each patient underwent panendoscopy by HDTV-WL and HDTV-NBI in the outpatient clinic followed by CT scan or MRI and PET scan. If a suspicious area was identified by HDTV-NBI endoscopy, we performed a guided-biopsy of the area for histological confirmation. By contrast if any suspicious area was detected during the aforementioned work-up, the patients underwent panendoscopy in microlaryngoscopy combined with bilateral tonsillectomy and BOT mucosectomy. In each patient was evaluated the HPV positivity. We defined as pT0 the patients in whom was impossible to find the primary tumor after all these procedures.

Neck CT scan, MRI and PET scan were not able to identify any of the primary tumor in the entire series. HDTV-NBI endoscopy identified 9 SCC (53%), 3 of the tonsil, 5 of BOT mucosa and 1 of nasopharynx. Seven patients (41%) were defined as pT0 because was impossible to detect the primary tumor neither with HDTV-NBI panendoscopy nor with radiological investigation. In only 1 patient we found the primary tumor in the BOT mucosa even if the panendoscopy HDTV-NBI in microlaryngoscopy was negative. The sensibility, specificity, positive predictive value and negative predictive value of HDTV-NBI were 100%, 87.5%, 90% and 100% respectively.

HDTV-NBI endoscopy offers a higher rate of identification of primary tumor in patients with SCCUP and should be strongly recommended as an adjunctive tool in the diagnostic work up of these patients.

Filauro M., Incandela F., Garofolo S., Peretti G.

Department of Otorhinolaryngology Head and Neck Surgery, University School of Medicine, Genoa, Italy.
The styloglossus muscle: a critical landmark in cancer management and surgical anatomy of the lateral oropharynx.

O.Laccoureye*(1), C.Holsinger*(2)

(1)University Paris V, Paris, France, (2)Stanford University, Palo Alto, United States

The styloglossus muscle: a critical landmark in cancer management and surgical anatomy of the lateral oropharynx.

Le muscle styloglosse: une structure clef dans la prise en charge et l’anatomie chirurgicale des cancers de l'oropharynx latéral.

Goal: To document the key role devoted to the styloglossus muscle in the surgical anatomy and oncological management of cancer of the lateral oropharynx. Material and Method: Electronical search conducted within the Pubmed, Embase and Cochrane databases using the following keywords: styloglossus muscle, parapharyngeal space, and oropharynx, allowing to discuss the embryology, physiology, anatomy, radiology, and surgical considerations of the styloglossus muscle. Results: The styloglossus muscle, whose action is to elevate and retract the tongue backwards, originates from the styloid process of the temporal bone and passes inferiorly and medially to attach along the lateral surface of the tongue and the upper border of the mylohyoid muscle. Magnetic resonance imaging evaluation of the styloglossus muscle classify the cancer as T4a, but limitations and discussion exist regarding the value of this exam to best evaluate the depth of cancer invasion within the lateral oropharynx. From a surgical perspective when performing a transoral approach, if resection of the styloglossus muscle appears necessary to achieve safe margins, one must know that this maneuver brings numerous arterial and venous structures within the operative field. A simple surgical maneuver described herein, that approaches the styloglossus from external allows for control the arterial and venous structures as well as resection with palpation under direct vision. Conclusion: Extreme care must be taken when comparing the results of treatment for cancer of the lateral oropharynx before and after the magnetic resonance imaging era. Current teaching of future head and neck cancer surgeons at the time of cadaveric dissection should integrate the approach of the styloglossus muscle both via the transoral and the transcervical approach.
THREE CASES OF PHARYNGEAL LESION AND CERVICAL LYMPH NODES: NOT ALL THAT GLITTERS IS GOLD

L.Cubillos del toro*(1), L.García pérez(2), B.Sobrino guijarro(3), A.Pino jiménez(4), I.Alcalá rueda(3), J.Villacampa aubá(3), C.Cenjor español(3)

(1)HOSPITAL UNIVERSITARIO FUNDACION JIMÉNEZ DÍAZ, Madrid, Spain, (2)HOSPITAL UNIVERSITARIO FUNDACION JIMENEZ DÍAZ, Madrid, Spain, (3)HOSPITAL UNIVERSITARIO FUNDACIÓN JIMÉNEZ DÍAZ, Madrid, Spain, (4)HOSPITAL UNIVERSITARIO FUNDACIÓN JIMÉNEZ DÍAZ, Madrid, Spain

INTRODUCTION

Mucous lesions of the pharynx are a frequent complaint at the ENT office; it represents a big challenge for the clinician, facing the wide spectre of diagnostic possibilities.

CASE DESCRIPTION

Three patients presented to our office with pharyngeal discomfort and neck swelling as chief complaint: a 65 and 49-year-old males and an 81-year-old female.

Clinical examination was also similar: they presented unilateral tonsillar ulcer and cervical lymph nodes, some of them over 1cm in size. Being the three cases suspected of malignancy, they underwent a cervical CT with contrast, cervical fine needle aspiration (FNA) and biopsy.

Imaging of the neck showed a tonsillar lesion compatible with carcinoma of the oropharynx (local stage from T2 to T4) with bilateral cervical metastasis.

The FNA was negative for tumour cells and only inflammation elements in a necrotic background could be seen, but the biopsy obtained from the primary lesion revealed squamous cell carcinoma, Treponema and Actinomyces-like bacilli respectively.

Thus the first patient was the only case of a malignant tumour, while the others were diagnosed of primary syphilis and cervical actinomycosis.

DISCUSSION

The palatine tonsil can be affected by tumours, being the most common squamous cell carcinoma and, in the second place, non-Hodgkin lymphoma; other benign diseases have an infectious (tuberculosis, syphilis, herpes virus, Epstein-Barr virus, Actinomyces, Candida, etc) or inflammatory aetiology (sarcoidosis and Crohn disease among others).

Following the NCCN recommendations, our patients had a complete head and neck examination, biopsy of the suspected primary site and FNA of the neck, and a CT with contrast of neck and chest; this is coordinated in our hospital with the radiology and pathology departments to integrate a quick diagnostic route.

Our three patients where included in this protocol from the first moment, nevertheless, the clinical data could also give a clue for possible diagnosis: for example, smoking habit in the first patient, and HIV infection in the second one.

CONCLUSIONS

Given the case of neck masses with pharyngeal lesion, the need to rule out malignant tumours in the first place becomes imperative. For this purpose, a quick route for oncologic diagnosis should be established in every ENT department, allowing an early diagnosis and treatment of other disorders, once a malignant disease has been dismissed.
Tongue cancer: Epidemiology and management

N. Zouhair*(1), A. Elbousaadani*(2), R. Abada(3), S. Rouadi(3), M. Roubal(2), M. Mahtar(2)

(1) Service d’ORL et de Chirurgie Cervico-faciale, Hôpital 20 Août 1953, CHU Ibn Rochd, Casablanca, Morocco,
(2) Oto-rhino-Laryngology Unit, University Hospital of Casablanca, Morocco,
(3) Oto-rhino-Laryngology Unit, University Hospital of Casablanca, Morocco

The objective of the paper is to discuss the epidemiological features, clinical risk factors, and para-clinical explorations and therapeutic management.


Results: The average age is 44 years ranging between 34 and 80 years. The sex-ratio male/female is 1.3. The consultation period of our patients was 9 months on average with extremes between one and 11 months. The main reason for consultation is the lingual lesion observed by the patient. Mobile tongue is the site of the tumor in 81% and the base of the tongue in 19%. One or more cervical lymph nodes are palpable in 51% of cases. Cervico-Facial is noted in 90% and imaging head and neck magnetic resonance in 35% of cases. Stage T3T4 and/or N3 44% of our patients. Surgery is indicated in 69% of cases.

Conclusion: The authors emphasize the usefulness of screening and early diagnosis of precancerous lesions to allow a cure. The location at the base of the tongue rest of delayed diagnosis and palliative treatment in our context.
Tonsillectomy for unilateral tonsillar enlargement in adults
B.Serban*(1), P.Paula(2), P.Bogdan(1), G.Raluca(1), P.Oana(1), A.Catrinel(1)
(1) Coltea Clinical Hospital, Bucharest, Romania, (2) Coltea Clinical Hospital, Bucharest, Bucharest, Romania

PURPOSE OF THE STUDY: The most common site of cancer of the oropharynx is the tonsil, therefore any suspicious clinical sign, including unilateral tonsillar enlargement, is often treated by tonsillectomy - biopsy. We aim to study the epidemiology and the clinical signs of incipient tonsil carcinoma in order to evaluate the treatment approach: tonsillectomy for unilateral tonsillar enlargement vs watch and wait.

MATERIALS AND METHODS: We reviewed a number of 420 tonsillectomies performed in our clinic from 2006 to 2016. A 15% was made as an indication for tonsillar asymmetry. In our evaluation we took into consideration: tonsillar enlargement noticed by the patient, sex, age, cervical lymphadenopathy, history of malignancy and immunocompromise, suspicious appearance, tobacco and alcohol use.

RESULTS: Histopathological results study has shown us that 80% were benign lesions and 20% malign ones. A strong correlation between malignancy and the following risk factors was made: cervical lymphadenopathy, suspicious appearance and the tobacco use.

CONCLUSIONS: A watch and wait conservative approach may be used when we deal with patients with unilateral tonsillar enlargement, known for an extensive period of time, but when risk factors such as cervical lymphadenopathies, suspicious appearance of the mucosa or medical history are involved, surgery is mandatory.
Treatment experience of 100 patients with oropharyngeal cancer with gastrointestinal tract flaps autotransplantation in one clinic.

A.Polyakov*(1), M.Ratushnyy(1), I.Reshetov(2), S.Kravzov(2), M.Filushin(2), I.Rebrikova(2)

(1)P. Hertzen Moscow Oncology Research Institute, Moscow, Russia, (2)P. Herzen Moscow Oncology Research Institute, Moscow, Russia

Purpose of the study: to evaluate the effectiveness of using of modified visceral flaps in patients with head and neck cancer.

Methods: for the period 1995 to 2016 accumulated experience of microsurgical reconstruction of the pharynx fragments of the gastrointestinal tract in 100 patients with malignant tumors of oropharyngeal aged 15 to 69 years. In 70% of patients had stage III-IV disease. In all cases, the defects were formed extensive pharyngeal mucosa. As the plastic material, we used the following visceral flaps: gastro-omental flap – 40, colon-omental flap - 29, jejunal flap - 24, sigmoid colon flap - 1, omental flap - 5, ileocolon flap - 1. In 20 patients after installation of flap, which included parts of small intestine and colon, trachea-esophageal shunting with installation of a voice prosthesis was performed.

Results: Necrosis of the flap was found in 5% of cases. Natural food intake was restored in 95%. No significant complications in the abdominal organs was noticed. In all cases, after the installation of a voice prosthesis speech function was restored. Follow up period was from 2 months to 16 years.

Conclusion: This method allowed to perform one time tumor resection and restore lost food and voice functions, thus, without any aid of artificial prostheses. Autotransplantation of visceral flaps improves the quality of life of patients and their early medical and social rehabilitation.
UNSUSUAL NEUROENDOCRINE TUMOUR OF HEAD AND NECK: Case report

R.Anmolsingh*(1), R.Edmiston(2), C.Aushman(3), V.Pothula(4), A.Ali(5)

(1)Wigan Wrightington and Leigh Foundation Trust, Salford, United Kingdom, (2)Wigan Wrightington and Leigh NHS Foundation Trust, Wigan, United Kingdom, (3)University Hospital of South Manchester, Wythenshawe, United Kingdom, (4)Wigan Wrightinton and Leigh NHS Foundation Trust, Wigan, United Kingdom, (5)Pennine Acute NHS Foundation Trust, Pennine, United Kingdom

Neuroendocrine tumours (NET) of the head and neck are a rare diverse group of tumours. In 2005 World Health Organisation (WHO) Classification of Head and Neck tumours lists 4 types of Neuroendocrine carcinomas; (a) typical carcinoid (b) atypical carcinoid, (c) small cell carcinoma, neuroendocrine type and (d) combined small cell carcinoma, neuroendocrine type with non small cell carcinoma. There has been considerable debate about non inclusion of large cell neuro endocrine carcinoma and need for further classification with inclusion of different terminology

Small cell NETs are reported in Larynx, Sinonasal tract, salivary glands, trachea, oral cavity and oropharynx. Large cell NET are also described in Oropharynx, Parotid gland, Larynx, hypopharynx. Primary tumours in the head and neck have been reported which have combined Neuroendocrine and Squamous cell carcinoma in Maxillary sinus and Larynx.

Neuroendocrine tumours in primary head and neck regions are known to metastasise to neck nodes. Hatoum et al suggested 80% of known disease stage presented with cervical lymphadenopathy at diagnosis and Mills et al reported a cumulative incidence of 93% cervical lymphadenopathy for laryngeal NET. Even large cell NETs are believed to metastasise to cervical lymph nodes

We report a case of squamous cell carcinoma of tongue base with bilateral neck nodes containing NET differentiation of small cell on one side and a large cell on the other. No such case is reported in the literature so far
: TEMPORO-OCCIPITAL DERMATOFIBROSARCOMA PROTUBERANS: WIDE LOCAL EXCISION AND SUPRACLAVICULAR ARTERY ISLAND FLAP RECONSTRUCTION - CASE REPORT

M.Szőcs* (1), T.Szatmári (2)
(1) ENT Clinic of the University of Medicine and Pharmacy of Târgu Mureș, Romania, Targu mures, Romania,
(2) E.N.T. Clinic of the University of Medicine and Pharmacy of Targu Mures, Targu mures, Romania

Purpose of the study: The aim of the study is to showcase the surgical treatment of a rare malignant fibroblastic tumor (Dermatofibrosarcoma protuberans) in the head and neck region,

Materials and methods used: We report the case of a 77-year-old male who presented with several palpable lesions with discoloration of the skin in the right retroauricular and occipital region. CT scan showed cortical bone destruction and infiltration (2x3cm) in the occipital area. The 95x85mm mass was resected with wide local excision encompassing all layers down to the occipital bone, including the drilling of the cortical part. Corresponding to the shoulder region on the tumor’s side, the patient had an ultrasonographically proven lipomatous deformity. Removing this lesion we had the chance to prepare a wider donor area. This is why we decided to correct the tissue deficiency with supraclavicular artery island flap. Results: Both the donor and the flap area healing per primam took 4 months. Local recurrence was observed local at the distal part of the original tissue defect, which was immediately removed. The patient received radiotherapy after the second intervention. 1.5 years after surgery the patient is cancer-free, the supraclavicular artery island flap reconstruction demonstrated perfect color and texture match. Conclusion: As a superficial low-grade spindle cell sarcoma that grows slowly, it infiltrates the dermis, subcutaneous tissue, which could invade into fascia, muscles or periosteum in advanced cases. Although the preferred management of localized disease is wide surgical excision, there is a high rate of local recurrence with low metastatic potential. Adjuvant chemo-radiotherapy would be indicated in cases of deep tumor and margin-positive disease. The advantage of utilizing a supraclavicular artery island flap in our case was the fact that we could cover a wide excision area with a thin and flexible island flap, that has a steady blood supply and which provided satisfying aesthetic results.
A case of extensive pharyngeal vascular malformation successfully treated with Kampo (traditional Japanese) medicine

K.Ogawa*(1), K.Osuga(2), S.Uehara(3), H.Okuyama(4)

(1)Kanazawa University Hospital, Kanazawa, Japan, (2)Osaka University, Osaka, Japan, (3)Department of Pediatric Surgical Oncology, National Cancer Center, Tokyo, Japan, (4)Osaka University Graduate School of Medicine, Osaka, Japan

Purpose of the study: We would like to present the efficacy of Japanese-traditional medicine (Kampo) for a case with vascular malformation.

Methods: A case study and literature review.

Patient: A 62-year-old female presented with dysphagia and spitting blood. Esophagogastroduodenoscopy showed a longitudinal lobulated and septated mass in the posterior pharynx. On MR imaging, the mass showed hyperintensity on T2-weighted images and heterogeneous enhancement on Gadolinium-enhanced T1-weighted images, suggestive of a low-flow vascular malformation.

Intervention: According to the Kampo diagnosis, kamisyouyousan and ninjinyoueito were prescribed to this patient. The effect of Kampo medicine was evaluated with improvement of her symptoms and volumetry of MRI findings.

Result: The longitudinal pharyngeal mass markedly decreased and her symptoms disappeared after 2 years of Kampo administration. The estimated lesion volume decreased from 85.5±2.7cm³ at the baseline to 46.4±2.6cm³. Two years later, her symptoms had almost completely disappeared, and the mass had markedly shrunk on laryngoscopy and MR images. The estimated lesion volume further decreased to 11.5±0.3cm³.

Discussion: Venous malformations usually present lesion expansion, and spontaneous regression is rare. They may cause eventual alteration in function and/or esthetics. Therapeutic options include surgery, sclerotherapy, and laser treatment. Surgery is usually a second-line treatment option or is implemented in conjunction with sclerotherapy. The goals of therapy tend to revolve around controlling the disease with periodic interventions without harming preexisting form or function [3]. This patient complained of dyspnea and dysphagia. We discussed the options of laser treatment, resection, or sclerotherapy, but she strongly refused these invasive treatments. We did not have an option other than watchful waiting with intermittent imaging to assess its growth pattern. It was worth taking Kampo formulas while observing.

Conclusions: This is the first report of the marked efficacy of Kampo therapy on symptom improvement and volume reduction of a large oropharyngeal low-flow vascular malformation. In such an extensive case, in which the loco-reginal treatments are invasive and limited in disease control, a systemic therapy vis-a-vis Kampo medicine can serve as a safe alternative option.
A Case of New Type of Branchial Cleft Cyst Presenting as Lower Midline Superficial Neck Mass

S.Kim*(1), K.Kwon(2)

(1)Department of Otolaryngology-Head and Neck Surgery, Veterans Health Service Medical Center, Seoul, Korea, Seoul, Korea, South, (2)Department of Otorhinolaryngology-Head and Neck Surgery, Ilsong Memorial Institute of Head and Neck Cancer, Hallym University, College of Medicine, Seoul, Korea, Seoul, Korea, South

According to the anatomical location and its origin, the branchial anomalies (BAs) are classified with four types. Among these, the second branchial anomaly is the most common type (95%). Clinically, these anomalies are appeared as cyst, sinus and fistula etc. So far, various theories about the origin of branchial cleft cyst (BCC) have been reported. The most received theory is that the cyst is derived from developmental remnants of branchial organ. And then, the second theory is acquired repetitive inflammatory mechanism. In other words, recurrent pharyngeal inflammation may lead to the transformation of aberrant epithelium in cervical lymph node. A 57-year-old woman visited our department, presented with a soft and well-margined round mass in right lower midline neck. She was received ultrasonography, fine needle aspiration cytology and computed tomography. We performed the excisional biopsy to confirm and cure of disease. The mass is relatively round shape that is located superficial to the sternohyoid without severe adhesion to surrounding tissue and abnormal communication. The pathologic examination was proven to be typical branchial cleft cyst. Microscopically, it contain very little lymphoid component beneath the lining epithelium, this point is distinguished from the benign lymphoepithelial cyst. We report the unique and new clinical type of BCC that is presumed to be occurred as acquired etiopathogenic mechanism.
A case report on pedunculated multilobulated parapharyngeal lipoma causing acute upper airway obstruction

C.Lee*(1)

(1)Khoo Teck Puat Hospital, Singapore, Singapore

Purpose:

Lipomas as benign soft tissue neoplasms which consist of mature fat cells enclosed by a thin fibrous capsule. Lipomas can develop on any part of the body, 13% of which occur in the head and neck region, however it rarely occurs in the pharynx. They are usually asymptomatic unless they are large enough to compress on surrounding structures, such as, in our case, where the lipomatous tumour was large enough to completely obstruct the laryngeal inlet and result in acute upper airway obstruction.

Methods and material:

A 79 year old malay lady presented with stridor to the emergency department with stridor. She had a one week history of fever and dysphagia which progressively worsened over the past week. There was no dysphagia, per oral bleeding or any other infective symptoms.

On examination, the patient was stridorous and had a respiratory rate of 25 breaths per minute. Flexible nasendoscopy revealed a mass arising from the right parapharyngeal wall, completely occluding the laryngeal inlet, creating a balloon valve effect. The mass appeared smooth, lobulated, non-ulcerated and there was no contact bleeding.

Results:

The patient was successfully intubated in the emergency department and was subsequently brought to the operating theatre for an emergency tracheostomy and transoral incisional biopsy of the right parapharyngeal tumour. Intra-operatively the pharyngeal mass was noted to be extending from the level of the soft palate down to 13cm post cricoid. However, the tumour was not completely excised via transoral approach as control of the inferior extent and great vessels could not be attained.

MRI neck post-operatively showed a predominantly fat containing lesion involving the right lateral pharyngeal wall extending to the larynx and with heterogenicity of the extra-laryngeal portion of the lesion. Histology of the tumour was suggestive of a lipomatous tumour with mature adipose tissue containing bland spindle cells, occasional atypical cells, rare floret like cells, and areas with myxoid stroma and ropey collagen. Immunohistochemistry for CD34 was positive in the atypical cells.

Conclusion:

The patient is planned for a transcervical excision of the rest of the pharyngeal tumour.
A CASE REPORT: LINGUAL THYROID

M. Youssef *(1)

(1) Kasr alainy, faculty of medicine, Cairo University, Egypt

Case description: a fifteen-year-old Egyptian male presented to the outpatient clinic, complaining of sensation of F.B in his mouth. His past medical history was insignificant. His mother denied receiving any medications during pregnancy. On physical examination, it was noticed that a 2.5 cm × 2 cm midline smooth, rubbery and reddish mass at the base of the tongue, with overlying telangiectasia. Neck examination revealed neither palpable thyroid gland nor any other palpable masses. Thyroid function tests demonstrated euthyroid levels. Other laboratory tests were within normal limits. Thyroid US scan revealed the absence of thyroid gland. Technetium (Tc99m) thyroid scan, revealed isotope uptake at the base of the tongue and no uptake in the normal thyroid location. CT scan of the neck with I.V contrast revealed oval well defined enhancing in the frontal surface of the tongue and also seen hypo dense areas within it measure about 2.5 cm × 2 cm and No thyroid gland is detected. Final diagnosis was lingual thyroid (LT). Patient only under observation.

Introduction: Ectopic thyroid refers to the presence of thyroid tissue in locations other than the normal anterior neck region between the second and fourth tracheal cartilages. It is the most frequent form of thyroid dysgenesis, accounting for 48-61% of the cases. To date; about 500 cases have been reported in the English literature mainly from Europe, Asia and America, with a small number of reports coming from Africa. Sixty-five to eighty percent of cases occurred in females. Lingual thyroid is the most common type accounting for 90% of cases of ectopic thyroid. The incidence of ectopic lingual thyroid gland is reported to be between 1 per 100,000-300,000 persons. The majority of patients with ectopic thyroid are asymptomatic but the patient present with symptoms like sensation of F.B in the mouth, dysphagia, dysphonia, upper airway obstruction or even hemorrhage at any time from infancy through adulthood. Although the pathogenesis of lingual thyroid is unclear, some authors have postulated that maternal antithyroid immunoglobulins may impair gland descent during early fetal life. Genetic research has shown that the gene transcription factors TITF-1(Nkx2-1), Foxe1(TITF-2) and PAX-8 are essential for thyroid morphogenesis and differentiation. Mutation in these genes may be involved in abnormal migration of the thyroid.

Treatment: Asymptomatic euthyroid patients are kept under observation. Euthyroid patients with mild obstructive symptoms can also benefit from suppressive therapy. Surgical intervention is indicated when severe obstructive symptoms, bleeding, ulceration, cystic degeneration and malignancy occur.
A CHALLENGING PHARYNGEAL BLACK PATCH

J.Simões*(1), B.Ferreira(2), J.Miguéis(1), S.Paiva(1), M.Julião(3)

(1)ENT Department, Centro Hospitalar e Universitário de Coimbra, , Portugal, (2)Dermatology Department, Centro Hospitalar e Universitário de Coimbra, , Portugal, (3)Anatomopathology Department, Centro Hospitalar e Universitário de Coimbra, , Portugal

Purpose of the study: The head and neck mucosal melanoma is an aggressive and rare neoplasm of melanocytic origin which corresponds to 0.2-8% of all primary mucosal melanomas in Europe. It commonly involves the nasal cavity and para-nasal sinuses and is seldom found in pharyngeal and laryngeal mucosa. The authors present a challenging case of pharyngeal black patch diagnosed as melanoma 15 years after.

Materials and methods: A 56 year-old man was admitted to our ENT department with dysphagia and cervical tumefaction with 1 month of evolution. The patient had a history of a stable black patch on posterior wall of the oropharynx for 15 years which did not induce symptoms during this period. The patient did not present concomitant cutaneous lesions. Multiple biopsies were performed during the 15 years showing consistent features of benign mucosal melanocytic lesion. He was not a smoker and was otherwise healthy. His professional and occupational life did not reveal any alarming risk for health problems.

After 15 years of follow-up, the patient reported sub-acute symptoms of cervical swelling and progressive dysphagia with 1 month of evolution. At the ENT examination it was found a significant progression of the previously black pharyngeal lesion with extension to the hypopharynx and trachea.

Results: The patient was submitted to imaging study and mucosal biopsies, including through exploratory cervicotomy. The image study showed an expansive mass from left pharyngeal wall to the great vessels with characteristics of highly metabolic lesion. The anatomopathological result showed unequivocal presence of a melanoma. The study for distant metastasis was negative. Therefore, this patient was diagnosed with a primary mucosal melanoma of the neck and was admitted for treatment with immunotherapy.

Conclusions: As previously described and reinforced with this case, the clinical and histopathological diagnosis of head and neck mucosal melanoma, especially in the setting of pharyngeal involvement, can be a challenge due to its rarity and unpredictable behavior. High levels of clinical suspicion and further research are needed.
A cross sectional survey of outcomes in Sialendoscopy for chronic Sialadenitis

J.Chan*(1), Z.To(1), C.Yim(1), E.Chan(1), G.Li(1), G.Wai(1), S.Ng(1)

(1) The Chinese University of Hong Kong, Shatin, Hong Kong

Purpose of Study
The purpose of this study was to evaluate the outcomes of patients following sialendoscopy for chronic sialadenitis in Hong Kong.

Materials and methods:
This was a cross sectional survey of patients either pre or post sialendoscopy for chronic sialadenitis at a tertiary, academic salivary disease referral center. All pre patients were surveyed prior to sialendoscopy. Patients that were post sialendoscopy had treatment between September 2006 and December 2015. A telephone survey was used to complete a questionnaire and quality of life outcomes survey. The questionnaire utilized a Chinese designed survey of salivary symptoms and a modified Chinese version of the Oral Health Impact Profile-14 (OHIP-14). Statistical analyses were performed with SPSS 20.0.

Results:
One hundred and forty seven patients were identified. Ninety six patients (65.3%) were contacted and completed the questionnaire and survey. There were no significant differences in gender, age, duration of symptoms or current symptoms between the pre and post sialendoscopy groups. There was a significant difference in median pain scores between the pre sialendoscopy (Median 5.0, interquartile range 2-8) and post sialendoscopy (Median 1.0, interquartile range 0-3) group (P=0.03). Using a Mann Whitney U test, significantly lower OHIP scores were noted in the post sialendoscopy group on functional limitation (p = 0.01, effect size -0.32), physical pain (P<0.001, effect size -0.25), physical disability (p=0.02, effect size -0.09), psychological disability (p=0.006, effect size -0.25), handicap (p=0.007, effect size -0.13) and total score (p=0.002, effect size -0.28). 69.1% of patients noted improvement after the sialendoscopy and 82.7% would recommend sialendoscopy to another patient. Gland preservation was possible in 91.4% of patients and 90.1% of patients had no complications.

Conclusion:
Sialendoscopy is a safe procedure with minimal complications that likely improves the quality of life in patients treated for chronic sialadenitis.
Fibroepithelial polyp is one of benign tumors, a lot of fibroepithelial polyp occurs in the area of Urology and Gynecology. But the fibroepithelial polyps in Otolaryngology are reported that they are rare and occur in tongue, oral, piriform recess, inferior nasal concha and tonsil. It is said that fibroepithelial polyp are easy to occur in the areas of always having light stimulation. The estimated prevalence of these lesions in general is 12 per 1000 with male predominance, there are many patients from 40% to 70% of male. It is said that fibroepithelial polyp have severe risk of occuring acute airway stenosis, rare cases of them have some possibility of changing malignancy, so we had to remove right away after diagnosis. We had a 56-year-old Japanese woman presented with a two years history of hoarsness of voice, and discomfort in her throat with no history of other medical problems, regular medications, or smoking. We resected the polyp under general anesthesia. It was originating from the left hypopharyngeal wall. Both microscopic and macroscopic appearance revealed benign fibroepithelial polyp with no evidence of malignancy. To our knowledge, this case is the second largest one among cases reported before. We will report our case with some literature.
A Modular Polymer Platform that Delivers Recombinant Cytokines and Cisplatin Allows for de-escalation of Radiation Therapy in an Animal Model of Head and Neck Squamous Cell Carcinoma

M.St. John*(1)

(1) University of California, Los Angeles, Los Angeles, United States

Purpose/Objectives: To evaluate the safety and efficacy of a novel modular polymer platform for head and neck squamous cell carcinoma (HNSCC). 50% of HNSCC patients fail primary management, and salvage of patients with recurrent disease is of paramount importance. We had previously shown the antitumor efficiency of this novel polymer in delivering chemokines (CCL21) and cisplatin in an animal model of SCCHN. Here we evaluate the safety and efficacy of this polymer in combination with radiation therapy (RT) in an effort to see if this combination allows for a de-escalation of RT.

Materials/Methods: SCCVII/SF tumors were established in C3H/HeJ mice. Tumors were then treated with either: (1) no polymer; (2) plain polymer; (3) CCL21-polymer; (4) cisplatin polymer; and (5) combination CCL21 and cisplatin secreting polymer. The mice were then treated with three different doses of RT. Tumor size was measured every day until the mice were euthanized. Four weeks later, necropsy was performed to evaluate for vascular or nerve damage and to assess tumor size and weight.

Results: Cisplatin-polymer, CCL21-polymer and the combination CCL21-cisplatin polymer effectively reduced SCCVII/SF tumors in the C3H/HeJ mice by over 16-fold (P < 0.01) as compared to control and plain polymer groups. Additionally, treatment with Cisplatin-polymer, CCL21-polymer and the combination CCL21-cisplatin polymer allowed for a 4-fold reduction in the dose of RT required. Histopathology revealed no adverse tissue effects when the cisplatin polymer was inserted in direct contact with the carotid artery, jugular vein or vagus nerve.

Conclusion: Our promising results indicate that this polymer may represent a new therapeutic modality for patients with HNSCC that is safe and efficacious. Our data provides a strong rationale for further evaluation of this polymer in de-intensification of radiation therapy. Once this polymer platform is further optimized we will plan for the ultimate validation in the context of a prospective trial in patients with unresectable advanced or recurrent HNSCC.
A Randomized Controlled Trial of a Comprehensive Smoking Cessation Intervention for Patients with Upper Aerodigestive Cancers Undergoing Radiation Therapy: The SmaRT Study

E.Rettig*(1), C.Fakhry(1), G.D'souza(1), R.Hales(1), A.Kiess(1), H.Quon(1)

(1)Johns Hopkins, Baltimore, United States

Purpose: Tobacco smoking is the greatest risk factor for upper aerodigestive malignancies. Continued smoking after diagnosis is associated with worse survival outcomes, however many patients continue to smoke throughout treatment. Smoking cessation interventions for cancer patients have had limited success thus far.

Methods: This was a randomized, controlled trial comparing a novel combination smoking cessation intervention ('Intervention') with enhanced usual care ('Control'). Participants were smokers with incident head and neck or thoracic malignancies undergoing radiation. Control participants received brief counseling. Intervention participants received intensive counseling for 8 weeks, pharmacotherapy with an option for combination nicotine replacement therapy, a text-messaging program, and small financial incentives. Smoking status was assessed weekly for 8 weeks, then at 3-, 6- and 12-months. ‘Abstinence’ was considered both self-reported 7-day abstinence from smoking and exhaled carbon monoxide (CO) ≤8ppm. The primary outcome was abstinence at 8 weeks, compared using Fisher’s exact t-test. Characteristics associated with smoking abstinence (yes/no) and smoking intensity (log[cigarettes/week]) were analyzed using time-series panel regression. Odds ratios (OR) and coefficients (β), respectively, were reported with 95% Confidence Intervals (CI).

Results: The study population comprised of 19 Intervention and 10 Control participants. 15 participants (52%) had head and neck cancer, and 14 (48%) had thoracic cancer. More participants in the Intervention than the Control group abstained from smoking at each study visit during weeks 1-8, with statistically significant differences at 4 weeks (53% versus 10%, p=0.05), 6 weeks (63% versus 10%, p=0.008) and 8 weeks (74% versus 30%, p=0.05). Considering long-term outcomes (3-, 6-, and 12-months study visits), the proportion of abstinent participants remained higher in the Intervention compared with the Control group, but was not significantly different. Assignment to the Intervention group was independently associated with abstinence (adjusted OR 12.5 [95%CI 3.3, 46.7]) and lower smoking intensity (adjusted β -1.11 [95%CI -1.73, -0.48]) during weeks 1-8, but not in long-term follow up. Depression and intravenous drug use (IDU) were associated with lower abstinence rates and higher smoking intensity during weeks 1-8. IDU, marital status, and pain score were associated with smoking behavior in long-term follow-up.

Conclusions: This intervention decreased smoking among patients with tobacco-related upper aerodigestive cancers during radiation treatment. Its success may inform the design of tobacco addiction treatment programs in oncology clinics. Additional research is necessary to further refine this intervention, and to determine whether such efficacious smoking cessation interventions during cancer treatment may prospectively improve survival outcomes.
INCIDENCE OF HYPOCALCEMIA FOLLOWING THYROID GLAND SURGERY
K. Sutalo(1)
(1) University Clinical Center Sarajevo, Sarajevo, Bosnia and Herzegovina

Purpose of the study
Postoperative hypocalcemia is the single most often complication following thyroidectomy. The major cause is secondary hypoparathyroidism due to a damage of parathyroid glands during surgery. Following hypocalcemia may be temporary or permanent. We conducted a retrospective study in order to determine the incidence and risk factors of postoperative hypocalcemia.

Materials and methods
The study was made of 196 patients- 139 women and 57 men, aged 21 to 82 years who underwent thyroid gland surgery from 2012 to 2016 including the following surgical procedures: total thyroidectomy, near- total thyroidectomy, lobectomy and thyroidectomy with neck dissection, bilateral or unilateral. Exclusion criteria were abnormal pre-operative calcium, abnormal pre-operative parathyroid hormone, renal insufficiency and pre-operative calcium replacement.

Results
A total of 196 thyroidectomy patients were treated. Postoperative hypocalcemia occurred in 26.02% of all thyroidectomy patients. Gender wise, most were female (70.9%). 46.9% of the patients were diagnosed with a neoplasm of the thyroid gland, malignant 66.3% or benign 33.7%. The most common procedures were unilateral thyroid lobectomy (43.9%) and total thyroidectomy (24.5%), followed by lobectomy and thyroidectomy with neck dissection (19.3%) and near-total thyroidectomy (12.2%). Patients who underwent thyroidectomy with neck dissection developed hypocalcemia in 52.6%, total thyroidectomy had a postoperative hypocalcemia incidence of 41.6%, near- total thyroidectomy 37.5%, compared with 2.3% after lobectomy.

Conclusion
The results show that the incidence of hypocalcemia directly relates to the extent of surgery which is in concordance with most of the studies.

Authors: Melika Tuhicic
Kamenko Sutalo
Department of Otorhinolaryngology
University Clinical Center Sarajevo
Bosnia and Herzegovina
INCIDENCE OF METASTASIS AT LEVEL IIb IN ORAL CAVITY SQUAMOUS CELL CARCINOMA.

S.Hashmi*(1), J.Saeed(2)

(1)PATEL HOSPITAL KARACHI/ BAQAI UNIVERSITY OF HEALTH SCIENCES, Karachi, Pakistan, (2)Patel Hospital Karachi, Karachi, Pakistan

PURPOSE OF THE STUDY

To determine whether level IIb lymph nodes can be saved in selective neck dissection, as a treatment for patients with squamous cell carcinoma of the oral cavity and Lip.

MATERIAL AND METHODS

This was a prospective study conducted in the Department of ENT Head and neck surgery Patel Hospital Karachi. A sample size minimum of 65 patients was calculated using open WHO sample size calculator, with p = 4, margin of error (d) = 4% and 90% confidence interval. Sampling technique was non probable consecutive sampling. Level IIa and IIb were separately dissected out in all patients and marked before sending for histopathology. The study period was started from August 2014 to August 2016. All patients undergoing neck dissection for oral cavity and lip SCC during this period are included in the study. Patients with prior oncological treatment or surgery for recurrent or residual tumor were excluded. Main outcome measure was the incidence of histopathological proven metastasis lymph nodes at level IIb.

RESULTS

A total of 65 patients with biopsy proven squamous cell carcinoma of any subsite of the oral cavity were included in the study. Mean age of the patients were 46.38 (SD 10.37) with 80% male population. Out of them 34 (52.3%) were clinically node negative. All patients underwent selective neck dissection. Average no of lymph nodes recovered were 40.63 (SD 19.55). Incidence of metastasis at level II b was 9.2 % (6 patients, out of 3 were clinically node negative and 3 were clinically positive). Most (4) of the patients with positive nodes at level IIb had also positive nodes at level IIa.

CONCLUSION

Our result shows relatively higher incidence of metastasis at level IIb as compared to international literature. Therefore we suggest level II b should be dissected out in all selective neck dissection, especially in patients with clinical node positive status.
Incidence, survival and progression in children and adolescents with head and neck soft tissue malignancies: a nation-wide study from 1977-2014

C.Mirian*(1)

(1)Rigshospitalet, Denmark - Department of Otolaryngology, Head & Neck Surgery, Denmark

Introduction

Soft tissue malignancies comprise a rare group of malignancies and patients remain challenged by poor prognosis. Likewise, sarcomas are associated to advanced disease at presentation, high risk of relapse, and high morbidity following treatment. It remains unclear in a population-based setting, whether trends in incidence and survival have changed.

This study aims to investigate the incidence, histology, disease progression and survival in individuals younger than 25 years of age diagnosed with head and neck sarcomas between 1977 and 2014 in Denmark.

Methods and materials

By individual-level linkage of the nationwide Danish Cancer Registry, we identified individuals aged 0-24 of age diagnosed between 1 January 1977 and 31 December 2014 with head and neck soft tissue sarcomas (ICD-10 490). Cases were verified through the Danish National Pathology Registry. Data on date of diagnosis, tumor-location, histology, gender, age at diagnosis, TNM-stage, vital status, timing of biopsy-verified progression, and treatment were extracted from files. Survival and progression rates were estimated by the Kaplan-Meier method. Incidence rate were examined by calculating the average annual percentage change with 95% confidence interval (CI) for age at diagnosis.

Results

At a median age at diagnosis of 7.1 years and median follow-up of 6.8 years (95% CI: 4.4-8.9 years), a total of 95 cases (52% males) were identified. A total of 46 deaths (48%) were recorded. The 1-, 2-, 5- and 10-year overall survival was 87%, 72%, 65% and 57%. The median time to biopsy verified disease progression was 1.2 years (95% CI: 0.86-1.77 years), a total of 36 cases experienced failure with a 1-, 2-, and 5-year progression-free survival of 84%, 72%, and 63%. We observed an average annual incidence increase of 3.4% (95% CI: 1.6-5.1) during the study.

Conclusion

We observed increasing incidence of children and adolescents diagnosed with head and neck soft tissue malignancies, and patients are faced with long-term poor prognosis especially for the subgroup with disease failure.
Inclusion of Extracapsular Spread in the pTNM Classification System for Patients with Head and Neck Carcinoma.

A.Rigo quera*(1)

(1)Hospital de Sant Pau i la Santa Creu - Barcelona, Barcelona, Spain

Purpose of the study

The inclusion of data about the presence of metastatic neck nodes with extracapsular spread (ECS) in the neck dissection improves the prognostic classification of patients with head and neck squamous cell carcinoma (HNSCC). The present study aimed to evaluate the prognostic capacity of ECS in patients with HNSCC, and to analyze the usefulness of including this information in the pathological classification of patients treated with a neck dissection.

Materials and methods

A retrospective study was performed including patients with HNSCC treated with a unilateral or bilateral neck dissection from 1985 through 2013. Adjusted survival and local, regional, and distant metastases-free survival were measured. Patients were classified according to a recursive partitioning analysis (RPA) method, considering pN category and number of neck nodes with ECS as the independent variables.

Results

Five-year adjusted survival for patients without metastatic nodes in the neck dissection (pN0) was 85.5%, for patients with neck node metastases without ECS (pN+/ECS-) it was 62.5%, and for patients with neck node metastases with ECS (pN+/ECS+) it was 29.9%. There were significant differences in survival between patients with pN0 lesions and pN+/ECS- (P <.001), and between patients with pN+/ECS- and those with pN+/ECS+ (P <.001). According to the RPA method, we classified patients according to 4 categories: category I, pN0 lesions; category II, pN1/ECS+ or pN+/ECS-; category III, pN2-3/1 node and ECS+; and category IV, pN2-3/2 or more nodes and ECS+. The RPA-derived classification achieved a better prognostic discrimination than the pTNM classification.

Conclusion

The inclusion of information about ECS in the neck dissection improved the prognostic classification of patients with HNSCC in relation to the classical pTNM classification.
Increasing incidence and survival in oral cavity cancer: a Danish nationwide study from 1980 to 2014

K. Karnov*(1), C. Von buchwald*(2), C. Grønhøj(2), D. Jensen(2), B. Charabi(2), L. Specht(3), A. Kjaer(4)

(1) Department of Otorhinolaryngology, Head and Neck Surgery and Audiology, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark, (2) Department of Otorhinolaryngology, Head and Neck Surgery and Audiology, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark, (3) Department of Oncology, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark, (4) Department of Clinical Physiology, Nuclear Medicine & PET and Cluster for Molecular Imaging, Rigshospitalet and University of Copenhagen, Copenhagen, Denmark

Background: Oral carcinomas (OCs) represent a significant proportion of head and neck carcinomas (HNCs) and constitute an important worldwide cause of morbidity and mortality. The purpose of this population-based study was to describe incidence and survival trends in OC in the Danish population from 1980-2014.

Methods: This study concerns all patients registered in the nationwide Danish Cancer Registry (DCR) in the period 1980–2014. Age-adjusted incidence rate (AAIR) per 100,000 and annual percentage change (APC) was evaluated. Additionally, 5-year overall survival was calculated with Cox regression analysis in relation to location, gender, age and calendar year at diagnosis.

Results: A total of 8,299 patients with oral cancer were identified of which 5,062 (61%) were males and 3,237 (39%) were females. The median age at diagnosis was 63 years. The AAIR of patients with OC increased from 1.9 in 1980 to 3.5 per 100,000 in 2014, and we observed a significant increase of 12 percentage points (an increase of 38%) in 5-year overall survival from the period 1980-1984 to 2005-2009. Females were observed to have a better prognosis than men.

Conclusion: During nearly four decades, the incidence of OC has increased parallel with an improvement of survival in Denmark. The 5-year overall survival was significantly better in recent years even when adjusted for relevant covariates.
Induction chemotherapy (IC) with EXTREME study regimen in locally advanced head and neck squamous cell carcinoma (LAHNSCC) frail patients.

V.Cochin*(1)
(1)CHU Saint André, Service oncologie médicale, Bordeaux, France

Background : IC with TPF (docetaxel, cisplatin, 5FU) in LA-SCCHN is limited to fit patients (pts). We conducted a retrospective cohort study to evaluate the use of EXTREME regimen (platinum, 5FU, cetuximab) as IC in LA-SCCHN frail pts.

Method : Retrospective analysis of all consecutive pts with unresectable LA-SCCHN treated with EXTREME regimen with or without 5FU as IC from two French centers from 2008 to 2015. We evaluated the rate of realization of the complete sequence (at least 2 cycles of IC and all radiation courses). Tolerance and efficacy, including clinical benefice, median progression free survival (PFS) and median overall survival (OS) were estimated.

Results : We included 34 pts with average age of 56 years [44-70]. Primary site of tumor was oropharynx (67%, n=23, all HPV negative), hypopharynx (21%, n=7) and oral cavity (12%, n=4). Pts presented : T4 76,5% (n=26), N2c 41% (n=14), N3 26% (n=9), stage disease IVa 62% (n=21), IVb 38% (n=13), ECOG PS2 38% (n=13), decreased weight of 10% in one month or 15% in 6 months 74% (n=25), pain 76% (n=26), feeding tube 82% (n=28), tracheotomy 15% (n=4), fistula 15% (n=4) and low albumin <35g/l 41% (n=14), <25g/l 12% (n=4).

Six pts (18%) not received 5FU (cardiovascular history). Grade 3 toxicities were seen in 53% pts principally due to cisplatin. 5FU dose was decreased in 9% (n=3) and cisplatin switched to carboplatin in 15% (n=4).

The sequence was achieved for 76% (n=26) of pts and 80% (n=27) presented clinical response (increased weight : 40%, n=11). Six pts (17%) have a progression disease (PD) under IC, one patient (3%) died during bioradiotherapy (BRT) (stomach perforation) and one (3%) stopped IC after one cycle (infection) but achieved BRT. BRT with cetuximab was used in 82% (n=23) (average of 6 cycles [2-8]).

PET-FDG at 3 months showed 9% (n=3) of complete response (CR) and 44% (n=15) of PD. Median PFS and OS were 5.7 and 15.5 months respectively. PD at 3 months was associated with decreased median OS : 21.9 versus 13.6 months, p=0.01.

Conclusion : This is the first report of use of the EXTREME regimen as IC. This IC was used in a very frail population and the majority achieved sequence with significant clinical benefice.
Influence of the microbial biofilm composition on voice prosthesis yield

A.Simioniuc*(1), I.Anghel(2), M.Dumitru(3), A.Anghel(4), M.Condeescu-cojocorita(2), R.Urs(5)

(1)Coltea Clinical Hospital, Bucharest, Romania, (2)Coltea Clinical Hospital Bucharest, ENT Department, Bucharest, Romania, (3)Carol Davila University of Medicine and Pharmacy, Bucharest, Bucharest, Romania, (4)St. Mary Clinical Hospital Bucharest, ENT Department, Bucharest, Romania, (5)Colțea Clinical Hospital Bucharest, ENT Department, Bucharest, Romania

Voice prosthesis are used for speech rehabilitation of patients who have undergone a laryngectomy due to a malignant laryngeal tumor and need to breathe through a tracheostomy. The major drawback of voice prosthesis involves their colonization within several weeks by a thick biofilm that consists of fungal and bacterial strains. Biofilm formation is a process whereby microorganisms irreversibly attach to and grow on a surface and produce extracellular polymers that facilitate attachment and matrix formation, resulting in an alteration in the phenotype of the organisms with respect to growth rate and gene transcription. This biofilm causes leakage of food and liquid, and it may block the valves and increase resistance to airflow, making it necessary to replace the prosthesis on average every 3 to 4 months.

The aim of this study was to determine the presence of microorganisms, establishing the most frequent combination of microbial biofilm developed on Provox Vega voice prosthesis when their replacement and the influence of a biofilm on the life of these prostheses.

We followed for 35 months (January 2014-December 2016) the evolution of 29 laryngectomized patients who were voice rehabilitated using Provox Vega voice prosthesis. A total of 68 voice prosthesis were microbiologically processed. The bacteria most commonly found were Staphylococcus aureus, Pseudomonas aeruginosa, Escherichia coli, Proteus mirabilis; and the fungus Candida albicans was the majority. The simultaneous presence of bacteria and fungi was determined in 83% of voice prostheses.

It has been found that there is a significant correlation between the composition of the biofilm and the lifetime of the device.
Initial staging of head and neck squamous cell carcinoma. What is the place of bronchoscopy and upper GI endoscopy?

C.Page*(1)

(1)CHU Amiens-Picardie, Amiens, France, , France

Objectives: This study aimed to determine the place of bronchoscopy and upper GI endoscopy in the initial staging of head and neck squamous cell carcinoma (HNSCC).

Design: A single-centre, 10-year retrospective study.

Setting: University Hospital.

Results: 838 patients were included in the study. As part of initial staging of the tumor, all patients underwent endoscopy of the upper airway (including: direct laryngoscopy, direct hypopharyngoscopy, direct cervical oesophagoscropy and oral cavity & oropharynx physical examination) under general anesthesia and were examined by neck and chest CT-scan. 487 patients were examined by bronchoscopy and 588 patients were examined by upper GI endoscopy. Esophageal cancer was detected in 4.25% of cases and lung cancer in 6.35% of cases. Chest CT scan was statistically superior to bronchoscopy to detect second lung cancers (p<0.05). On multivariate analysis, oral cancers (p=0.009) and multiple (synchronous) HNSCC (p=0.009) were associated with the presence of a second lung cancer.

Conclusion: Systematic bronchoscopy might not be systematically indicated for initial staging of HNSCC (particularly in the presence of a normal chest CT scan) but in patients with oral cancer and multiple synchronous head and neck cancers. Systematic upper GI endoscopy might be indicated in alcoholic patients and patients with hypopharyngeal carcinoma.
Integrated assessment of clinical, morphologic and genetic larynx cancer

M.Ciolofan*(1), A.Vlaescu(2), F.Anghelina(1), C.Mogoanta(1), I.Ionita(2), E.Ionita(2)

(1)University of Medicine and Pharmacy of Craiova, Romania, (2)Clinical Emergency Hospital of Craiova, Romania

Purpose of the study. Laryngeal cancer represents the malignant degeneration, of epithelial nature or from the connective tissue, which starts in the constitutive elements of the larynx. Cancer localization in the larynx represents between 1% and 3% of all malignant tumors and approximately 50% of ENT tumors, squamous cell carcinoma totaling around 95% of malignant laryngeal tumors. It is most commonly met in human males from southern and central Europe, Romania occupying one of the top places. Method. Cases diagnosed with laryngeal cancer from 2009 to 2014 have been clinically, histologically, immunohistochemically, genetically, therapeutically and prognostically analyzed. Results. The study comprises of 475 patients diagnosed with laryngeal cancer, with a male to female ratio of 42.7 to 1. Most have been from the countryside – 67%, with an age predominancy between 50 and 70 years old – 72%. TNM staging shows that 93.5% of patients have requested assistance in the third or fourth stages. Histological types have been represented as follows: 31 carcinomas in situ, 17 microinvasive carcinoma, 205 poorly differentiated carcinomas, 138 moderately differentiated carcinomas, 63 well differentiated carcinomas, 8 papillary carcinomas, 1 leiomyosarcoma, 1 chondrosarcoma, 6 basaloid squamous cell carcinoma, 4 verrucous carcinoma, 1 malignant melanoma. Genotyping with the identification and comparative evaluation of the allelic frequency for the genes included in the study, the determination of gene expressions with the detection and quantification of certain transcriptions through Real Time PCR have led to a comparative and quantitative analysis of genic expressions implicated in laryngeal carcinogenesis. The type of surgical intervention (diagnostical/curative/palliative, radical/partial) is associated with the histological type, tumoral grading, vascular and/or perineural invasion, and complementary immunohistochemical examination, together with genetic markers that can become targets for complex screening/diagnostic protocols or laryngeal cancer prognosis. Conclusions. The study brings to light the importance of integrated clinical, morphological and genetic evaluation of laryngeal cancer, regarding tumoral invasion grading and establishing an adequate surgical and oncologic treatment. Keywords: Laryngeal cancer, morphological and genetic evaluation, staging.

Mircea-Sorin Ciolofan, Alexandru Vlaescu, Florin Anghelina, Carmen-Aurelia Mogoanta, Iulica Ionita, Elena Ionita

University of Medicine and Pharmacy of Craiova, Clinical Emergency Hospital of Craiova
Interim Analysis of an Oral Rinse Point-Of-Care Assay to Predict Head and Neck Squamous Cell Carcinoma (HNSCC) in a High Risk Danish Oral Clinic

M.Donovan*(1), D.Hebbelstrup jensen(2), E.Franzmann(3)

(1)Icahn School of Medicine at Mt. Sinai, New york city, United States, (2)Rigshospitalet, Copenhagen, Denmark, (3)University of Miami, Miami, United States

Background: Head and neck squamous cell carcinoma (HNSCC) is the 6th most common cause of cancer mortality throughout the world affecting some 50,000 people in the US and 600,000 worldwide each year. The ability to detect the disease in a potentially malignant phase and earlier stage could have significant impact on overall outcome. Previous studies have demonstrated that both a point-of-care (POC) lateral flow assay and a quantitative LAB test measuring CD44 and total protein (TP) were able to aid in the diagnosis of HNSCC. We sought to better understand performance of these assays in a hospital-based high risk oral clinic in Denmark.

Methods: Oral rinse specimens were obtained from 130 consecutive patients presenting for physical exam and biopsy in a high risk ENT clinic (Rigshospitalet, Copenhagen, Denmark). A 1ml sample was removed prior to POC test for the LAB assay. Operators were provided POC visual tools to record assay results. A positive POC test is a visible CD44 band or level of TP (i.e. color-graded scale from 0-5, recommended cut-off >/=2 or adjusted >/=3), with Sensitivity (Se), Specificity (Sp), NPV, PPV to evaluate correlation with biopsy outcome. Compare POC results with LAB test and assess concordance.

Results: 86 of 130 (66%) patients had HNSCC by biopsy. Average age 56 years, 40% male, 100% white and 65% smokers. Using levels of CD44 or a TP cut-off of 3, the assay achieved a Se of 71%, and Sp55%. Applying a TP level of 2 for non-smokers and 4 for smokers further improved assay performance: Se 81% and Sp 49%. With a prevalence of 23%, the NPV was >90%. Additional patients are currently in progress along with concordance studies between POC and the LAB test to assess both CD44 and total protein levels for all patients.

Conclusions: Preliminary results from an easy to administer POC assay measuring salivary levels of either CD44 or TP performed well for discriminating HNSCC. Additional studies are underway to confirm and validate these results.
A rare case of a pedunculated liposarcoma in the hypopharynx

F. Alzadjali*(1), E. Mouchon(2), S. Vergez(2), E. Serrano(2), G. De bonnecaze(2)

(1) Centre Hospitalier Universitaire (CHU) de Toulouse, France, (2) CHU Toulouse Larrey, France

Objectives:

Lipomas are the most common encountered soft tissue tumors amongst adults however, they are rare in the upper aerodigestive tract. Cases of liposarcoma are rare and only few cases have been reported in literature. A case is reported to highlight clinical presentation and management challenges.

Case report:

A 62 years old male patient, without comorbid, was referred to ORL clinic. In emergency, he was presented with progressive dyspnea for the last two days. His history revealed a progressive dysphagia for the last one and half year. The clinical examination showed a voluminous round mass from hypopharyngeal area as well as the glottis was not visualized. The CT scan showed a pharyngeal mass similar to a lipoma. A surgery by suspension microlaryngoscopy was done. It was visible that the mass was arising from the right hypopharyngeal area and pediculated on the arytenoid with a size of 8.5 cm. It was removed without any significant surgical complications. At one month follow-up, the nasopharyngoscopy showed bilaterally normal mobility of vocal cords with a healing scar and no evidence of remnants. Immunohistochemical examination for pathological diagnosis confirmed a diagnosis of Lipoma-like Well-Differentiated Liposarcoma.

Conclusion:

Early detection and complete surgical excision is the main modality to treat hypopharyngeal liposarcoma to prevent further complication like airway obstruction. It’s difficult to have a clear margin during surgical removal and it’s necessary to have a long-term follow-up with possible complementary radiotherapy.
Intraoperative neuromonitoring of the vagus nerve during thyroidectomy:
determination of electrophysiological parameters able to accurately predict postoperative vocal fold palsy. A prospective study.

C.Page*(1)

(1)CHU Amiens-Picardie, Amiens, France, , France

Objectives: the goal of the study was to determine whether intraoperative neuromonitoring of the vagus nerve during thyroidectomy can predict postoperative vocal fold palsy.

Design: A single-centre, prospective study.

Setting: University Hospital.

Participants: Ninety five (95) patients underwent thyroid surgery. 160 vagus nerves were studied. The amplitude of the action potential of vocal muscles was recorded intraoperatively by indirect supra-maximal stimulation of the vagus nerve. All patients underwent indirect laryngoscopy on postoperative day 1 to detect the presence of vocal fold palsy.

Main outcome measures: The primary outcome measure was the difference of the action potential amplitude of the vagus nerve before and after resection of the thyroid lobe. Statistical analysis determined the amplitude variation cut-off able to accurately predict postoperative vocal fold palsy.

Results: Transient vocal fold palsy was observed in 7% of cases and permanent fold palsy was observed in 2% of cases. A decrease of the action potential amplitude by more than 61% was statistically significantly associated with postoperative vocal fold palsy. A greater than 87% decrease of the amplitude of the action potential was correlated with permanent postoperative vocal fold palsy.

Conclusion: Intraoperative neuromonitoring of the vagus nerve during thyroidectomy may accurately predict postoperative vocal fold palsy.
Is superficial parotidectomy necessary for the treatment of buccal mucosa tumors?

Y.Olgun*(1)

(1)Dokuz Eylül University School of Medicine Department of Otorhinolaryngology, İzmit, Turkey

Authors: Yüksel Olgun 1, Ersoy Doğan 1, Özgür Kümüş 1, Sülen Sarıoğlu 2, Fadime Akman 3, Ahmet Ömer İkiz 1

1 Dokuz Eylül University School of Medicine Department of Otorhinolaryngology, İzmir, Turkey
2 Dokuz Eylül University School of Medicine Department of Pathology, İzmir, Turkey
3 Dokuz Eylül University School of Medicine Department of Radiation Oncology, İzmir, Turkey

Aim

The aim of this study is to investigate the necessity of superficial parotidectomy for primary buccal mucosa tumors or oral cavity tumors with buccal mucosa extension.

Material and Method

Charts of all patients who were surgically treated between January 1994 and June 2016 due to primary buccal mucosa tumors or oral cavity tumors with buccal mucosa extension were retrospectively evaluated. Two group of patients were included in the study. First group was composed of patients who had parotidectomy in addition the neck dissection and surgery for the oral cavity tumor. Second group was composed of patients who did not have parotidectomy but followed up at least for 1 year. All patients were evaluated by a detailed ENT examination, maxillofacial MR, neck CT in the preoperative period.

Results

There was 25 patients who meet the inclusion criteria (16 men, 9 women). A parotidectomy was performed in 15 of these patients. The mean follow up time for the non parotidectomy group (10 patients) was 49.2 months (13 - 165 month). Preoperative ENT examination and radiological findings did not revealed any signs intraparotid metastasis in all of the patients. No metastatic lymph node was detected in the histopathologic evaluation of the parotidectomy specimens. During their follow up period we did not observed any metastasis in the parotid region of the non parotidectomy group patients.

Conclusion

No parotid metastatis was detected in both groups. We think that for patients with tumors involving buccal mucosa if clinically and radiologically there was no evidence of metastasis superficial parotidectomy is not necessary. In this way potential morbidity of parotidectomy can be avoided.
Isolated hydatid cyst of the neck: case report

B.Jalila*(1), I.Rkain(2), S.Rokhssi(2)

(1)CHU IBN SINA Rabat, Rabat, Morocco, (2)hopital des spécialités, Rabat, Morocco

Purpose of the presentation:

Hydatidosis is a cosmopolitan anthropozoonosis common to humans and many mammals. The head and neck localization of the hydatid cyst is rare even in the endemic countries; it represents 1% of all the localizations. There is problem in diagnostic and management of this lesion. The objective of this work is to study the different aspects of cervical hydatid cysts in the light of a case report and the review of the literature.

Materials and Methods:

We report the case of a 14-year-old girl with no previous history, who consulted for a left supraclavicular mass that had been growing for 6 years ago.

Results:

The cervical ultrasound had suggested at the beginning an adenopathy with necrotic center. CT scan revealed a unilocular cystic mass measuring 5 cm x 4 cm in diameter, with a thin, regular wall, with not enhanced after injection. Chest x-ray and abdominal ultrasound were normal. The patient benefited from an exploratory cervicotomy with complete removal of the cyst. The pathological examination confirmed the diagnosis of hydatidosis.

Conclusion:

The cervical hydatid cyst isolated is exceptional, it must be evoked before any cervical mass cystic even in the endemic countries. Imaging and biology direct the diagnosis that remains histological. The treatment is surgical and especially preventive.

Le cancer du larynx est l'un des cancers ORL les plus fréquents. Réputé de bon pronostic, certaines présentations cliniques peuvent alourdir la mutilation engendrée par la chirurgie radicale.


Il s’agit d’hommes d’âge moyen de 59 ans. L’intoxication alcool-tabagique était notée dans tous les cas. L’infiltration cutanée était à type de bourgeonnement dans 4 cas et à type d’ulcérations dans 8 cas. 9 patients parmi 12 ont nécessité une trachéotomie préopératoire. Le point d’émersion de la tumeur, non connu dans 5 cas, était glottique dans les 7 cas restants. Il s’agissait de carcinome épidermoïde dans tous les cas, bien différencié dans 9 cas. Le staging préopératoire était T4N0M0 dans tous les cas. Tous nos patients ont eu une chirurgie radicale associant une chirurgie ganglionnaire conservatrice, une laryngectomie carrée et une thyroïdectomie totale. La réparation de la perte de substance a nécessité une plastie par lambeau dans 7 cas. Celui-ci était myo-cutanée aux dépens du grand pectoral dans 4 cas et fascio-cutanée delto-pectoral dans les 3 cas restants. Le séjour hospitalier moyen était de 18 jours. L’alimentation par sonde nasogastrique était maintenue pendant 16 jours en moyenne. 7 patients (58.3%) ont eu au moins une complication en postopératoire. L’hyperparathyroïdie transitoire et l’infection des sites opératoires étaient les 2 complications les plus fréquentes. 10 patients ont une radiothérapie externe adjuvante. 1 patient était décédé avant mise en place (MEP) pour irradiation et l’autre patient, ayant raté sa MEP, a eu une récidive péri-stomiale qui était fatale. La survie globale à 3 ans était de 58%.

En somme, l’atteinte cutanée dans les cancers laryngés impose une chirurgie radicale plus élargie et souvent un apport tégumentaire de réparation alourdissant le geste opératoire. Un traitement adjuvant par radiothérapie externe et parfois une chimiothérapie concomitante est, aussi, souvent nécessaire. La morbidité est certainement plus importante mais la survie reste peu modifiée comparativement aux cancers laryngés nécessitant une chirurgie radicale sans sacrifice cutané.

HN-Ot-113

Laryngeal locally advanced cancers with anterior extension: therapeutic imperatives.

S.Kedous*(1), S.Jbali*(2), S.Dhambri(1), M.Dhaha(1), F.Hedhili(1), Z.Attia(1), S.Gritli(1)

(1)Institut Salah Azaiez, Tunis, Tunisia, (2)Institut Salah Azaiez de Tunis, Tunis, Tunisia
laryngeal paraganglioma: a case report

D.Chafik*(1), Y.Mohammedi(2), M.Bensafia(2), S.Chalal(2), M.Hasbellaoui(2), A.Saheb(2)

(1)CHU MOHAMMED NEDIR TIZI OUZOU ALGERIA, Algeria, (2)chu de tizi ouzou, Algeria

Object : Paragangliomas are benign tumors with slow growing. The carotid body, jugular vain and tympanic localization is classical; but the laryngeal localization remains exceptional. The clinical manifestations are non-specific; can sometimes simulate a malignant tumor. This can makes the diagnosis difficult.

Material and method : A 50-year-old woman presented to our hospital with hoarseness, pharyngeal discomfort since 2 years ago and dyspnea in the last 6 months. Fiber optic laryngoscope showed a supraglottic mass arising from right aryepiglottic fold, covering the glottal plane extended to the right piriform sinus. The right vocal fold had a reduced movement. On neck examination no lymph node enlargement was observed.

CT scan showed a vascularised tumor.

The patient underwent a lateral pharyngectomy with partial thyroid cartilage resection, concurrent with tracheotomy. No embolisation was done before.

Histopathologic examination of the specimen showed a very vascular tumor with nests of cuboidal cells separated by vascularised septa. Immunohistochemistry results showed the neoplastic cells were cytoplasmic positivity for chromogranin, synaptophysin and sustentacular positivity for S-100.

The patient has not any evidence of disease at her 5-month follow up after surgery.

Conclusion : the distinction between paragangliomas and other neuroendocrine tumors can be difficult. Precise diagnosis is important in order to optimize patient treatment. The diagnosis is essentially based on anatomopathology followed by immunohistochemistry.
Lipoma of the parapharyngeal space. Case report

K. Markou*(1), A. Zisi*(2), S. Do-val(3), P. Karkos(3), G. Psillas(3)

(1) 2nd Academic ENT Department, Papageorgiou Hospital, Aristotle University of Thessaloniki, Thessaloniki, Greece, (2) 1st Academic ENT Department, AHEPA Hospital, Aristotle University of Thessaloniki, Thessaloniki, Greece, (3) 1st Academic ENT Department, AHEPA Hospital, Aristotle University of Thessaloniki, Thessaloniki, Greece

PURPOSE

The aim of this study is to present an interesting case of a lipoma identified in the parapharyngeal space in a 57-year-old woman. Parapharyngeal space lipomas are extremely rare with only few cases reported in the literature.

MATERIALS AND METHODS

A 57-year-old female, was admitted to our ENT department with a few months history of progressive dysphagia due to mass effect, respiratory distress and complaints of foreign body sensation. Clinical examination revealed a slight palpable mass in the left side of the neck and a smooth spherical bulge in the left lateral wall of the oropharynx, displacing the tonsil medially. Head and neck computed tomography and magnetic resonance imaging, demonstrated a fat attenuation mass located in the parapharyngeal space, extending from the lateral wall of the oropharynx superiorly to the piriform sinus inferiorly. The lesion displaced the adjacent anatomical structures, especially the major vessels of the neck. The preferred surgical technique included a combined external and intraoral approach of the mass.

RESULTS

The histopathological evaluation confirmed the diagnosis of a lipoma. The patient had an uneventful recovery and there has been no recurrence of the lesion so far.

CONCLUSION:

Tumors of parapharyngeal space are rare and account for 0,5-0,8% of neoplasms of the head and neck region. Most of them are benign. Lipomas are extremely rare and their reported frequency is 1-2%. The management of parapharyngeal tumors is a challenge for the head and neck surgeon. Fine needle aspiration biopsy isn’t a reliable diagnostic tool due to the anatomical location of the tumor, which makes access difficult. However imaging modalities such as CT and MRI help to diagnose the lesion and choose the appropriate surgical approach.
Long-standing Massive Cavernous Hemangioma with Oto-Naso-Oro-Pharyngo-Laryngeal Involvement: A Clinical Case Report.

P.Correia-rodrigues*(1)

(1)Centro Hospitalar de Lisboa Norte - Hospital de Santa Maria, Foz do douro, porto, Portugal

Hospital de Santa Maria, Centro Hospitalar de Lisboa Norte, Lisboa, Portugal

Long-standing Massive Cavernous Hemangioma with Oto-Naso-Oro-Pharyngo-Laryngeal Involvement: A Clinical Case Report.

Purpose: Hemangiomas are benign vasoformative soft tissue tumours which in more than half of the cases involve the head and neck region. This case illustrates an adult patient presenting with a long-standing cavernous hemangioma which extends through different - although contiguous - territories in the scope of Otolaryngology.

Material and Methods: Case report describing the clinical presentation, iconography and imaging studies used in the workup.

Results: We report on an otherwise asymptomatic 59-year-old black female presenting with a large cavernous hemangioma with oto-naso-oro-pharyngo-laryngeal involvement. Clinically the hemangioma runs from the right external auditory canal wall and tympanic membrane, the nasopharynx, the base, ventral and dorsal surfaces of the tongue, the vallecula into the hypopharynx and the epiglottis, right aryepiglottic fold and remaining laryngeal additus. Besides the extension of this bluish lesion, upper aerodigestive airways are patent and the patient denies any symptoms of dysphagia, dysphonia or dyspnea. The head and neck MRI shows a voluminous multilobulated mass with likely epicentre in the right parapharyngeal space, extending through the pterygopalatine fossa to the masticator space, parotid gland and the other areas described above.

Conclusion: Most hemangiomas involute with time, but a certain small percentage may sometimes undergo slow growth and progression. The patient has been under close follow-up with regular nasofibrolaryngoscopy and imaging studies in our outpatient clinic. She is currently under daily beta-blocker therapy with the lesion remaining clinically and imagiologically stable for the last 20 years without functional impairment.
Lymph node management in early stage laryngeal cancers
C.Gauche*(1), L.Chaltiel(1), J.Sarini(2), E.Serrano(3), S.Vergez(2)
(1)IUCT-Oncopole, Toulouse, France, (2)IUCT-Oncopole, France, (3)CHU Larrey, France

The aim purpose of the study was to access the prognostic factors of lymph node recurrence in patients with early laryngeal cancer (T1-T2 N0), and the rate of occult metastases for different laryngeal sub-location.

The data from patients who were treated in three tertiary care medical center (Institut Claudius Regaud, Toulouse-Larrey University Hospital, IUCT-Oncopôle), from 1997 to 2014, were analysed retrospectively. From the date of diagnosis, survival without lymph node recurrence as the first event was estimated using the Kaplan-Meier method and was presented with its 95% confidence interval. Comparisons between the groups were made using the log-rank test.

343 patients with laryngeal cancer classified T1 or T2 N0 clinical and radiological were included. After a median follow-up of 55.2 months (95% CI [48.4; 58.2]), 13 (3.8%) patients experienced lymph node recurrence. The survival rate without a 5-year lymph node recurrence was 95.5% (95% CI [92.2, 97.5]). The prognostic factors of lymph node recurrence were sustained glottic location (90.7% vs 98.5%, p = 0.0031) and clinical T2 stage (92.1% vs 97.4%, p = 0.0396). Glottic location had better survival without ganglionic recurrence than nonglottic location (96.8% vs 84.5%, p = 0.0006).

These results corroborate the need for prophylactic lymph node management of laryngeal tumors with a susglottic starting point.
lymph node tuberculosis epidemiological profile, diagnosis and therapeutic strategy in Setif (Algeria) ENT department

H.Fawzi*(1), N.Mersaoui(2)

(1)SERVICE D'ORL ET DE CCF DU CHU DE SETIF, Setif, Algeria, (2)SERVICE D'ORL CHU DE SETIF, Setif, Algeria

lymph node tuberculosis (LNT) is the most frequent extrapulmonary localization in Algeria. It still poses a diagnostic and therapeutic problem. The aim of this work is to study the epidemiological, diagnostic and therapeutic profile of lymph node tuberculosis in the setif area, which is representative of an Algerian endemic zone. This is a prospective study of new cases of LNT followed in the ENT department of the Sétif University Hospital between October 2014 and June 2016. Nearly 400 cases were collected for lymph node location alone. The average age was 29.1 years with a sex ratio of 0.6 (62.5% of women). Diabetes, tuberculosis and HIV infection were found in 9%, 15.6% and 0.6%, respectively. The adenopathies were cervical in 98%. The chest X-ray (made in all the cases) was abnormal in 8.1%. The diagnosis was confirmed in 98.2% of the cases on the basis of FNAC. All our patients benefited from an ultrasound which led us to a biopsy in case of single adenopathy and selective lymph node dissection (SNED) in case of multiple adenopathy.

The therapeutic regimen associated with SNED followed by 2 RHZE / 4RH in 86% of the cases. In the cases followed, the development was marked by the disappearance of the adenopathies in 96%, an increase of the volume 2.8% of the cases. The relapse of TG was noted in 7.2% of cases with adenopathy on the opposite side.

Our results allow us to propose as a therapeutic strategy a SNED followed by a 2 RHZE / 4RH treatment with prolongation of RH up to 12 months maximum with remission rates close to 99%.
Lymphoplasmocytic Non-Hodgkin lymphoma of the larynx: a case report

S.Nikoloska*(1), M.Nikoloski(2)

(1)University clinic for Otorhinolaryngology, Skopje, Macedonia, , Macedonia, (2)University clinic for surgical diseases "Sv. Naum Ohridski", Skopje, Macedonia

Background: Primary non-Hodgkin lymphoma of the larynx, according to literature, is a very rare entity accounting for less than 1% of laryngeal tumors. Current authors report less than 50 cases, and this is the only known case on the clinic in the past 30+ years.

Purpose of study: a presentation of case of a 61-year-old man, presenting with a four month history of dysphonia. Under indirect laryngoscopy (fiber-optic laryngoscopy) a tumorous formation of the right ventricular fold was demonstrated. Microlaryngoscopy showed a well demarcated tumorous formation measuring 3x6 mm, which was removed in entirety.

Results: Histological study concluded the presence of small lymphocites mixed with plasmocytoid lymphocytes and plasmatic B cells. Postoperatively, the patient was treated with single course of chemotherapy as a unimodular therapy. Evolution was favourable as seen by a followup period of twelve months form the time of reaching diagnosis.

Conclusion: Although primary laryngeal non-hodgkin lymphoma is rare, it must not be forgotten in the differential diagnosis workup, while evaluating a mass in the neck, especially in the supraglottic area. Direct laryngoscopy with biopsy for pathohystological examination, is crucial in reaching the correct diagnosis. Treatment and prognosis depend on the stage and the grade of the lymphoma.

Keywords Larynx, Lymphoma, Laryngoscopy, Chemotherapy
A very rare case of ronchopathy: palatal lipoma
S.Rokhssi*(1), R.Bencheikh(1), N.Belhaj(2), L.Essakalli(2)

(1)University Mohamed V, Rabat, Morocco, (2)university Mohammed V, Rabat, Morocco

Purpose
Intraoral lipomas are benign mesenchymal neoplasms that originate from mature adipose cells. Oral lipomas are however rare and represents only 0.5–4% of all benign tumors of the oral cavity. They may occur in any region of oral cavity. The buccal mucosa, tongue, and floor of the mouth are among the most common locations. Lipomas arising from the palate are very rare. They are usually asymptomatic until they grow to a large size and may interfere with speaking and swallowing.

Material and method
We report the case of a 62-year-old male patient with a large palatal swelling revealed by a nocturnal snoring with speech discomfort and swallow difficulties.

Results
The growth was gradual in onset, slowly increased in size over a period of 2 years.

On examination, there was a 6cm smooth-surfaced, elastic mass on the left side of the hard and soft palate, extended to the lateral pharyngeal wall. No signs of pain nor discharge from the tumor. It was covered with intact mucosa. We performed a face computed tomography, which excluded any bone erosion.

He underwent surgery with oral access. The treatment was easy with a complete resection. Histology came back in favor of a lipoma. The wound healed well. The patient was followed up for 3 years without any recurrence.

Conclusion
We present this case for its rare site, size and presentation. Clinicians should be able to identify intraoral lipomas to provide appropriate treatment, ensuring comfort and quality of life for the patients.
Madelung Disease: A Case Report

H. Jaafoura*(1)

(1) Department of Otorhinolaryngology Charles Nicolle Hospital Tunis, Tunis, Tunisia

Objective:

Benign symmetrical lipomatosis (BSL), also known as Madelung’s disease or Launois-Bensaude syndrome, is a rare disease characterized by the presence of multiple, symmetric, loose adipose tissues distributed around the neck, occipitalis, shoulder, back or chest. The etiology of this disease remains unknown, a disturbance of lipid metabolism is involved, and it has been associated with alcoholism in 60% to 90% of patients.

The case study objective is to describe the clinical presentation and the management of Madelung disease.

Materials and Methods:

It’s a retrospective study of one case of Launois-Bensaude syndrome in a 57-year-old man. The clinical, radiological and therapeutic data were analyzed.

Result:

We report the case of a 57-year-old man with a history of alcohol use disorder, having a surgery history of an excision of a scalp cyst, present with doughy a symmetrically distributed cervical adipose masses, which gradually enlarged over a period of 5 months, unpainful to the touch and of a soft consistency, resulting on an increase in the base of the neck. A biopsy taken from this mass showed a diffuse proliferation of the subcutaneous adipose tissue. Laboratory evaluation revealed a high cholesterol level. A neck ultrasound showed symmetric laterocervical and posterior adipose overload without focal lesion. Cranio-cervical CT scan consider a Madelung syndrome. Total neck lipectomy and abstinence from alcohol were performed. A relevant and long-lasting reduction of fat bulges has been obtained with no major complications.

Conclusion:

Launois-Bensaude syndrome causes a functional rather than esthetic concern due to the peculiar localization of fat bulges. Currently, the only effective therapy is surgery, through lipectomy or liposuction of adipose bulges, with abstinence from alcohol.

H. Jaafoura, S. Najjar, A. Kessantini, I. Riahi, S. Mannoubi, K. Khamassi, R. Lahiani, M. Ben Salah

Department of Otorhinolaryngology Charles Nicolle Hospital Tunis, Tunisia
Malignant neoplasms of the gingiva: about 70 cases.

S.Dhambrí*(1), F.El hedhili*(2), A.Ben younes(3), S.Kedous(4), S.Touati(4), S.Gritli(4)

(1)Institut Salah Azaiez, Tunis, Tunisia, (2)Faculté de Médecine de Tunis,, Ariana, Tunisia, (3)institut Salah Azaiz, Tunis, Tunisia, (4)Institut d’oncologie Salah Azaiez, Tunis, Tunisia

Objet de la présentation : Le cancer de la gencive représente 10% à 35 % des cancers de la cavité orale. Les objectifs de notre travail étaient d’étudier les caractères épidémi-co-cliniques et étiologiques de la tumeur maligne de la gencive, et de présenter les modalités thérapeutiques et les procédés de reconstruction.

Méthode : cette étude rétrospective portait sur 70 cas de tumeurs malignes de la gencive traités au service de chirurgie carcinologique et cervico faciale de l’institut d’oncologie Salah Azai ez de Tunis entre 2001 et 2006.

Résultats :

L’âge moyen était de 61,7 ans, avec un sexe ratio de 1,13. Les patients étaient tabagiques dans 41% des cas, consommateur d’alcool dans 20,4% des cas et consommateurs de tabac à chiquer dans 50,9% des cas. Le délai moyen de consultation était de 105 jours.

La taille moyenne de la lésion était de 4,1 cm. Elle était ulcéro-bourgeonnante dans 40% des cas. Elle était gingivale inférieure dans 87% des cas et supérieure dans 13% des cas. Des adénopathies cervicales étaient présentes chez 40 des patients. Le carcinome épidermoide représentait 87% des tumeurs. Les patients étaient classés T1 dans 10% des cas, 31% T2, 13% T3, et 46% T4. 60% des patients n’avaient pas d’adénopathies 17% N1, 19% N2, 4% N3.

Un traitement chirurgical a été indiqué chez les 70 patients. L’exérèse de la tumeur a été faite chez 2 patients. Une mandibulectomie interruptrice a été pratiquée chez 28 patients et non interruptrice chez 15 malades. Un patient a eu une hémi-maxillectomie et 3 patients ont eu une palato-maxillectomie. Un évidement ganglionnaire a été pratiqué pour 46 patients. Trente patients ont eu une radiothérapie post opératoire. Neuf patients ont eu une radiothérapie exclusive. Deux patients ont eu un traitement associant la radiothérapie et la chimiothérapie.

Vingt patients étaient en poursuite évolutive, 16 patients ont présenté une récidive locale. Deux patients ont eu une récidive ganglionnaire et quatre ont présenté des métastases à distance. La survie moyenne était de 3,9 ans.

Conclusion : le meilleur traitement des cancers de la gencive reste préventif avec une lutte contre les facteurs de risque et le dépistage des lésions précoces chez la population à risque. L’imprégnation par le HPV est à rechercher pour les patients jeunes.
Malignant sinonasal melanoma – 6 years follow-up. A case review.

C.Pietrosanu*(1), V.Zainea(2), I.Ionita(3), S.Radoi(3), A.Iliescu(3), A.Tanase(3), R.Hainarosie(3)

(1)Prof Dr. D Hociota Institute of Phonoaudiology and Functional ENT Surgery, Romania, (2)Prof Dr. D Hociota Institute of Phonoaudiology and Functional ENT Surgery, Bucharest, Romania, (3)"Prof. Dr. D. Hociota” Institute of Phonoaudiology and Functional ENT surgery, Bucharest, Romania

Purpose of the study

Malignant melanoma is a tumor rarely located at the sinonasal level, these cases accounting for about 0.3-2% of all presentations. It’s origin are the melanocyte cells. Although rare, this pathology represents quite a challenge, due to the high risk of local recurrence and distant metastasis.

The purpose of this paper is to present the complete aspects of a particular case, including all surgical interventions, the diagnostic challenges, the management problems that may occur, the most appropriate surgical approach and the follow-up 6 years after the first presentation, at the present time.

Materials and methods used

We wish to present all investigation and therapeutical methods available in our clinic, that we used according to present protocols. Patients with such a pathology must undergo a complete imagistic examination and endoscopic evaluation. Although the aspect may be suggestive for the diagnosis, the final result is given by the histopathologic examination.

Results

The surgical extensive resection is the method of choice for patients with malignant melanoma of the nose and sinuses. In our particular case, although less invasive methods were used at first, the best outcome was achieved after a combined approach, classical and endoscopic, which included an extensive resection with safety margins and lymph nodes dissection.

Conclusion

Even for patients with early stage disease the method of choice for treatment is a surgical resection. For more advanced cases, the combined therapy, including chemotherapy may associate a good outcome. We wish to emphasize the importance of a thorough follow-up, that allows us to quickly detect any possible recurrence and take the appropriate measures.
Management of advanced Angiofibroma

Z.Zakirullah*(1)

(1)Khyber Teaching Hospital/ Khyber Medical College Peshawar Pakistan, Peshawar, Pakistan

MANAGEMENT OF ADVANCED NASOPHARYNGEAL ANGIOFIBROMA BY CONVENTIONAL METHODS

Zakirullah

Department of Otolaryngology, Head & Neck Surgery, Khyber Medical College & Khyber Teaching Hospital Peshawar Pakistan

ABSTRACT:

Objectives: - To highlight the effectiveness of different surgical approaches performed in the management of advanced Nasopharyngeal Angiofibroma.

Study design: - Retrospective study.

Place and Duration of Study: - Study was conducted in the Department of ENT and Head & Neck Surgery, Khyber Medical College & Khyber Teaching Hospital Peshawar between April, 2002 and August, 2015.

Patients and Method: Eighty five cases of Nasopharyngeal Angiofibroma were selected for this study. Data like, name, age, address, clinical features, laboratory investigations and imaging studies (CT and/or MRI) were recorded, including the pre and post-operative medical treatment, operative findings and postoperative results. Minimum follow up was 08 months; recurrence of disease was also recorded.

Results: - Study reveals that Nasopharyngeal Angiofibroma is a disease of younger age, mainly occurring in 2nd decade of life in males. Twelve patients presented in stage IV and forty seven in stage III. Lateral rhinotomy was the best surgical approach in majority of cases. Recurrence of disease was seen in thirteen cases where the initial approach was transpalatal and four cases in lateral rhinotomy approach. Five cases received radiotherapy for recurrent unresectable intracranial disease.

Conclusion: -

Initial diagnosis of Nasopharyngeal Angiofibroma requires suspicion on the part of the Otolaryngologist in young boys coming with profuse nasal bleeding, such cases needs proper evaluation. Appropriate surgical approach should be planned depending on the CT scan findings.

KEY WORDS: Nose bleeding, Epistaxis, Nasopharyngeal Angiofibroma
Management of external carotid artery pseudoaneurysms in head and neck cancer

M.De la losa*(1), L.Roussel(1), E.Babin(1), P.Courtheoux(1), C.Barbier(1), M.Hitier(1)

(1)CHU Caen, Caen, France

Introduction : Pseudoaneurysms are life-threatening secondary arterial lesions causing carotid blowout syndrome. They were described widely on the internal carotid artery but rarely on the external carotid artery. Here we aim to study the characteristic of external carotid artery pseudoaneurysms, their potential causing factor and their treatment.

Material and Methods: From January 2010 to December 2015, we have reviewed all patients with head and neck cancer presenting an acute hemorrhage from a pseudoaneurysm. We analysed the site of the treatment and the treatment of the cancer. When radiotherapy data were available, we performed a dosimetric revision on the pseudoaneurysm site compared with the contralateral artery.

Results: Twelve pseudoaneurysms of the external carotid artery have been included, representing 11 patients. Diagnosis was done by angioscanner or angiography after a carotid blowout syndrome. Time from radiotherapy to CBS varied from 0 to 135 months. On the 11 patients, 3 had intensity modulation radiotherapy. When dosimetric revision was possible, we found no significant difference between the pseudoaneurysm artery and the contralateral artery. One patient presented a pseudoaneurysm with no history of radiotherapy but had a tumor next to the vessel. All the pseudoaneurysms were successfully treated by selective embolization.

Discussion: Facing a carotid blowout syndrome in head and neck cancer patient, we need to look for an external artery pseudoaneurysm, either with angioscanner or angiography. The ideal treatment remains endovascular embolization of the responsible artery. This endovascular treatment avoid surgical dissection which may be difficult after radiotherapy and at risk of fistula. As in internal carotid artery pseudoaneurysm, we recommend complete embolization - rather than stenting - to avoid bleeding recurrence.

Here we demonstrate that other factors than radiotherapy are involved in external carotid artery pseudoaneurysm. Better understanding of these factors should help to prevent life-threatening bleeding.
Management of Skull Base Metastases

O. Ben-ari*(1), N. Margalit(2), M. Yehuda(1), A. Abergel(1), D. Fliss(1)

(1) Department of Otolaryngology Head and Neck Surgery and Maxillofacial Surgery, Tel Aviv Sourasky Medical Center Affiliated to Sackler School of Medicine, Tel Aviv University, Tel Aviv, Israel, (2) Department of Neurosurgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

Background:

Skull base metastases (SBM) have received little attention mainly because of their relative rarity. There are only few publications dealing with SBM, most-of-which are case reports. Evidence based practice guidelines are practically inexistent, and the current treatment strategies are based on the very limited data in the literature and the clinical experience of the treating medical team.

Objective:

The goal of this study is to evaluate the prevalence, preoperative workup and treatment of SBM in a large series of patients with skull base neoplasms.

Methods:

We retrospectively reviewed the records of all patients who had been diagnosed with a skull base neoplasm between 2000 and 2014 in a tertiary medical center in Israel.

Results:

Of 466 patients with skull base neoplasms, seven patients were found to have SBM. Five of them had been previously diagnosed with cancer. The metastases were of renal, thyroid, bile duct, nasopharyngeal and gynecological origin. The presenting symptoms included epistaxis, exophthalmos and a new craniofacial mass. All patients were treated surgically and with adjuvant chemo-radiation.

Conclusions:

SBM are rare and account for only 1.5% in this series. A high index of suspicion, based on new neurological findings or new craniofacial masses, in patients with known cancer, is important for the early diagnosis. Occasionally, SBM may be the presenting symptom. The role of PET-CT in the pre-operative evaluation is crucial. Indications for surgery include the need to obtain tissue for diagnosis, palliation in radio-resistant tumors with progressive neurological deficits and a large solitary symptomatic metastasis accessible for surgery.
Management of thyroid gland during total laryngectomy – a retrospective analysis in 73 patients
A.Marinou*(1)
(1)GENERAL HOSPITAL OF ATHENS ' GEORGIOS GENNIMATAS', Athens, Greece

Purpose: The intraoperative management of thyroid gland during total laryngectomy in patients with squamous cell laryngeal carcinomas remains controversial. Some authors recommend resection of the ipsilateral lobe and isthmus during total laryngectomy in order to secure free disease margins, in far advanced carcinomas. Taking into account the upcoming hypothyroidism in postoperative period and its consequence, an intervention in thyroid gland should be more skeptical. Purpose of our study is to cite the percentages of thyroid gland invasion among our patients that underwent total laryngectomy in our institute, review of the literature and propose indications for thyroid gland approach in patients with squamous cell carcinomas.

Material – Methods: We review 73 patients undergoing total laryngectomy for squamous cell carcinoma at our institution during the period 2012-2016. The patients were categorized according to the gender, age, the primary site of the tumor and the pathological characteristics.

Results: Among 73 patients that included to our study, 37 patients underwent hemi-thyroidectomy and 5 patients total thyroidectomy, as part of surgical treatment during total laryngectomy. In 7 patients (16% of patient that had surgical management in thyroid gland) thyroid gland invasion from squamous cell carcinoma was confirmed histopathologically and 3 patients were diagnosed with synchronous primary papillary carcinoma. Four of six patients with primary subglottic carcinomas were detected with thyroid gland invasion.

Conclusion: Surgical management of thyroid lobe during total laryngectomy should not be considered as routine approach in all cases with laryngeal squamous cell carcinomas, in order to avoid unnecessary iatrogenic hypothyroidism. According to our experience, the results of our study and the literature, we recommend hemithyroidectomy in cases with preoperative confirmed thyroid gland invasion, intraoperative suspicious involvement and in cases with primary subglottic site, advanced stage carcinomas with advanced subglottic extention and thyroid cartilage and crico-thyroid membrane invasion.

Affiliation:
1. Athanasia Marinou, Otorhinolaryngologist Consultant, ENT Clinic, General hospital of Athens ‘Georgios Gennimatas’, Athens, Greece
2. Sotirios Papouliakos, Otorhinolaryngologist Consultant, ENT Clinic, General hospital of Athens ‘Georgios Gennimatas’, Athens, Greece
3. Evangelia Zacharioudaki, Otorhinolaryngologist, Director of ENT Clinic General hospital of Athens ‘Georgios Gennimatas’, Athens, Greece
4. Zisis Pappas, Otorhinolaryngologist, Director of ENT Clinic General hospital of Athens ‘Georgios Gennimatas’, Athens, Greece
Marginal Mandibullectomy in a Case of Recurrent Juvenile Ossifying Fibroma

L. Guevara*(1)

(1) Department of Otorhinolaryngology - Head and Neck Surgery, Ospital ng Maynila Medical Center, Manila city, Philippines

Title: Marginal Mandibullectomy in a Case of Recurrent Juvenile Ossifying Fibroma

Authors: Lemuel Ian R. Guevara, M.D., Winma Athena L. Alcira, M.D.

Affiliation: Department of Otorhinolaryngology - Head and Neck Surgery, Ospital ng Maynila, Manila, Philippines

Abstract:

Purpose of the Study:

Ossifying Fibroma is a well-demarcated lesion composed of fibrocellular tissue and mineralized material of varying appearances. Juvenile Ossifying Fibroma is a subtype which is characterized as a fast growing mass that appears between 5 and 15 years of age. It is aggressive and has a high incidence of recurrence. This significance of this case report is to add to the fund of knowledge necessary to establish specific guidelines in treating Juvenile Ossifying Fibroma.

Methods, Results:

We are presented with a case of a 9 year old male, previously diagnosed as a case of Juvenile Ossifying Fibroma, who underwent excision and enucleation of tumor in the left gingivobuccal area of the mandible. After 7 months, the patient had recurrence of mass, now noted at the left lingual area of the mandible. The patient underwent marginal mandibullectomy and was advised for close follow-up. After 6 months of observation and serial radiologic examination, no recurrence of the mass has been noted.

Conclusion:

Currently, there are no specific guidelines regarding the treatment of Juvenile Ossifying Fibroma. The approach to management may be conservative or aggressive. The decision between simple excision and enucleation of mass versus segmental mandibular resection has largely been made on a case-to-case basis. Though benign in nature, the aggressive behavior of Juvenile Ossifying Fibroma and its high recurrence rate are enough to pose a clinical dilemma for physicians. In the management of this case, despite the presence of recurrence, the age of the patient was a major determining factor in the choice of surgical treatment. Due to the potential risk for lifelong facial deformity with more aggressive surgical treatment, a more conservative management was chosen for the patient. In pediatric cases, long-term quality of life should still be of utmost importance.
Introduction: Intravascular papillary endothelial hyperplasia (IPEH) is a benign lesion composed by the proliferation of vascular endothelial cells. Its etiology is unknown, it appears after trauma and in relation to thrombus as a reactive process. The most frequent localizations are hands, head and neck. There are no specific clinical characteristics to guide its diagnosis, it grows slowly and does not have any predilections over sex or age. Histologically, it presents a proliferation of endothelial cells in a mono-layer, with digit-like projections that grow towards the center of the vessel until total occlusion. Its main differential diagnosis is angiosarcoma, nonetheless, the IPEH does not present cellular atypia, it remains inside the vascular lumen and it has a benign course.

Objectives: Report of a case of IPEH and review of the literature.

Clinical Case: A 27-year old male patient, HIV positive in ART. He presents one year history characterized by intermittent epistaxis in right nostril associated to ipsilateral local volume increase. Upon consultation, he refers headache, no findings at physical examination. Computed Tomography (CT) scan informs an expansive mass in the right maxillary sinus causing medial wall remodeling and extension into the right nasal fossa, with no bone destruction. Examination under functional endoscopic sinus surgery shows a soft tissue mass with necrotic rim, which deforms the uncinate process and abuts the medium turbinate. The mass is enucleated in its totality; intraoperative biopsy informs a mycetoma, for which the patient received Itraconazole. Cultures were finally negative. The patient evolved asymptomatic. Final biopsy informed a vascularized fibrous lesion with a reactive appearance, associated to necrotic material, no malignancies where present, suggesting IPEH with a necrotic center.

Conclusions: The treatment of choice in IPEH is surgical resection with wide margins to avoid recurrence. Adjuvant therapies can be used, however, there are no validated protocols. Even though this is not a frequent lesion, it must be known so it can be considered among the differential diagnosis in a vascular neoplasm in head and neck region, as to prevent aggressive treatment in a benign lesion.
Melanoma of the nasal mucosa: a diagnosis to consider

A. Cortez*(1), L. Sanz López(1), F. García Alcántara(1), T. Rivera Rodríguez(1)

(1) Hospital Universitario Príncipe de Asturias, Madrid, Spain

Introduction:

Primary mucosal melanoma of the nasal cavity is a rare tumor with poor prognosis due to its aggressive nature. It originates in the melanocytes of the nasal cavity, where exists a higher density of this cells compare to other sites.

Material and methods:

A woman of 52 years old, who presented right nasal respiratory insufficiency, associated with thick yellowish rhinorrhea of 4 months of evolution. She also presented facial pain in the right lateronasal and retroocular zone, and 2 weeks later noticed the presence of a right laterocervical mass with progressive increase in size.

The physical exploration showed:

- Nasal endoscopy: Presence of yellowish rhinorrhea and a whitish mass that occupies the floor of the right nasal cavity and extends to the coana.
- Neck: Mass in the right II area of 2 x 2 cm below the Sternocleidomastoid muscle, with increased consistency.

Results:

The MRI and CT scan findings suggested the presence of a mass on the right nasal cavity of 50x55x31 mm (CCxAPxT) that extends to the cavum, slims the medial wall of the maxillary sinus, occupies partially it; also infiltrates the posterior ethmoidal cells and the hard palate. Presence of bilateral submandibular adenopathies.

Cytological examination of the right submandibular adenopathy suggested metastasis of undifferentiated malignant neoplasm.

The patient was subjected to surgery and part of the tumor was resected; the histopathological findings describe the presence of coagulative necrosis, fibroconective tissue infiltrated by cells medium to high size of rounded morphology with melanic pigment.

Immunohistochemistry was positive to HMB45 and S100 markers. No mutation of the BRAF gene was founded.

All this findings suggested the presence of melanoma of the nasal mucosa.

Discussion/Conclusion:

Melanoma of the nasal mucosa is a rare entity that represents between 0.7 and 1% of all melanomas in Caucasian populations, and between 4 and 8% of malignant tumors of the nasal cavity and paranasal sinuses, this increasing incidence appears to be significant in women. The most common symptoms are unilateral nasal obstruction and epistaxis.

Histopathological exams show the presence of intracytoplasmic melanin pigment, and the confirmation of the diagnosis is based on immunohistochemistry using S100 and melanocytic markers (HMB45, Melan-A). Options of treatment are surgery, radiotherapy and chemotherapy. The 5 year overall survival doesn’t exceed 40% and mean survival doesn’t exceed 28 months, so it is important to have this diagnosis in mind in order to act as soon as possible.
Adenoid Cystic Carcinoma of the Head and Neck: a review of patients treated in the West of Scotland 2008 - 2015

M.King*(1)
(1)NHS Greater Glasgow and Clyde, United Kingdom

Purpose of the study: Adenoid cystic carcinoma of the head and neck is an uncommon disease. These tumors are generally indolent although many patients present a long time period after initially noticing their symptoms, and they do have the potential for metastasis and significant local invasion. The purpose of this study was to examine the demographics of patients experiencing adenoid cystic carcinoma of the head and neck in the West of Scotland between the years 2008-2015, and to examine the anatomical locations of their tumors, the initial presenting symptoms, the stage of the disease and the treatment modalities used.

Methods and materials used: Caldicott approval was granted for the identification of all patients that had been diagnosed with an adenoid cystic carcinoma of the head and neck in the West of Scotland between 2008-2015. Electronic records were then examined for the variables mentioned above.

Results: There were 22 cases of adenoid cystic carcinoma of the head and neck diagnosed in the West of Scotland between 2008-2015. The average age at diagnosis was 53 years (range 23-86). 68% were women. The majority (31%) occurred in the submandibular glands. 18% occurred in the parotid glands, 13% in the tongue and the remainder occurred across the following sites: Nasal cavity, Lip, Soft palate, External auditory meatus, Subglottis, Maxillary sinus. In terms of the initial stage of the tumor, 41% were T1 (Tumor less than 2cm). A significant number (32%) were T4 at presentation (invasion of local structures). Only 9% had evidence of nodal disease at presentation. 13% experienced metastatic disease. 73% received definitive surgery with post-operative radiotherapy. 19% received surgery alone. 4% received radiotherapy alone, and 4% were palliated. In terms of initial presenting symptoms, 59% presented having noticed a lump of the head or neck. Other presenting symptoms included epistaxis, nasal obstruction, impaired hearing, sore throat, shortness of breath, stridor, and facial tenderness.

Conclusions: Adenoid cystic carcinoma of the head and neck affects a range of ages and sexes. The most common site of occurrence was the submandibular glands, although they can occur across a range of other sites. The most common presenting symptom was a lump, although in 40% of cases this was not so. The majority are treated with surgery and post-operative radiotherapy. Unfortunately, a small number experience metastatic disease or local intracranial invasion at the time of diagnosis.

Authors and affiliations:

Dr King, Dr Keh, Professor McGarry (NHS GGC)
Melkersson-Rosenthal syndrome: a case report

H. Jaafoura*(1)

(1) Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia, Tunis, Tunisia

Purpose of the study:

Melkersson–Rosenthal syndrome (MRS) is a rare, noncaseating granulomatous disease consisting of persistent or recurrent orofacial edema, relapsing peripheral facial paralysis and fissured tongue. The etiology and mechanisms of MRS are still unknown. The reported incidence is 0.08%. His treatment is controversial. The aim of this study is to describe the clinical, histologic and therapeutic features of this pathology.

Material and methods:

It’s a retrospective study concerning a case of Melkersson–Rosenthal syndrome hospitalized in the department of otolaryngology at the Charles Nicolle hospital.

Results:

A 58-year-old Tunisian woman was referred to the Department of Otolaryngology of Charles Nicolle Hospital with a 5 days history of isolated facial asymmetry. Reviewing her past history, she had a similar episode 2 years prior, but symptoms had subsided spontaneously after a few days. Physical examination revealed a peripheral facial paralysis grade 5 (House and Brackmann), fissured tongue and swelling of the upper lip with some erosions. No other clinical problems were found. Audiogram was normal. Blood tests showed an elevated VS level. Skin biopsy on the upper lip showed noncaseating granulomatous change which was compatible with granulomatous Cheilitis.

Melkersson-Rosenthal syndrome was diagnosed. She received systemic corticosteroids (1mg/kg/j) 10 days associated to physical therapy. The orofacial edema and facial palsy had improved by the end of the treatment period. No adverse effects were observed.

Conclusion:

The rare neurologic disorder MRS is difficult to diagnose and treat. When patients with recurrent facial paralysis are encountered, physicians should examine and question those patients for recurrent or persistent orofacial edema. Because of the chronic progressive course of MRS, the management of this disease should improve with early diagnosis, effective treatment and active prevention.


Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
Microscopic Spread beyond gross disease: an adverse prognostic factor

A.Mishra*(1), P.Chaturvedi*(2), S.Datta(3), A.Malik(2), D.Nair(2)

(1)Tata Memorial Hospital, Mumbai India, Mumbai, India, (2)Tata Memorial Hospital, Mumbai, India, (3)Narayana Superspeciality Hospital, Kolkata, India

Introduction: Despite advances in surgery and chemo-radiotherapy techniques in management of head and neck cancers, the survival still remains poor. The prognostic significance of inadequate surgical margin is well established. Majority of times it is possible to appreciate the most distal extent of the tumor in oral cavity squamous cell carcinoma (OCSCC) on gross examination. However in few patients, tumor cells can be detected away from the appreciable edge of tumor during microscopy which may appear normal on gross evaluation. We hypothesized that presence of MSGD is a poor prognostic factor in itself, irrespective of margin status.

Method: This is a retrospective study of a prospectively collected data of 1025 treatment naïve oral squamous cell carcinoma patients. All patients underwent surgery from January 2012 to October 2013 followed by appropriate adjuvant treatment. Demographic and histopathological details were noted from the electronic medical records. Patients with MSGD were identified. Incidence of various histopathological factors was compared between patients with and without MSGD. Effect of MSGD on survival was done in relation to the various histopathological factors. Multivariate analysis was done to evaluate the effect of MSGD on survival.

Results: MSGD is present in 8.8% of the patients. Incidence of nodal metastasis (54.9% vs 43.5%; p< 0.046) perineural invasion (33 % vs 18.9%; p11 mm (57.1% vs 48.1% p<0.024), inadequate margins ( 35.2% vs 1.2 % p< 0.000) were significantly higher in patients with MSGD. Poor grade of differentiation (24.2% vs 18.2%, p<0.060) and extra capsular spread (44% vs 34.3%; P<0.067) also had a higher incidence in patients with MSGD however was not statistically significant. The overall survival in patients with MSGD was 32.45 months versus 37.5 months in patients without MSGD (p<0.002).

Conclusion: Tumors with MSGD tend to have a poor grade of differentiation and higher incidence of nodal metastasis, PNI and thicker tumors. Presence of MSGD was associated with lower overall survival as compared to those without. This possibly implies that presence of MSGD actually represents an aggressive nature of the disease. Considering the fact that identification of any adverse prognostic factor may improve the disease outcome, by intensification of treatment. Therefore prognostic significance of MSGD should be validated in a prospectively designed study.
Mid Yorkshire's Macmillan Head & Neck Team: Delivering holistic, multidisciplinary, patient-centred care including Cancer Follow Up

N. Corfield*(1), H. Chadwick(2), C. George(1)

(1) Mid Yorkshire Hospitals Trust, Wakefield, United Kingdom, (2) Mid Yorks Hospitals Trust, Wakefield, United Kingdom

Mid Yorkshire’s Macmillan Head & Neck Team: Delivering holistic, multidisciplinary, patient-centred care including Cancer Follow up.

Corfield N, SLT, Chadwick H, CNS, George C, Dietitian, Ross L, CNS, Mid Yorkshire Hospitals Trust, UK.

Purpose: Increasing numbers of Head and Neck (H&N) Cancer diagnoses means that consultant five year post treatment follow up is not sustainable. This has driven the Head and Neck Team at Mid Yorkshire Hospitals Trust to redesign their service to provide consistent, holistic management of patients through the cancer care pathway. Supportive consultant colleagues; the determination and dedication of the clinical nurse specialists (CNS) and allied health professionals (AHP) and five years of perseverance have contributed to this achievement. This model meets UK recommendations/guidance for standards of care. Dependent on individual needs, all H&N patients now have access to the personnel required in a timely manner, improving experience and outcomes

Method: The project brought together a team comprising two CNSs, (both non-medical prescribers) a dietitian and a speech therapist (SLT), all full time and dedicated to H&N, and an alcohol liaison CNS. The highly specialised nature of this H&N team enabled extended CNS/AHP roles, providing the cancer follow-up of a risk stratified subgroup of H&N patients: Those with oropharyngeal squamous cell carcinomas, one year post-completion of treatment and laryngectomees after one consultant visit post-completion of treatment. Following revision of anatomy and physiology and successful completion of training in flexible nasendoscopy, oropharyngeal/oral cavity examination, neck palpation, and stoma & speaking valve examination for laryngectomees, consultant approved competencies were devised and completed by all team members in 16 months, by February 2014. CNS/AHP cancer follow up clinics were commenced, alongside the existing consultant clinic.

Result: Consultant review of assessment for the first year demonstrated competence and safety of all team members (n=121: 35 patients). A second year of independent, peer-assessed procedures (n=214: 50 patients) have been delivered. Audit demonstrated that during both years, 4 recurrences were successfully detected and appropriate investigations requested to rule out others. 7 patients declined to consent for CNS/AHP follow up: 6 preferred indirect laryngoscopy, 1 preferred consultant follow-up. Patient satisfaction; 82.35% ‘very satisfied’, 17.6% ‘satisfied’, 100% said that they would choose to have H&N follow up that way again.

Conclusions: CNS/AHP led Cancer Follow-up clinics are safe, effective and efficient, with a high level of patient satisfaction. The service redesign is now established clinical practice.
Modified margin to thickness ratio predicts poor outcome in oral cancer patient

C.Huang*(1), C.Lee(2), Y.Lin(2), K.Chang(2), C.Chi(2), M.Lin(2), H.Su(2)

(1)Department of Otorhinolaryngology - Head and Neck Surgery, Kaohsiung Veterans General Hospital, Kaohsiung city, China, Republic of (Taiwan), (2)Department of Otorhinolaryngology - Head and Neck Surgery, Kaohsiung Veterans General Hospital, China, Republic of (Taiwan)

Purpose of the study

Margin to thickness ratio (MTR) had been proposed to be the predictor for local recurrence and disease specific death in oral squamous cell carcinoma in Australia. We aim to test if the same correlation exists in Asian ethnics group.

Materials and methods

Retrospective cohort study of 302 patients with oral squamous cell carcinoma who had received surgical management at a medical center between January 2006 and December 2013 were reviewed. Margin to thickness ratio was calculated in each patient.

Results

There were total 280 male(92.7%) and 22 female (7.3%) with age 52±10 yrs and 173(57.3%) tumor subsites were in buccal mucosa. On distribution analysis, log MTR appears to be more normal distribute than MTR. Thus 33% cut off of log MTR was used as analysis factor. In univariate analysis, log MTR, tumor thickness >13.2mm, perineural invasion, lymphovascular invasion, pathologic T stage, pathologic N stage, differentiation category and adjuvant therapy was correlated with 5 year disease-specific survival rate(DSS). Multivariate cox proportional hazard regression model was used to examine the factors associated with 5-year DSS, and log MTR showed significance in overall study population with adjusted hazard ratio(aHR)= 1.56 (p=0.049, 95% confidence interval CI= 1.002-2.452). In subgroup analysis, by separating T group into early T(T1+T2) and advanced T(T3+T4), multivariate cox proportional hazard regression model demonstrated log MTR had improved predicting value in advanced T group with aHR=2.73 (p=0.006, 95% CI= 1.33-5.60). Other significant factors include age aHR= 1.03 (p=0.039, 95% C.I. 1.00-1.05), tumor thickness aHR= 2.53 (p=0.034, 95% CI 1.07-5.99), pathologic N stage aHR= 6.18 (p=4cm) requires larger surgical margin to obtain confident local control rate and disease specific survival. Margin to thickness ratio could be a potential predictor of poor outcome and log MTR was a significant factor associated with poor 5 year disease survival in advanced T stage (T3,T4). Our study could help in pre-surgical planning in high-risk patients.
Narrow Band Imaging Guided Resection of Oral Cavity Cancer Decreases Local Recurrence and Increases Disease-Free Survival.

C. Farah*(1)

(1) University of Western Australia, Nedlands, Australia

Purpose: Local recurrence of oral squamous cell carcinoma (OSCC) is estimated at 20%. Incomplete primary tumour excision contributes to localized postsurgical recurrence of OSCC. The purpose of this study was to report on patient outcomes following resection of OSCC using Narrow Band Imaging (NBI).

Methods and Methods: Patients with OSCC requiring resection had their tumours visualized under conventional white light (WL) then NBI using an Olympus NBI ENF-VQ nasendoscope with CLV-180 light source and processor (Olympus Medical Systems, Tokyo, Japan). OSCC tissue was resected to the NBI-defined surgical margins, and molecular analyses undertaken in addition to following patients for 5 years post-surgery to assess local recurrence and disease free survival.

Results: Of the 18 patients recruited for this study, 1 patient (5.55%) declined follow-up. At 5 years follow-up, 14/17 patients (82.35%) were alive with no local recurrence, 1 patient (5.8%) had died from their disease, and 2 patients (11.7%) had died disease-free from other causes. In total, 16/17 patients (94.11%) who were followed for a minimum of 5 years were still alive and had not developed local recurrence.

Conclusion: Resection to NBI-defined margins improves survival rates and decreases recurrence rates of OSCC compared to traditional methods using white light, and should be adopted as the new gold standard for determining surgical margins for treatment of oral cavity cancer. The promising results of this prospective study have set the scene for a multi-centred, randomised controlled trial comparing NBI to WL currently underway in Australia.
Nasoetmoidal chondrosarcoma after repeated negative biopsies results.

E. Martínez Portes*(1)

(1) HOSPITAL CLINICO SAN CARLOS, Spain

Purpose of study:
To emphasize the importance of biopsy repetition after a persistent negative histology result in chondrosarcoma suspicious lesions.

Materials and methods:
A 72 year old woman with previous history of HTA presented to the ENT consult with bilateral nasal obstruction and discharge with progressive worsening of symptoms since 4 months ago. In the physical examination the patient showed a large mass arising from the septum and middle meatus of the right nasal cavity with a deviated septum in the contralateral fossa.

The MRI and CT scan showed a tumor like nasoetmoidal expansive lesion with right orbit wall displacement and septum infiltration extending to the left nasal cavity.

Multiple biopsies of the lesion were taken and informed as cartilage-forming neoplasm with no atypia found.

Results:
A large intraoperative endoscopy biopsy was performed and a paralateronasal approach was made after histological confirmation of high-grade chondrosarcoma. No disruption of the orbit periosteum was seen.

Adjuvant radiotherapy was administered.

At the moment the patient is controlled periodically and nasal crusts removal is usually performed. One PET-CT scan was made every 3 months during a year of follow up, no evidence of active disease has been found to this date.

Conclusion:
Chondrosarcoma usually presents as a slowly growing mass in the third or fourth decade of life. Local recurrences are most common.

The histological analysis is difficult and several intranasal biopsies are sometimes needed to confirm the diagnosis of sarcoma.

The treatment of choice is radical, en bloc, surgical excision and adjuvant radiotherapy, mainly in the cases of incomplete resection, with a 5 years survival rate of 50-60%.

Authors:
Martínez Portes, E; Fuentes Pérez, B; Hernane Pérez Hidalgo, D; Poch Pérez-Botija, A; González Gimeno, M; Iglesias Moreno, M.

Hospital Universitario Clínico San Carlos. Madrid, Spain.
**Nasopharyngeal Schwannoma - a rare cause of OME**

M.Calha*(1), E.Ferreira(2), J.Levy(3), V.Gouveia(4), P.Borges dinis(4), L.Luis(4)

(1)Hospital de Santa Maria, Lisboa, Portugal, (2)Hospital de Santa Maria, Lisboa, Portugal, (3)Ho, Lisboa, Portugal, (4)H, Lisboa, Portugal

**Purpose:** The nasopharynx is an area of embryologic confluence not only of nasal and pharyngeal structures, but also of ectodermal and mesodermal derived structures from the skull base and superior cervical region. This multitude of origins explains the diversity of tumors that can arise in this space. Because of the capacity for tumor growth and expansion in the nasopharynx, symptoms usually arise late, namely palpable neck masses, epistaxis or otitis media with effusion (OME).

Schwannomas are neural crest derived benign tumors, composed of Schwann cells, which normally produce myelin for peripheral nerves. Although most schwannomas of the head and neck occur in the parapharyngeal space, they have rarely been reported to emerge in the nasopharynx.

We report a case illustrating a rare cause of OME in an adult with a nasopharyngeal mass.

**Materials and methods:** Case report describing the clinical presentation, iconography and imaging studies used in the diagnostic workup, treatment and follow up.

**Results:** A 71-year old patient, presented with new onset left sided deafness, confirmed on audiogram and tympanogram. The nasal endoscopy revealed a left sided nasopharyngeal protrusion, 2 cm wide, covered by macroscopically normal mucosa. The magnetic resonance confirmed the presence of a mass stemming from the left pharyngeal recess, with well defined limits and without surrounding invasion. After various inconclusive endoscopic guided biopsies, under local anesthesia, pointing to lymphoid tissue hyperplasia, the patient was admitted to the OR and submitted to partial resection of the mass. The histologic result was a nasopharyngeal schwannoma. The patient was submitted to total surgical resection through a combined endoscopic and transoral approach, with posterior resolution of the otologic complaints confirmed on follow up.

**Conclusions:** Nasopharyngeal tumors can derive from a wide range of structures and usually remain asymptomatic until very late. It is therefore crucial to include even the most rare etiologies, such as a schwannoma, in the differential diagnosis and diagnostic workup.
Nodal metastases distribution in laryngeal cancer requiring total laryngectomy: therapeutic implications for the N0 Neck:

N.Fakhry*(1), D.Rivière(2), L.Santini(2), A.Loth(2), A.Giovanni(2), P.Dessi(2)

(1)APHP, France, (2)CHU Conception, Marseille, France

Purpose: Cervical dissection is a controversial surgical procedure in patients with squamous cell carcinoma of the Larynx free of any node metastasis detected in preoperative staging. The aim of this study was to investigate the distributions of lymph node metastases in laryngeal squamous cell carcinoma (SCC) and to improve the rationale for elective treatment of N0 neck.

Materials and methods: Seventy eight patients with laryngeal SCC who underwent neck dissection between 2008 and 2015 were analysed retrospectively. Surgery was first-line treatment in 37 patients (47%) and for recurrent disease in 41 (53%).

Results: The rate of occult nodal metastasis was 14% (N=11): levels IIa and/or III were affected in 9 cases (11.5%) compared with single cases of IIb and IV involvement (1.3% each). The rate of occult nodal metastasis was significantly lower among patients operated on for recurrent disease after radiotherapy than in patients who never had any radiotherapy of the cervical lymph nodes (0% vs 16.7%, p=0.03).

Conclusion: Selective cervical lymph node dissection in levels IIa and III sparing levels IIb and IV seems to be ideal in total laryngectomy in patients with cN0 laryngeal squamous cell carcinoma. Omitting lymph node dissection altogether may be considered in total laryngectomy on a cN0 patient showing recurrence after radiotherapy.
**Novel application of a rigid curved laryngo-pharyngoscope for examination and treatment of hypopharyngeal lesions**

K.Watanabe*(1), D.Yamauchi(1), Y.Takanashi(1), H.Hidaka(1), Y.Katori(1)

(1)Tohoku University School of Medicine, Japan

**[Purpose of the study]**

Among several types of transoral surgery, endoscopic laryngo-pharyngeal surgery (ELPS) has been reported in Japan since 2006. In ELPS, a rigid curved laryngo-pharyngoscope, which was invented by Sato, et al., is inserted orally to provide a wide surgical view of the whole hypopharynx with a magnifying endoscope. This instrument can elevate the larynx anteriorly so strongly that an excellent surgical view including the apex of the pyriform sinus, post cricoid region, posterior wall, and even the entrance of the esophagus is obtained. Developing the above-mentioned concept, we have considered applying it for the examination and treatment of diseases other than cancer located in the hypopharynx.

**[Materials and methods used]**

Under general anesthesia, a rigid curved laryngo-pharyngoscope is introduced orally assisted by upper gastrointestinal endoscope or flexible laryngoscope or magnifying endoscope. Then the tip of blade is advanced just short of the glottis, consequently blade is applied to the laryngeal surface of the epiglottis. By lifting larynx upward, both whole hypopharynx space and the entrance of the esophagus expand widely so that they are easier to see.

**[Results]**

We have used this instrument for several types of hypopharyngeal lesion, such as difficult-to-find buried fish bones, retropharyngeal abscess, congenital pyriform sinus fistula, and retropharyngeal tumor. In the result, we could acquire better view of hypopharynx and completed the intended procedure safely, especially for uncovering difficult-to-find fish bone buried in the mucosa. Even in the case hardly to operate under this instrument, just use for the purpose of detailed observation of the lesion was available.

**[Conclusion]**

A rigid curved laryngo-pharyngoscope provides a wide and clear view of a challenging space, the hypopharynx. We recommend using this technique in cases such as difficult-to-find buried fish bones or retropharyngeal abscesses while avoiding a neck incision.
Nuchal Horseshoe Incision for excision of a paravertebral sarcoma: a case report

P.Lopes*(1), A.Lameiras*(2), M.Gião(3), M.Magalhães(4), L.Oliveira(5), A.Hebe(5)

(1)Instituto Português de Oncologia de Lisboa, Francisco Gentil, Agualva-cacém, Portugal, (2)Hospital Egas Moniz, Lisboa, Portugal, (3)Hospital Fernando Fonseca, Amadora, Portugal, (4)Instituto Português de Oncologia de Lisboa, Francisco Gentil, Lisboa, Portugal, (5)Instituto Português de Oncologia de Lisboa, Francisco Gentil, Lisboa, Portugal

Purpose of the Study: Describe a case of a modified inverted horseshoe incision for the approach of a posterior neck paravertebral sarcoma, and analyze the advantages of this surgical technique in tumors of this location.

Methods: Case report of a posterior paravertebral sarcoma excised via a modified inverted horseshoe incision in the nuchal region at a Portuguese Oncology Centre. Outcome measures considered in the study were surgical technique and outcome.

Results: A 78 years-old male presented with a four months history of gradual growing expansive posterolateral neck lesion, without other symptoms. Fine-needle aspiration cytology revealed an undifferentiated pleomorphic sarcoma. Investigation with neck computed tomography scan without contrast (due to patient contraindication) showed a posterolateral paravertebral neck mass, measuring 49 x 32 x 44 mm, contacting the mastoid tip, the occipital bone, the transverse apophysis of C2 and C3 and the V3 and V4 segments of the ipsilateral vertebral artery, with no signs of bone invasion. To evaluate the relationship of the vertebral artery regarding the tumor, an eco-doppler was performed which suggested that this artery run separately from the tumor. The patient was placed in a right lateral decubitus position with the head fixed with a three-point head fixation frame. A modified inverted horseshoe incision was performed along the superior third of the posterior border of sternocleidomastoid muscle, turned around the mastoid prominence, curved to the midline and extended caudally to the C4 level. The lesion was completely excised, with identification and preservation of the ipsilateral trapezius and superior oblique muscles and the vertebral artery.

Conclusion: The modified inverted horseshoe incision is an advantageous surgical approach technique for posterior paravertebral tumors, as it enables adequate exposure of such lesions and a correct visualization of the noble structures of this anatomic region.
Advanced Laryngeal Cancer – understanding it’s reality at Portuguese Oncology Institute of Lisbon

P.Campelo*(1), B.Araujo(2), A.Jardim(3), T.Gabriel(4), H.Estibeiro(5), M.Guimarães(5)

(1)Hospital CUF Infante Santo, , Portugal, (2)Centro Hospitalar Lisboa Central, , Portugal, (3)Hospital CUF Descobertas, , Portugal, (4)Hospital Professor Fernando da Fonseca, , Portugal, (5)Instituto Português de Oncologia de Lisboa, , Portugal

Introduction: Squamous cell carcinoma of the larynx remains one of the most frequent tumors of the head and neck region. Advanced stages imply greater mortality, morbidity, and costs for health systems worldwide. In several countries, including Portugal, efforts have been made to reduce the substantial number of patients included in this subgroup. This work aims to study the current reality of laryngeal carcinomas at the Portuguese Oncology Institute of Lisbon (IPO), with focus on characterization of patients presenting with advanced stages.

Materials and methods: Medical charts of patients with squamous cell carcinoma of the larynx observed for the first time on the ENT Department of Portuguese Institute of Oncology, Lisbon, from January 2013 to December 2014 were reviewed. Demographic and clinical characteristics such as: age at diagnosis, gender, referral origin, cancer location, education, occupation, alcohol and tobacco consumption, time between the initial symptoms and the diagnosis and between the diagnosis and the treatment were analyzed. For the analysis we divided the study population in patients with stage I-II (early stage) and stage III-IV (advanced stage). The Stage I-II was considered the reference group. The outcome was death attributed to laryngeal cancer. The survival was measured in months after the diagnosis of by biopsy.

Results: The study population of 251 participants was followed for 5.102 person/month, with a total of 42 deaths; median follow-up time was 20.3 months (minimum of .23 and maximum of 39 months). Fifty-two percent of patients (n=130) presented at an advanced stage, median age 62.5 years. Regarding demographic and clinical characteristics, the two groups were similar except for cancer location and referral origin. Advanced staged tumors were more frequent at supraglottis and referred from National Service Health Primary Care. Advanced stage, older age and location other than glottic were associated with worse survival. Either referral origin, time between the initial symptoms and the diagnosis or time between the diagnosis and the treatment had impact on survival.

Conclusions: Despite the health policies and prevention campaigns developed, more than half of patients observed at IPO with laryngeal carcinoma present at an advanced stages. Such a finding may be justified by several factors (patient, tumor or health system related) that warrant further investigation. Further investigation is in need in order to understand the reason for this reality.
Obstructive salivary diseases: how important the learning curve is for diagnostic and interventional endoscopic management

A.Bellusci*(1), L.Vargiu*(2), P.Farneti*(3), E.Pasquini*(4)

(1)Università di Bologna, Azienda ospedaliera Sant'Orsola-Malpighi, , Italy, (2)Bologna University Medical School – DIMES - Ear, Nose and Throat Unit of Sant'Orsola-Malpighi Hospital, Bologna, Italy, , Italy, (3)Obstructive salivary diseases: how important the learning curve is for diagnostic and interventional endoscopic management, , Italy, (4)Ear, Nose and Throat Metropolitan Unit – AUSL Bologna, Italy, , Italy

Purpose of the study

Sialoendoscopic diagnosis and treatment is the new frontier for obstructive diseases of major salivary glands. As with any new technique, an adequate training programme involving a gradual learning curve is mandatory to quickly obtain good results. This surgical technique is less invasive, with shorter hospitalization time, fewer complications, and better results compared to open techniques.

Materials and methods

118 patients were enrolled in our hospital, from 2009-2013. 141 procedures were executed on 130 major salivary glands, for obstructive diseases (74 parotids and 67 submaxillary glands), considering diagnostic and therapeutic sialoendoscopy and combined surgery.

Procedures were divided into 3 groups: Group A was composed of the first 49 procedures, Group B the next 50 procedures, Group C the last 42 procedures.

We compared the results obtained in each of the 3 groups, considering the increasing experience of the surgical team.

Results

There were no statistically significant differences, relative to mean surgical procedure times, recurrence of symptomatology after treatment, need of further treatments, and also rates of minor complications between groups. No major complications were observed.

The increase in experience resulted in an increased number of interventional sialendoscopies performed under local anaesthesia instead of general anaesthesia (51% Group A, vs 18% Group B, vs 14% Group C, p<0.0001).

Conclusion

As for any innovative surgical technique, a team training programme is needed, in our series, results are similar to those already published in literature, so sialoendoscopy might be considered a good alternative for benign obstructive diseases of major salivary glands.

To achieve good experience, it is necessary: to have a good knowledge of the anatomy and surgery of salivary glands and the floor of mouth, and to have competence in managing potential complications; to use adequate instrumentation; to participate to hands on courses; to gain experience for canalising and dilating ducts (such as in dacriocystostomy); moreover operating the first cases under general anaesthesia is helpful to avoid patient’s discomfort due to longer procedure times.

Finally due to the low frequency of these pathologies and the need of expensive instruments (such intracorporeal shock wave lithotripsy, laser intracorporeal lythotripsy) it is mandatory to centralize diseases in dedicated institutions (for populations of about 1-2 million people), in order to validate investment in staff and equipment to provide the service.
Oncology results in laryngeal carcinoma - ENT Department of Jaen’s Hospital (Spain)

E. Fuster Martín*(1), D. Guillamon(2), A. Delgado(3), J. Galvez(4)

(1) Complejo Hospitalario de Jaén (SPAIN), Jaén, Spain, (2) Complejo Hospitalario Ciudad de Jaén, Jaen, Spain, (3) Complejo Hospitalario Ciudad de Jaén, Spain, (4) Jaén, Spain

PURPOSE OF THE STUDY/INTRODUCTION: Laryngeal carcinoma is the twentieth more frequent tumour in the world and its worldwide incidence rate is 5 cases per year out of 100,000.

The aim of this study is to perform a retrospective analysis of all the cases with diagnosis of laryngeal carcinoma from 2004 to 2014, do a protocol and know its survival.

MATERIALS AND METHODS: Jaén is a province of Spain with a population of 664,916 people. Nevertheless, the population that belongs to Jaén’s Hospital is 252,562 people. During 2014, 5570 cases had been diagnosed in Spain, thirty of them in Jaén province and 8 of them in our hospital. Therefore, our incidence rate is 2.7 cases per 100,000 in 2014. That is the lowest incidence record in the 10 years study. We don't have any epidemiological explanation, although we think it can be related with a wrong data recording.

Our sample has 248 patients. Forty of them had to be excluded for lack of information. We gathered all the data from the Pathology Department database, medical records, surgery books, civil registry and census. For the statistics analysis we have used the SPSS statistics software.

RESULTS: Within our sample 93.8% of the patients were male and the most common symptom was dysphonia in 57.7% of the times. At least 50% of them were both smokers and drinkers. About the location of the tumour, in 54.3% of the cases it was located in the glottis while it was in the supraglottis in 28.4% of the cases. The most frequent histology, 96%, was epidermoid carcinoma. 58.1% of the sample was in stage III and stage IV. If we talk about treatment, 27.9% of the patients didn’t go for surgery, 26.9% received conservative surgery (decortication, cordectomy or partial laringectomy) and 45.2% radical laringectomy. Clinical recurrence was recorded in 9%, there was a 6.7% with persistence of the disease and we couldn’t have this information in 21.6% of the patients. Global survival rate was 6.57 years with a standard error of 0.32 and with a 95% confidence interval (5.94-7.21).

CONCLUSION: We have found that our results are comparable with other articles, although the most remarkable part could be the few partial surgeries performed. We have been working hard in this last point since 2014, improving our results up to 70%. We think this is due to the protocol of early diagnostic that we have performed.
OUR EXPERIENCE IN MANAGING A CASE OF A PAEDIATRIC BILATERAL CAROTID BODY PARAGANGLIOMA

A.Singh*(1), A.Subash(2), N.Panda(2)

(1)POSTGRADUATE INSTITUTE OF MEDICAL EDUCATION AND RESEARCH CHANDIGARH, Chandigarh, India, (2)PGIMER, Chandigarh, India

PURPOSE OF THE STUDY: Carotid body tumors are rare neuroendocrine tumors derived from the extra adrenal paraganglioma of the autonomic nervous system. Very few cases have been reported in the literature in the paediatric age group less than 14 years of age. We present our experience in managing a Shamblin III carotid body tumor in a 13 year old boy.

METHOD: A 13 year boy hailing from the plains in Northern India presented to our out patient department with a left sided neck swelling. An unsuccessful attempt to excise the tumor was made at another hospital. Our evaluation revealed a Shamblin III carotid body tumor on the left side and Shamblin I on the right side. Further evaluation revealed already compromised left internal carotid system.

RESULT: Surgical excision of the tumor along with ligation of internal carotid artery was done. The tumor on the right side is being managed conservatively with serial follow up. No malignant changes or regional metastasis has been demonstrated in the resected specimen.

CONCLUSION: Although paragangliomas are rare entity in paediatics age group, they are diagnosed mostly in a locally advanced stage where they pose surgical challenges because of the smaller size of involved anatomical structures and risk of hypovolemia. A high index of suspicion should be kept in mind in a bilateral pulsatile painless neck swelling in children not residing in hilly areas and a thorough evaluation and angiography is mandatory before an attempt is made at excision of such tumors.
Outcomes for Oral and Sinus Cancer Patients Admitted to Intensive care in Australia and New Zealand Between 2000 and 2015: A Multi-centre, Retrospective, Observational Cohort Analysis

C.Frauenfelder*(1), E.Raith(2), S.Krishnan(3), A.Udy(4), D.Pilcher(5)

(1)Royal Adelaide Hospital, South Australia, Hahndorf, Australia, (2)(1) Department of Intensive Care and Hyperbaric Medicine, The Alfred, Victoria, Australia (2) Discipline of Surgery, University of Adelaide, South Australia, Melbourne, Australia, (3)(1) Department of Otolaryngology, Head and Neck Surgery, Royal Adelaide Hospital, South Australia (2) Discipline of Surgery, University of Adelaide, South Australia, Adelaide, Australia, (4)(1) Department of Intensive Care and Hyperbaric Medicine, The Alfred, Victoria, Australia (2) Australian & New Zealand Intensive Care Research Centre, Monash University, Australia, Melbourne, Australia, (5)(1) Department of Intensive Care and Hyperbaric Medicine, The Alfred, Victoria, Australia (2) Australian and New Zealand Intensive Care Research Centre, Monash University, Australia (3) Centre for Outcome & Resource Evaluation, Australian and New Zealand

Purpose of the study:

Little evidence surrounds the post-operative critical care management of head and neck cancer (HNC) patients despite their often extensive surgery and high-risk medical co-morbidities. ICU outcomes for oncological surgery have previously been reported, but no published studies addressed HNC patients specifically. Other studies have examined post-operative surgical complications, ward vs. ICU management of free flaps, and the economic impact of post-operative medical complications in HNC patients.

This study describes the admission characteristics, epidemiology, illness severity and outcomes of HNC patients admitted to ICUs in Australia and New Zealand over a sixteen-year period (2000-2015).

Method:

Using data from the Australian and New Zealand Intensive Care Society (ANZICS) Centre for Outcome and Resource Evaluation Adult Patient Database (APD), we assessed all patients >16 years old, admitted to ICU following any oral, sinus, or laryngo-tracheal cancer surgery between January 2000 and June 2016. Readmissions to ICU and transfers from other centres were excluded. Our primary end-point was in-hospital mortality. Secondary end-points included: ICU mortality, ICU length of stay (LOS), and hospital LOS. A multivariable logistic regression model including; age, illness severity score on ICU admission, mechanical ventilation, and year (referenced to 2015), was constructed to explore changes in adjusted in-hospital mortality risk over time.

Results:

We screened 1,427,422 completed adult ICU admissions and identified 10,721 eligible HNC patients from 154 ICUs. Annual admissions increased over the study period, from 348 in 2000 to 1132 in 2015. Median patient age was 64 years, 71.6% were male. Patients were predominantly treated in public hospitals (76.4%) and the majority were admitted from theatre or recovery (96.9%). 43.6% of patients were mechanically ventilated at time of ICU admission. Overall, in-hospital mortality was low (2.7%) and ICU mortality was 0.7%. The median duration of ICU admission was 1.04 days [IQR 0.80-2.40], and median duration of hospital admission was 11.7 days [IQR 5.54-20.4]. Crude in-hospital mortality fell over the study period; from 5.7% (95% CI, 3.0-8.0) in 2000 to 1.8% (95% CI, 1.0-3.0) in 2015. In multivariable modelling, the adjusted risk of dying in hospital also declined significantly (OR 3.37 (1.74-6.50) in 2000 vs OR 1.07 (0.57-2.03) in 2014).
Conclusion:

Despite increasing post-operative ICU admissions for HNC across Australia and New Zealand, in-hospital mortality has declined over a 16-year period. Given the low ICU mortality rate and longer ward LOS, peri-operative interventions and resource allocation outside ICU may lead to further improvements.
Outpatient-based trans-nasal flexible laryngo-oesophagoscopy (TNFLO)-guided biopsies for the histological diagnosis of patients with upper aero-digestive tract lesions

H.Mohammed*(1), M.Delbiero(2), M.Coates(2), L.Masterson(3), R.Nassif(2)

(1)Norfolk and Norwich University Hospital, Norwich, United Kingdom, (2)nor, Norwich, United Kingdom, (3)No, Norwich, United Kingdom

Purpose of study: To assess diagnostic yield of awake unsedated outpatient-based Trans Nasal Flexible Laryngo-Oesophagoscopy (TNFLO)-guided biopsies for upper aero-digestive tract (UADT) lesions.

Materials and Methods: A prospective study in a tertiary head and neck center. Over a period of three years, all patients who were booked to have TNFLO-guided biopsies were included.

Demographic data was recorded as well as the histological diagnosis. Details of abandoned procedures and patients who needed further procedures for their tissue diagnosis were collected as well.

Results: In the time period, 134 procedures were booked for TNFLO-guided biopsy. General anaesthesia procedures for tissue diagnosis were avoided in 103 procedures. The most common biopsied area was the larynx followed by the tongue base. The most common malignancy was squamous cell carcinoma. The procedure was shown to have low failure rate and high sensitivity and specificity when compared with traditional methods of biopsies.

Conclusions: TNFLO-guided biopsy procedure has a potential to be a useful diagnostic tool for patients who were found to have a lesion in their UADT tract. It appears to be tolerated by patients. The availability of the procedure in outpatient settings and the ability to perform the procedure without sedation allow for faster turn out of histology, which can be critical in patients with suspected cancer.
Parapharyngeal tumors of 30 cases and their complication of first bite syndrome

K. Abe*(1), R. Kanamura(2), G. Sato(3), K. Tamura(4), N. Takeda(1)
(1) Tokushima University Graduate School of Biomedical Sciences, Japan, (2) Tokushima University of Graduate School of Biomedical Science, Japan, (3) Tokushima University of Graduate School of Biochmical Medicine, Japan, (4) Tokushima Municipal Hospital, Japan

Introduction:
The parapharyngeal space is a complicated area in close to the masticator space, parotid space and carotid space. Salivary gland tumors such as pleomorphic adenoma and neurogenic tumors such as vagal schwannoma occur in a parapharyngeal space. Because a lot of important nerves and blood vessels exist in a parapharyngeal space, to protect that, various approaches (cervical approach with or without mandibular osteomy, cervical-parotid approach, transparotid approach) are used for resection of the parapharyngeal tumor.

Some complications of resection of the parapharyngeal tumor are bleeding due to vascular injury of internal carotid artery, external carotid artery and internal jugular vein, cranial nerve palsy of IX, X, X, XII due to nervous injury, horner’s syndrome due to sympathetic injury.

Recently, first bite syndrome (FBS) is known as one of the complication of resection of the parapharyngeal tumor. FBS is the development of pain in the parotid area associated with the first bite of food, especially the first meal of the day. In the past report, the mechanism of FBS is due to become hypersensitive of parasympathetic nerve, if the sympathetic nerve is damaged during operation. However, this theory has some contradiction. The purpose of this study is to propose of the mechanism of FBS.

Materials and Methods:
This study was a retrospective review of thirty patients who were underwent surgery of the parapharyngeal tumor from April 2003 to March 2015 in our hospital. We investigated the number of onset of FBS, the relationship between surgical approach and FBS.

Results:
Patient ages ranged from 21 to 80 (average: 53.2 years), and the male-to-female ratio was 1:1. The cervical approach (n=19, 2 included with mandibular osteomy), the cervical-parotid approach (n=7) and the transparotid approach (n=4) were selected for resection. Six patients had the onset of FBS after the operation. The surgical approach and the onset of FBS were irrelevance. In our cases with FBS, the dissection around the external carotid artery was performed to mobilize the parotid tail and a part of the parotid gland tissue was preserved.

Discussion:
We propose the mechanism of FBS that the branch from the sympathetic nerve is disturbed during the dissection of the parapharyngeal tumor around the external carotid artery, saliva secreted parotid gland becomes viscous due to the parasympathetic nerve dominant, viscous saliva at first bite is causing the pain.
Parathyroid hormone as a predictor of postoperative hypocalcemia after total thyroidectomy

A.Milioni*(1), A.Karatzanis(1), E.Prokopakis(2), D.Klonaris(2), E.Fountakis(2), G.Velegrakis(2)

(1)University of Crete School of Medicine, Heraklion, crete, Greece, (2)School of Medicine, University of Crete, Heraklion, crete, Greece

Purpose of the study: Parathyroid hormone (PTH) is a peptide hormone produced by the chief cells of the parathyroid glands, and regulates serum calcium concentration through its effects on bone, kidney, and the intestine. Hypocalcemia is frequently encountered after total thyroidectomy mainly due to postoperative hypoparathyroidism. The aim of this study is to identify and assess the reliability, and safety of the use of postoperative PTH levels as a strong indicator of postoperative hypocalcemia after total thyroidectomy.

Materials/Methods: A prospective study was conducted in 100 patients that underwent total thyroidectomy in our Department from June 2014 to May 2015. Ionized calcium (Ca2+) and intact PTH levels were measured preoperatively and also postoperatively, 18 to 24 hours from surgery. Additional measurements of Ca2+ were obtained every 12 hours until the stabilization of Ca2+ levels within normal values. Calcium supplements were administered orally for values below 8mg/dl, while intravenous administration was held for values less than 7,5mg/dl. The mean time of hospitalization was 3,2 days.

Results: We found that on the first postoperative day, a decrease in PTH level of 65% compared with preoperative level, or a decrease in PTH threshold more than 20pg/dl, is a strong indication for postoperative hypocalcemia. Respectively, a decrease in PTH level of 45% or less on the first postoperative day, or a decrease in PTH threshold less than 50pg/dl can be considered a safe predictor of normocalcemia.

Conclusion: PTH levels, when checked 1 day after thyroidectomy, have excellent accuracy in determining which patients will become symptomatically hypocalcemic. Routine use of this assay should be considered as a clinical guide for earlier discharge after thyroidectomy, as well as a tool for earlier identification of patients requiring pharmacologic calcium prophylaxis to avoid adverse outcomes.
Pectoralis Major Myocutaneous Flap in Primary and Salvage Head and Neck Cancer Surgery - Oncological, Functional and Aesthetic Results

A. Aničin*(1)

(1) Department of Otorhinolaryngology and Cervicofacial Surgery, University Medical Centre Ljubljana, Ljubljana, Slovenia

Purpose of the study: We analysed the oncological, functional and aesthetic results of the pectoralis major myocutaneous flap (PMMF) used between November 2001 and December 2014 at the Department of Otorhinolaryngology and Cervicofacial Surgery, University Medical Centre Ljubljana, Slovenia. The study was designed as a retrospective analysis of case series in a tertiary medical centre setting.

Subjects and Methods: Patients with squamous cell carcinoma of the head and neck (SCCHN) submitted to tissue defect reconstruction with PMMF were identified from a prospective database. Medical and surgical records were reviewed for information on clinical characteristics, treatment and outcome, and, specifically, indication for PMMF, wound healing, flap vitality, functional results and aesthetics.

Results: 61 PMMFs were used in 59 HNSCC patients. In respect to eventual previous therapy and prognosis, the patients were sorted into a primary surgery group - having either no treatment for SCCHN before PMMF reconstruction, or the PMMF was used to close the pharyngocutaneous fistula (PCF) that appeared after previous oncological intervention (31 patients) and a salvage surgery group (28 patients). Significantly better locoregional control and disease-free survival were observed in the first group. Wound healing was completed in 51 patients (median time from surgery of 20 days). There were 4 cases with partial PMMF necrosis. Functional results, occlusion of pharyngocutaneous fistula, speech intelligibility, upper limb dysfunction, and aesthetic outcome did not differ between the two groups.

Conclusion: PMMF is a reasonable choice in primary head and neck cancer surgery and in salvage procedures. Its use is characterised by vitality, reasonably short recovery time and a favourable aesthetic outcome at the donor site in the majority of patients.

Assistant professor Aleksandar Aničin, MD, PhD, Department of Otorhinolaryngology and Cervicofacial Surgery, University Medical Centre Ljubljana, Slovenia

Assistant Robert Šifrer, MD, Department of Otorhinolaryngology and Cervicofacial Surgery, University Medical Centre Ljubljana, Slovenia

Professor Primož Strojan, MD, PhD, Department of Radiation Oncology, Institute of Oncology, Ljubljana, Slovenia
PEG VS OPEN SURGICAL GASTROSTOMY IN TERMS OF EARLY COMPLICATIONS IN
HEAD AND NECK CANCER PATIENTS

T.Ahmed*(1), M.Awan(2)

(1)THE AGA KHAN UNIVERSITY HOSPITAL, Karachi, Pakistan, (2)Aga Khan University Hospital, Karachi, Pakistan

INTRODUCTION:

Head and neck cancers are among most common cancers in the Pakistan, they amount upto 1/5th of cancers in males and about 1/10th in females [1].

Surgery and radiotherapy are usually needed for their cure, both of which causes decreased mouth opening and difficulty in swallowing [2] and feeding through a gastrostomy the preferred source of nutrition in these patients [3]. An open surgical gastrostomy tube insertion was first attempted by Stamm in 1894. In recent past an alternative method of inserting gastrostomy tube has been adopted via endoscope, first used by Guaderer in 1979 [4]. Since then there is debate over better mode of nutrition in these patients, common complications of these procedures include peri-stomal infection, leakage, tube dislodgement, tube fracture and blockage, peritonitis, bleeding, gastric mucosa overgrowth [5-8]. The aim of this study was to review and compare PEG and Gastrostomy in terms of early complications.

MATERIAL AND METHODS:

Our study was a randomised control trial in which total 60 patients, 30 in each group, were included over a period of 7 months (1st June 2015 – 31st December 2015), patients were selected by Lottery method.

Results:

It was found that age and Total Admission Days did not give any mean difference between types, pain was analysed on visual analogue pain scale on the scale of 1-10 by the patients, mean pain score at all stages was found significantly higher in open group as compare to PEG. Peristomal Bleeding or leakage was measured by the no. of gauzes soaked and it was found that Bleeding/Leakage also gives significant mean difference between two groups, PEG and Open, and Open group patients have higher mean Bleeding or Leakage than patients who underwent PEG.

Peristomal erythema was taken as the only indicator of infection, 5mm of erythema was rated as 1, 10mm was rated 2 and infection was rated on the scale of 1-5, Peristomal infection in peg and open gastrostomy group, it was observed that Peristomal infection from Post-operative days 3 to 5 was found significantly higher in open group as compare to PEG and gives significant association.

Conclusion

Comparing early complication, there was significantly less pain in PEG group. Pain also reduced from first postoperative to fifth postoperative day. The number of gauzes soaked significantly less in PEG group.
PET/CT EVALUATION IN PATIENTS DIAGNOSED WITH HEAD AND NECK SQUAMOUS CARCINOMA AFTER TREATMENT

M.Gil*(1)

(1)Hospital Universitario Marqués de Valdecilla, Santander, Spain

Gil Aguilar M*; Lazuén Fernández S**; Morales Angulo C*; Castañeda Curto N*; Viana Cora A*; Ledesma Castillo N*

* Servicio de Otorrinolaringología del Hospital Universitario Marqués de Valdecilla (Santander. España)
** Servicio de Cirugía oral y Maxilofacial del Hospital Universitario Marqués de Valdecilla (Santander. España)

Background: Head and neck squamous cell carcinoma (HNSCC) has been estimated to represent between 5 and 10 percent of all new cases of cancer in Northern America and Europe. Imaging studies help evaluate the degree of local invasion, involvement of regional lymph nodes, and presence of distant metastases or second primary malignancies. The positron emission tomography-computed tomography (PET/CT) helps evaluate tumor metabolism, being specially useful after treatment. The aim of the study is to determine the usefulness of PET/CT in patients with HNSCC before and after treatment and the limitations this technique may present.

Methods: A literature review was performed in the databases Pubmed, OvidSP and ClinicalKey with the MeSH terms “positron emission tomography and computed tomography”, “squamous cell carcinoma of the head and neck”, and “after treatment”, and in the free text modality. A total of 13 articles fulfilled the inclusion criteria and were selected.

Results: Head and neck cancers are the sixth cause of cancer in the world. Many of these patients present and advanced stage of the disease (stage III and IV), and for this reason require a multidisciplinary treatment combining surgery, chemotherapy and radiotherapy. Tumor staging is essential for deciding the most adequate treatment option. Conventional imaging techniques as CT and MRI show certain limitations, especially in patients subjected to previous treatments, whose anatomical structures in many instances are substantially altered.

PET/CT is a technique with high sensibility and specificity which is very useful in the diagnosis of distant metastases and regional lymph node involvement, as well as for an early assessment of the response to treatment and the tumor relapse or residual disease, which occasionally is difficult to detect with other tests as CT or MRI. It also plays an essential role prior to taking a diagnostic biopsy in patients with cancer of unknown primary origin. The results obtained with PET/CT influence both clinical management and therapeutic approach.
Advantages of dry versus moist wound healing in the closure of pharyngocutaneous fistula: a case study.

M. Santos Lopez*(1), A. Gonzalez Izquierdo(2), A. Santos Alija(2), E. Gil-Carcedo Sañudo.md(2), D. Herrero Calvo.md(2), J. Herrero Agustin.md(2), L. Vallejo Valdezate.md(2)

(1) Hospital Universitario Rio Hortega, , Spain, (2) Hospital Universitario Rio Hortega, Valladolid, Spain

PURPOSE: Pharyngocutaneous fistula (PCF) is one of the most common complications after oncologic open laryngeal surgery. It considerably increases morbidity, hospitalization time and costs, as well as delays in starting adjuvant radiation therapy. We report our experience and the advantages of dry wound healing versus moist treatments in the closure of PCF.

METHODS: A caucasian 61-year-old man presented with a PCF after a supraglottic laryngectomy and a right radical / left modified radical neck dissection (T3N2bM0). After several surgical wound closure failures (Pectoralis Major Myocutaneous flap and local skin flaps) due to poor tissue quality, an attempt of a delayed wound closure was then initiated. Different types of wound care management methods, sutures and creative devices were trialed for several months until the fistula closure was achieved.

DISCUSSION: Although surgical debridement of necrotic tissue (protecting peripheral tissue with topical antiseptics) and the use of hydrocolloids (gel and dressing forms) combined with asian centella (gotu kola) and neomycin ointment resulted in the proliferation of healthy tissue at first, due to poor skin elasticity and little patient involvement, the direct wound closure attempted after several weeks of treatment was unsuccessful. Other devices and the use of a Philadelphia collar were then needed to allow traction over the neck area.

Further treatments with boric acid and mercurochrome were necessary in the management of perifistular skin that became macerated due to excessive amount of saliva. A combination of moist and dry wound care helped to prevent skin maceration and the controlled moisture stimulated healthy tissue regeneration. Occasionally, silver nitrate was also employed to avoid an excessive proliferation of granulation tissue. Finally, an essential oil for tissue regeneration was applied to support the final stage of the wound healing. The entire process was carried out in 6 months.

CONCLUSION: We observed that dry procedures combined with hydrocolloids and regenerating tissue oil were more beneficial than moist wound healing using hydrocolloids. Therefore, we believe that traditional dry methods are more effective in the management of PCF.
Pharyngocutaneous fistula following total laryngectomy: 5 years experience of a single-institution

J.Guimarães*(1), A.Menezes(1), M.Breda(1), S.Ramalho(1), L.Dias(1)

(1)Hospital de Braga, Portugal

Background: Total laryngectomy (TL) carries with it significant morbidity, with 40%–92% reported complication rates. The most frequent postoperative complication is the development of a pharyngocutaneous fistula (PCF), which causes increased length of hospital stay and delayed initiation of oral diet. These patients often present multiple comorbidity conditions that predispose to the development of these complications.

Objectives: The aims of this study were to review our single-center experience with PCF after TL and to determine risk factors associated with PCF in our patient population.

Materials and methods: The records of 44 patients undergoing total laryngectomy at our institution from 2011 to 2015 were retrospectively reviewed. Data collected included patient, tumor and treatment characteristics, like demographic factors, tumor location, TNM stage, associated comorbidities, American Society of Anesthesiologists (ASA) stage, body mass index, alcohol and tobacco use, hemoglobin and albumin serum values, preoperative tracheotomy, surgical margins status, prior radiotherapy and / or chemotherapy and length of hospital stay.

Results: The overall incidence of PCF was 27.3% (n=12). A total of 58.3% of these patients (7 of 12) needed additional surgery. Fistula development was associated with increased length of hospital stay (p < 0.001). 50% patients with positive surgical margins (p = 0.297), 38.5% patients with preoperative tracheotomy (p = 0.281), 75% patients with preoperative hemoglobin <12.5 g/L (p = 0.056) and 40% patients with postoperative albumin level <2.5 g/L (p = 0.170) developed PCF. However, none of these factors, in addition to T stage, ASA stage and presence of comorbidities, were associated with the development of PCF. The overall survival rate was 84.1%, 42.9% patients (n=3) died because of the oncologic disease.

Discussion/Conclusions: Postoperative complications following TL are common, especially PCF. They increase morbidity, length of hospital stay and are associated with increased hospital costs, delay in adjuvant treatment options and worse clinical outcomes. The early recognition of these complications is essential to permit adequate treatments, decrease costs, and optimize clinical oncologic results.
Polymorphous sweat gland carcinoma of the external ear canal

J. Fejza Bulaj*(1)

(1) UHC MOTHER TERESA, Tirana, Albania

Purpose of the study: To present a very rare case of neoplasms of external ear canal. Polymorphous sweat gland carcinoma (PSGC) is a rare adnexal neoplasm with characteristic variegated histopathologic findings and low-grade clinical behaviour.

Materials and methods: A young woman, 29 year old was presented in our clinic. She complained a recurrent blockage of the ear. The otoscopic findings showed a mass of the external ear canal covered with normal skin. It obstructed mostly the ear canal and was located at the superior wall of the ear canal.

A high resolution CT scan of the temporal bone was performed and it revealed a round, solid and well defined mass of the superior wall of the ear canal. The bone was not eroded by the mass.

The patient underwent the surgery for excision of the mass. The mass was sent for histopathological examination.

Results: The histopathological examination revealed that the mass was a low grade polymorphous sweat gland carcinoma and it was resected in healthy borders. Patient was checked for lymph nodes or metastasis but they were absent. The patient was followed up for three years. No local recurrences or metastasis were found during this time.

Conclusion: This is a rare condition which needs an accurate diagnosis and follow up of the patient.
Positive fresh frozen section margins as an adverse independent prognostic factor for recurrence in oral cavity squamous cell carcinoma.

M.Szewczyk*(1), J.Pazdrowski(1), P.Golusinski(1), P.Pieńkowski(1), W.Golusinski(1)

(1)Department of Head and Neck Surgery. Poznan University of Medical Sciences. The Greater Poland Cancer Centre, Poznan, Poland

Purpose of the study: The aim of this study was to evaluate the impact of positive fresh frozen section margins re-resected to negative margins on local and regional control and comparison with other, well known risk factors, how they affect the patient’s oncological outcome.

Material and methods: The material comprised the cohort of 151 oral squamous cell carcinoma patients. Most of the patients were T1 and T2 tumours (31% and 47% respectively). The majority had N0 status (59%). There were 14% pts with perineurial invasion, 11% pts) with vascular invasion and 18% pts with extra capsular spread. Intraoperative margin specimens were classified positive, when distance from tumour boarder was less than 1mm (high grade dysplasia or carcinoma in situ within the boarders were counted as positive as well). In all cases, where frozen section margin analysis revealed positive surgical margin, an extended resection has been performed unless further resection was limited by anatomical boundaries.

Results: The intraoperative analysis of surgical margins revealed that cancer free margins were achieved in 81,5% (123) cases. In 18,5% pts (28) the surgical margins were positive for cancer cells. Local recurrence was observed in 28 (18,5%) patients; regional recurrence was observed in 30 (19,9%) patients. Out of the analysed factors: age, sex, stage of disease, T stage, N stage, positive fresh frozen surgical margin, PNI, LVI, ECS: positive fresh frozen surgical margins (p<0,0001), the advanced stage of the disease (stage III + IV) (p=0,01), N – positive status (p=0,02), vascular invasion (p=0,03) were significantly related to local recurrence. Following multivariate analysis positive fresh frozen surgical margins (p=0,01) and advanced stage of disease (III+IV) (p=0,04), N positive status (p=0,004), PNI (p<0,001), VI (p=0,02) had significant impact. On multivariate analysis positive fresh frozen surgical margins (p=0,04) and PNI (p=0,004) were independent risk factors for regional recurrence.

Conclusions: Our results clearly show that positive fresh frozen margins evaluation, regardless of re-resection to R0 margins, is a powerful factor that determines an aggressive nature of particular tumours in oral cavity and this feature has to be taken into consideration in adjuvant treatment planning. The greatest impact such factor could have in borderline tumours and if so, adjuvant treatment should be implemented in those patients.
Post-laryngectomy voice rehabilitation in patients with different ways of pharyngoplasty

A.Polyakov*(1), I.Reshetov(1), M.Ratushnyy(1), O.Matorin(1), M.Filushin(1), I.Rebrikova(1)

(1)P. Herzen Moscow Oncology Research Institute, Russia

Purpose of the study: Post-laryngectomy voice rehabilitation in patients with microsurgical reconstruction for head and neck cancer.

Materials and methods: The study includes 94 patients aged from 15 to 69 years. The voice prosthesis was installed in 19 patients. In 70% of all cases there was registered Stage III-IV of the Cancer. Reconstruction with the visceral flaps was performed simultaneously in 62%, in deferred order – 38%. Cancer recurrence was noticed in 56%. Following visceral autografts were used: gastroepiploic flap – 40, transverse colon segment-epiploic flap – 29, jejunum flap – 17, sigmoid colon segment flap – 1, omental flap – 6, ileo-colon flap – 1.

Results: Follow-up period varies from 2 months to 16 years. Oral nutrition was restored in 95% of patients. In all cases the recovery of speech was achieved by voice prosthesis installation. The fistulas were registered in 8,7% of patients, the purulence of the post-operative wound – in 6,5%. The total flap necrosis was noticed in 6,3 % of all cases. The autotransplantation of the ileo-colon flap allowed to return simultaneously the lost voice and nutritive function applying own tissues only.

Conclusions: Post-laryngectomy installation of the voice prosthesis in patients with microsurgical reconstruction increases the patients’ chance for whole medical and social rehabilitation. The choice of the ileo-colon flap is economically explained. There are no complications related to the use of the voice prosthesis that’s why the dates of patients’ rehabilitation reduce significantly.
POSTOPERATIVE MONITORING OF PARATHYROID HORMON LEVEL AS A PREDICTOR OF OUTPATIENT THYROIDECTOMY FEASIBILITY

V. Parent*(1)

(1) CHU Pontchaillou RENNES FRANCE, Rennes, France

Postoperative monitoring of parathyroid hormone level as a predictor of outpatient thyroidectomy feasibility


Abstract

Objective: Postoperative hypocalcemia is the most common complication after total thyroidectomy and can lead to unfeasibility of outpatient surgery.

The objective of this study was to evaluate the assay of intraoperative-PTH level for predictive diagnosis of postoperative hypocalcemia that requires supplementation after total thyroidectomy.

Methods: A prospective, nonrandomized and uncontrolled study has included 102 patients (87 female; mean 50y) treated with total thyroidectomy without associated dyscalcemia nor neck dissection in a tertiary care university hospital.

Serum calcium was measured preoperatively, at D0, D1, D2. PTH was measured at incision (PTHi), at the end of thyroid removal (PTHr), J3 and J45. Only symptomatic patients were treated with vitamin and calcium supplementation. Multivariate analysis was performed to identify predictors of severe hypocalcemia.

Results: Twenty-eight patients experienced symptomatic hypocalcemia, treated with vitamin and calcium supplementation. Normal calcium level at D0 and D1 was not predictive of the absence of hypoparathyroidism at D3 and D45 (p>0.01). The combination of hypocalcemia at D0 and PTHr<10pg/ml was predictive of symptomatic hypocalcemia with a specificity of 100%, a PPV of 1. The decrease between PTHi and PTHr was significantly higher in symptomatic hypocalcemia patients (mean 60% decrease) than in normocalcemic patients (mean 24%) (p = 0.001).

Conclusion: This study suggests that intra-operative PTH level can help in selecting patients eligible to outpatient surgery, or those who must require systematic vitaminocalcic supplementation before being released.

Keywords: PTH level, hypocalcemia, total thyroidectomy, outpatient surgery
Post-thyroidectomy hypoparathyroidism: prevalence and predictive factors (Prospective study)

H.Ait taleb oum’hand*(1)

(1) service d’ORL et CCF à l’hôpital des spécialités de Rabat Maroc, Rabat 9, Morocco

Purpose of the study:

Hypoparathyroidism is a frequent complication of thyroid surgery, its incidence in the literature varies from 1.6% to more than 50% of cases. It is a major cause of prolonged hospital stays requiring long-term calcium supplementation for some patients and very close clinical and biological post-operative follow-up.

The purpose of this study is to:

- Determine the prevalence of hypocalcaemia in thyroid surgery through our experience of ENT and CFC service at the Rabat specialty hospital.
- Determine the predictive factors for its occurrence.

MATERIALS AND METHODS:

This is a prospective, analytical study carried out within the ORL and CFC department at the Rabat Specialty Hospital over a period of seven months from June 2016 to January 2017.

RESULTS:

In our series, 31 cases of transient hypoparathyroidism were recorded in 120 total thyroidectomies, a frequency of 25.8%. The mean age of the patients was 49.5 years with +/- 11.96. There was a clear female predominance (85%). Post-thyroidectomy hypoparathyroidism is an iatrogenic complication of variable frequency, it may be asymptomatic, especially if the calcium levels are reduced slightly, or symptomatic with typical manifestations ranging from paresthesias and muscle spasms to the signs of Chvostek and Trousseau. Calcium + vitamin D supplementation is performed in patients with postoperative hypocalcemia (per or IV: depending on the depth of the hypocalcaemia):

CONCLUSION:

Severe hypocalcemia after thyroidectomy is mainly due to an insufficiency of the parathyroid function secondary to the operative trauma. In most cases hypocalcemia is transient and recovers spontaneously in a few weeks to a few months.

Authors: H. Ait taleb Oum’hand, S. Nitassi, A. Ayoubi, R. Bencheikh, M.A. Benbouzid, A. Oujilal, L. Essakalli.
Predicting extra-capsular nodal spread in head and neck squamous cell carcinoma

L.Langstaff*(1), G.Chilvers(2), P.Tierney(3), S.Burrows(1)

(1)Norfolk and Norwich University Hospital, Norwich, United Kingdom, (2)Bristol Royal Infirmary, Bristol, United Kingdom, (3)United Hospitals Bristol, United Kingdom

Purpose of Study

The presence of extra capsular spread (ECS) in nodal disease of head and neck squamous cell carcinoma (SCC) affects treatment planning and prognosis. The gold standard for diagnosing extra capsular spread is histological analysis of neck dissection specimens. This study is a literature review to include the current evidence of methods used to identify the presence of ECS prior to or in the absence of neck dissection.

Methods

The Embase and Medline databases were searched using the terms “extra-capsular”, “neck”, “extra capsular” and “cervical”. Titles and abstracts were reviewed by the authors. Papers that compared the method to be assessed to the ‘gold standard’ of a histopathological analysis of a dissected nodal sample were included.

Results

The literature search identified 456 unique articles using our search terms and criteria. On review of these articles we identified 22 papers that compared the preoperative assessment of ECS with the postoperative histopathological specimens.

Conclusion

The results of our review highlight that although sensitivity and specificity of methods have been reported as high, once confidence intervals are included and likelihood ratios have been calculated questions regarding the clinical reliance on these tests have to be raised. Our review indicates that the most predictive indicator of ECS is the presence of central necrosis of the cervical lymph nodes on CT scan, although its clinical relevance is less convincing. The ‘Gold Standard’ for the determination of ECS remains the histological analysis of excised tissue.
Predictive factors for pharyngocutaneous fistula in patients treated with total laryngectomy or pharyngolaryngectomy

I. Atallah*(1), J. Petrossi*(1), A. Coffre(1), A. Fares, E. Rey(1), C. Righini(1)

(1) Grenoble University Hospital, Otolaryngology-Head and Neck Surgery Department, Grenoble, France

Objectives: Identification of predictive factors for post-operative pharyngocutaneous fistula in patients treated with total laryngectomy or pharyngolaryngectomy.

Material and Methods: A monocentric retrospective study was performed and included all patients who underwent total laryngectomy and pharyngolaryngectomy between 2000 and 2015. Data were obtained from paper and electronic medical records. All patients had laryngeal or pharyngolaryngeal squamous cell carcinoma with different TNM stage. The surgery was the initial treatment or the salvage treatment after trial of conservative treatment. The risk factors studied were smoking, chronic alcoholism, liver failure, chronic obstructive pulmonary disease, diabetes, heart failure, anemia, hypothyroidism, malnutrition, hypoalbuminemia, body mass index, pre-operative radiation therapy, surgical technique and the presence of pre-operative tracheotomy.

Results: 118 patients were included in our study with a mean age of 61.9 years. Risk factors were studied in univariate analysis then multivariate analysis. 45 (38%) patients developed completed or blind pharyngocutaneous fistula. Three factors were identified as risk factors for post-operative pharyngocutaneous fistula: pre-operative radiation therapy, pre-operative tracheotomy and neck dissection.

Conclusions: Knowledge of predisposing factors for pharyngocutaneous fistula is an essential element for a better preventive care. Factors affecting tissue vascularisation, like pre-operative radiation therapy, pre-operative tracheotomy and neck dissection, were identified as risk factors.
HN-Ot-158

Pre-treatment Neutrophil/Lymphocyte ratio, Platelet/Lymphocyte ratio and T-Lymphocytes subsets as predictors in laryngeal squamous cell carcinoma: a prospective study.

F.Missale*(1), F.Marchi(1), L.Guastini(2), G.Catola(3), G.Peretti(4)

(1)University of Genova, Italy, (2)U, Italy, (3)Univer, Italy, (4)Univ, Italy

Purpose of the study

Despite the established role of the immune system in the biology and clinical history of solid tumors, little is known in laryngeal squamous cell carcinoma (LSCC). The aim of our prospective study is the analysis of the inflammatory markers Neutrophil/Lymphocyte ratio (NLR) and Platelet/Lymphocyte ratio (PLR) in a cohort of patients affected and treated by LSCC compared to a control sample from healthy population and the to investigate the clinical significance of peripheral T-Lymphocyte subsets (CD3+, CD4+ and CD8+) in the oncologic cohort.

Materials and methods

The immunological parameters taken into account, derived from blood tests of pre-operative routines, are the amount of: platelets, lymphocytes and neutrophils; the analysis of T-lymphocytes subsets is performed with cytofluorometry. It is included, as control group, a cohort of healthy patients who underwent nasal septoplasty. Non-parametric statistical analysis tests were performed for the comparison of the variables of interest among the patients and the control cohort and to compare different patients subgroups.

Results

Between January 2015 and June 2016 we enrolled 65 patients affected by LSCC, treated with curative intent, and 30 healthy controls. In patients affected by LSCC the amount of neutrophils was higher than in the healthy group (p=0.00093); instead the amount of lymphocyte was lower (p=0.0043). The NLR and the PLR were significantly higher in patients affected by LSCC (p<0.0001 and p<0.0001 respectively). Among the oncological group, in patients treated for recurrent disease, compared to those who received first treatment, lymphocytes CD8+/CD3+ ratio was higher, instead CD4+/CD8+ ratio and CD4+/CD3+ ratio were lower (p=0.02; p=0.03 and p=0.04 respectively). In patients with lymph node metastases, compared to those without them, the WBC count and the count of lymphocytes CD3+ and CD4+ were higher (p=0.03; p=0.04; p=0.0098 respectively).

Conclusion

Our data demonstrate, as shown in literature in other head and neck cancer subsites, that a lower NLR and PLR could represent a favorable parameter in LSCC, being a positive prognostic factor in HNSCC. Lower ratio of CD4+/CD8+ and CD3+/CD8+ are related with a higher risk of local recurrence. Higher number of CD3+ and CD4+ are related with a higher risk of nodal metastasis.

These encouraging data suggest us further analysis in tumor specimen with immunohistochemistry, to understand the role of immune system in LSCC. Integration of these findings with traditional staging system could be useful in treatment choice and their predictive value during follow-up is under investigation.
PROGNOSTIC FACTORS IN CERVICAL METASTASES OF UNKNOWN PRIMARY

M. Maldonado corral*(1), M. Sancho mestre(1), A. Jover espla(1), M. Zelada trigoso(1), F. Ruiz de la cuesta(1), G. Severá ferrándiz(1)

(1) Hospital General Universitario de Alicante, Alicante, Spain

Cervical metastases of unknown primary account for 1-3% of all head and neck tumors. Diagnostic and therapeutic management is still a controversial issue. Several epidemiological and prognostic factors have been studied, the most important being the stage. The objective of our work was to study epidemiological, diagnostic and therapeutic factors and to relate them to survival to establish the factors Forecasts.

MATERIAL AND METHODS:

We conducted a longitudinal descriptive study of all cases of cervical metastasis of unknown origin diagnosed in our service in the last 20 years. The variables analyzed were age, sex, clinical presentation, diagnostic methods, treatments performed and survival (analysis of global and adjusted survival was performed using Kaplan Meier curves).

RESULTS

We have a series of 31 patients diagnosed with Cervical metastases of unknown primary after diagnostic confirmation by histopathology. The sensitivity of the fine needle aspiration (FNA) was 80%. After relating variables in terms of survival, we found two with statistical significance: Patients with N1 - N2a staging had better prognosis compared to patients with N2b - N3 staging (p = 0.001). We also observed that patients who had extracapsular disease had worse survival than those who did not (p = 0.003), The most commonly used treatment was radical cervical emptying associated with radiotherapy and in some cases chemotherapy; When comparing it with the other treatments and assessing survival, a better survival was observed in the group that initially used the surgery although this was not statistically significant.

The overall survival at 3 years was 50% and the adjusted survival at 3 and 5 years was 50% and 35%, respectively.

CONCLUSIONS.

In our study, the most important prognostic factor in terms of survival was staging and extracapsular disease; When comparing the different variables, the results did not become statistically significant, probably due to the small number of patients.

We think that the use of molecular tests will improve targeted treatments, also, we consider that longer series or multicenter studies should be performed in the aim of establishing diagnostic and therapeutic protocols.
HN-Ot-16

Ambul

S.Vigier*(1), S.Deneuve(2), D.Girodet(3), P.Zrounba(4)

(1)HFME, Bron, France, (2)centre león berra, Lyon, France, (3)centre león berard, Lyon, France, (4)centre léon bérard, Lyon, France

Purpose of the study: To evaluate the rate of upper aerodigestive tract (UADT) panendoscopy performed in a single-center day care unit and study the reasons leading to conventional hospitalisation and unexpected conversions.

Materials and methods: retrospective study from January 2011 to May 2013. Inclusion criteria: panendoscopy of the upper aerodigestive tract.

Collected data: age, sex, location of the tumor, reason for panendoscopy, TNM stage, previous cervical radiotherapy, distance from residence to center, APFEL, DETSKY, and ASA scores. A day care group and a conventional hospitalization group were compared using Fisher’s test for ASA stage, Student’s test for age, and Pearson’s khi2 test for the other variables.

Results: 436 panendoscopy were performed. This included 252 in day care unit, including 4 cases of conversion and 184 cases of conventional hospitalization. No significant difference was observed between the two groups concerning age, sex, localization of the tumor, TNM stage, reason for panendoscopy, previous cervical radiotherapy, distance between residence and center, APFEL or DETSKY stages. A significant difference was observed for ASA stage (p < 0.0001). The main reason for hospitalization when no SFAR or HAS (Haute Autorité de Santé) criteria were found was the patient’s refusal. Ten percent of conventional hospitalization were caused by psychosocial factors.

Conclusion: Use of a day care unit is appropriated for panendoscopy of the upper aerodigestive tract in selected patients. The high rate of patient refusals might be decreased using better education and information.
PROSPECTIVE STUDY ON THYROIDECTOMY BY TECHNICAL VASCULAR MICROSURGERY WITHOUT SEARCH RECURRENT NERVES

Y. Amourache*(1)

(1) Service ORL et chirurgie cervico-faciale CHU Bab Eloued (ex. CHU Mayo) Alger, Alger, Algeria

Objet
La chirurgie d’exérèse de la glande thyroïde repose sur les principes d’une chirurgie vasculaire fine avec en conséquence une hémostase parfaite ainsi que sur la préservation des éléments nobles, les nerfs laryngés et les glandes parathyroïdes. Le coût des moyens techniques doit aussi être mis en exergue. La recherche des nerfs récurrents reste recommandée par beaucoup d’auteurs et quelque soit la technique utilisée. Notre étude tient à montrer que la recherche de ces nerfs n’est pas indispensable notamment en utilisant une technique dite « Thyroidectomie par technique de microchirurgie vasculaire » et assurant une hémostase parfaite, avec la préservation des glandes parathyroïdes et sans drainage post-opératoire avec des moyens classiques, simples et non coûteux.

Patients et méthodes
Il s’agit d’une étude prospective, sur la prise en charge chirurgicale actuelle de la pathologie thyroïdienne nodulaire. Notre série comprend 41 patients, la technique chirurgicale mise à l’œuvre est dite : technique de microchirurgie vasculaire thyroïdienne avec hémostase réalisée uniquement à l’électrocoagulation bipolaire (sans ligatures vasculaires ni de clips) et sans la recherche des nerfs récurrents. L’aide technique correspond à l’utilisation de lunettes grossissantes. Les paramètres étudiés sont : l’indication opératoire concertée, l’état antérieur et post-opératoire de la mobilité des cordes vocales et de la calcémie, la technique chirurgicale (type d’hémostase et la recherche ou non des nerfs récurrents), la place du drainage, les complications post-opératoires, la durée d’hospitalisation et le coût de prise en charge global.

Résultats
Chez tous nos patients, l’indication chirurgicale était décidée en concertation avec l’endocrinologue, 21 thyroidectomies totales et 20 hémithyroidectomies réalisées (62 lobi-isthmectomies). L’état antérieur et post-opératoire de la mobilité des cordes vocales et de la calcémie était bien notifié. Les trois premiers patients uniquement avaient bénéficié d’un drainage post-opératoire, les autres n’avaient pas été drainés. Il n’y avait aucune complication hémorragique et aucune paralysie récurrentielle, on a relevé 03 cas d’hypocalcémie transitoire. Le temps d’intervention était de 1h30mn, la durée d’hospitalisation était d’un jour.

Discussion
Notre technique chirurgicale ainsi que les résultats des différents paramètres étudiés sont discutés à travers une revue de littérature internationale notamment avec les autres techniques : classique, avec hémostase par ultracision, endoscopique ou vidéo assisté et la thyroidectomie assistée par robot.

Conclusion
La Thyroidectomie par technique de microchirurgie vasculaire trouverait bien une place parmi les autres techniques chirurgicales.

En vu des résultats comparés, notre mode de prise en charge s’avère assez concurrentiel, notamment en terme d’économies de santé.
Rare cases of lateral neck swellings -mystery unveiled?

B.Basavarajah*(1)
(1)JSS Medical College, JSS University, Mysuru, Mysuru, India

Rare cases of lateral neck swellings -mystery unveiled?

Purpose of study
Lateral neck masses are often surrounded by mystique — in arriving at a diagnosis as well as in its management. This is a series of 5 rare cases of lateral neck swellings encountered in our department over the past 6 months – neurofibroma of right vagus nerve in the carotid triangle, (only about 25 cases have been recorded in literature), left internal jugular vein thrombosis(subclavian) (only about 26 cases of idiopathic IJV thrombosis have been recorded in literature.) in the neck, infected epidermoid cyst in the right parapharyngeal space (only 7% in head and neck, mostly in midline), synovial sarcoma of right parapharyngeal space (PPS space tumours accounts for less than 10% of head and neck tumours, synovial sarcomas seen in only 0.5% of head and neck tumours) and foreign body in left IJV (only 3 cases have been reported in literature.)

Material and methods
A retrospective study was conducted in our institution for the past 6 months during which all lateral neck swellings were studied. These 5 rare cases were selected. Appropriate radiological investigations were done for all the cases and necessary cases were subjected to FNAC. Out of the 5 cases 4 were treated surgically and IJV thrombosis was managed conservatively. Vagal nerve schwannoma was excised sacrificing the vagal nerve. Cable grafting using sural nerve was done. Synovial sarcoma patient had postoperative radiotherapy.

Results
Vagal nerve schwannoma is two months postoperative, has hoarseness and is receiving speech therapy. Planning to wait for regeneration of nerve for 6 months, if no improvement Thyroplasty 1 will be planned. Epidermoid cyst complete excision done. FB impacted in IJV was excised with IJV. IJV thrombosis patient is fine and is on warfarin therapy.

CONCLUSION
Although lateral neck swellings are a common presentation in our practice, the diagnosis can be challenging and it is important to manage with utmost care and not to dismiss any findings as trivial.

KEYWORDS- Lateral neck swelling, vagal neurofibroma, synovial sarcoma, IJV thrombosis, epidermoid cyst
Rare malignancies affecting the larynx - case presentation

A.Nicolaescu*(1), C.Coman(2), R.Grigore(3), Ș.Berteșteanu(3), B.Popescu(3), C.Popescu(3)

(1)Coltea Clinical Hospital Bucharest, Bucharest, Romania, (2)Coltea Clinical Hospital Bucharest - ENT Head & Neck Surgery Clinic, Bucharest, Romania, (3)Coltea Clinical Hospital - ENT Head&Neck Surgery Clinic, Bucharest, Romania

Purpose of study: two case presentations of rare malignant tumors affecting the larynx, a sarcoma and a plasmocitoma

Materials and methods: Data and case files of two patients who presented in our clinic recently, with similar insidious onset symptoms, consisting in dysphonia and a lateral neck mass. After a complete ENT clinical examination the diagnosis was that of a laryngeal tumor with bilateral neck masses, a common clinical presentation. After performing direct laryngoscopy and biopsies from the tumor sites, the final diagnosis was a surprise for everyone involved with the cases: plasmocitoma and sarcoma.

Results: The treatment in the case of the laryngeal sarcoma was straightforward: total laryngectomy with bilateral modified radical neck dissection. The more difficult case was the plasmocitoma. After an interdisciplinary board was summoned along with the haematologist and radiotherapy physician, the best option was considered the oncological treatment, but after radical neck dissection. However, the evolution was poor, in the case of the sarcoma patient with distant metastases, currently under chemotherapy and in the case of the plasmocitoma patient with systemic complications.

Conclusion: Malignant tumors affecting the larynx are in the vast majority SCC, and all other forms of malignancy comprise only 2 to 3% of laryngeal cancer cases. Thus, rare malignant tumors present difficulties of treatment for the ENT surgeon and sometimes even of diagnosis for the pathology physician and have a poor prognosis, with low 5-year survival rates.
Rare pharyngo-laryngeal tumors: Multicenter study of the French Study Network of Rare ORL Cancers of 155 cases

M. Lombard*(1)
(1) CHU de Nantes, Nantes, France

OBJECTIVE: To describe the clinical, histological and therapeutic characteristics of a multicenter prospective series of patients with rare pharyngo-laryngeal rare carcinomas and to look for possible prognostic factors in terms of overall disease-free survival.

MATERIALS AND METHODS: A prospective multicenter study of patients included in the REFCOR database between January 2009 and September 2016. Epidemiological, tumoral and treatment data were studied for all patients. Disease-free survival analysis using the Kaplan Meier method, variables that may influence survival, were studied by the log-rank test for univariate analysis and the Cox model in multivariate analysis.

Results: This study grouped 155 patients with rare pharyngolaryngeal carcinomas, included between 2009 and 2016 in the REFCOR database and from 35 hospitals. The main histological types found were chondrosarcoma for 19% of patients, neuroendocrine carcinomas for 18%, followed by verrucous and adenoid cystic carcinomas with 12% and 11%, respectively. The primary site was the larynx for 81% of the patients. 32 patients had cervical lymph node involvement and 7 were metastatic at diagnosis.

Surgery was the most common treatment, performed in 70% of cases. During follow-up, 28 patients died, 15 patients developed recurrence in metastatic or local recurrence. The mean follow-up was 28.6 months. The survival rate estimated at 2 years was 72% and 61% at 5 years. In univariate analysis, overall survival was related to ethyl poisoning (p <0.0001), Karnofsky index (p = 0.043), primary site (p <0.0001), lymph node invasion (p <0.0001), surgical excision (p <0.0001) and its limitations (p = 0.017). In multivariate analysis, patients with a Karnofsky score greater than 90% (p = 0.001), a laryngeal primary tumor (p = 0.001) and an operable tumor (p = 0.001) had better overall survival.

CONCLUSION: Rare tumors of the larynx and hypopharynx represent less than 1% of cancers. The treatment is based primarily on the surgery of the primary tumor site, the lymph node dissection can be discussed according to histology.

Certain histologies have a better prognosis, and can therefore benefit from specific therapeutic adaptations which require the use of centers of competence in this field.
Rate of success in vocal rehabilitation among laryngectomized patients: a Montreal study.

I. Berania*(1)

(1) Université de Montréal, Montreal, Canada

Title: Rate of success in vocal rehabilitation among laryngectomized patients: a Montreal study.

Ilyes Berania MD, Lindsay Paul BSc, Charles Martin SLP, Louis Guertin MD, Apostolos Christopoulos MD, Eric Bissada MD DMD, Marie-Jo Olivier MD, Jean-Claude Tabet MD, Tareck Ayad MD.

Purpose of the study: Following total laryngectomy (TL), secondary phonatory dysfunction may significantly impair quality of life of patients. Among the main used voice rehabilitation modalities, we account the tracheo-eosophageal fistula (TEF), oesophageal voice (OV), and the artificial larynx (AL). In addition, a proportion of laryngectomized patients will demonstrate a persistent failure to vocal rehabilitation modalities, and may be considered as an «orphan» group of patients. Our study aims to assess the rate of success of voice rehabilitation modalities, and determine potential predictive factors of rehabilitation failure.

Materials and methods used: we retrospectively revised all cases of total laryngectomy underwent between January 2011 and December 2014 in our institution. Demographics, oncological and social parameters were collected. We compared rates of success for TEF, OV and AL on a 48-month follow-up period. We also evaluated potential predictive factors of persistent rehabilitation failure among «orphan» patients.

Results: A total of 104 patients TL were assessed in our institution. The mean follow-up period was 27.3 months. After a 48-month follow-up period, we account 41.6%, 16.7%, 25.0% patients successfully using TEF, OV and AL, respectively. In addition, we noted that within 48 months of follow-up, 16.7% of patients demonstrated a persistent therapeutic failure to vocal rehabilitation. Bivariate analysis noted that nodal status was the only significantly factor (p=0.041) which appeared predictive of rehabilitation failure.

Conclusion: A significant proportion of patients appear to have persistent failure to vocal rehabilitation. Further investigations would thus be interesting to identify to role of clinical predictors of failure.
Regional Control after Selective Neck Dissection in Node-Positive Necks

L. Fernandez-vañes*(1), P. García-cabo(1), J. Rodrigo(1), F. López(1), M. Menéndez(1), P. Sánchez(1), J. Llorente(1)

(1) Hospital Universitario Central de Asturias, Oviedo, Spain

Purpose of the study: The manage of cervical lymph node metastases in head and neck squamous cell carcinomas (NHSCC) remains controversial. Classically radical or modified neck dissections were performed in the case of lymphatic neck metastases. The aim of the study is to determine the effectiveness of the selective neck dissection in the regional control in node-positive necks in patients with SCCHN.

Materials and Methods: We present a retrospective case series with 168 patients with N(+) HNSCC. They underwent a selective cervical lymphadenectomy either uni (35 patients) or bilateral (133 patients) between 1999-2009. Sixty-six per cent of cases received adjuvant radiotherapy. The median follow-up was 30 months.

Results: One hundred fifty-eight males and 10 females, with an average age of 59 years old, underwent 168 neck dissections (35 uni and 133 bilateral). The most frequent primary tumor’s location was the oropharynx (33%), followed by hypopharynx (28%), supraglottis (27%), glottis (8%) and oral cavity (4%). After surgery, the distribution according to the pT was: 10 cases T1, 36 T2, 70 T3 and 52 T4. Regarding the pN classification, 48 patients (28%) were N1, and 120 (72%) N2 (7 N2a, 68 N2b, and 45 N2c). 21% of patients were classified as stage III and 79% stage IV. In 21% of the cases there was extracapsular spread. There were 10 (6%) isolated regional recurrence (4 N1, 2 N2B, 4 N2C), and 17 (10%) with locoregional recurrence (2 N1, 8 N2B, 7 N2C). 5-years specific survival was 54%, and 5-years regional disease free survival was 80%. We did not find any differences according to the N stage (p=0.21; although the regional recurrences were slightly higher than N2b and N2c), extracapsular spread (p=0.33), or postoperative radiotherapy (p=0.97).

Discussion/Conclusion: According to the results presented in this study, the selective neck dissection appears as an effective treatment in the tumors with positive nodes at diagnosis, with reduced rates of regional recurrences. This allows to decrease the morbility performing a less aggressive surgical technique for the patient than the classical radical neck dissections.
Regional flaps for the ENT surgeon.
C.Douglas*(1), J.Montgomery(2), D.Houghton(2)

(1)Queen Elizabeth University Hospital, Glasgow, United Kingdom, (2)Department of Otolaryngology – Head and Neck Surgery, Queen Elizabeth University Hospital, Glasgow, United Kingdom

Department of Otolaryngology – Head and Neck Surgery,
Queen Elizabeth University Hospital,
1345 Govan Road
Glasgow.
G51 4TF

Background: Rates of pharyngocutaneous fistula following laryngectomy are higher in pre irradiated patients. Evidence suggests that placement of a flap may reduce the rate of fistula in this situation. The gold standard of care for reconstruction is free tissue transfer. Many patients undergoing surgery for head and neck cancer that have previously undergone oncological treatment have multiple co-morbidities. In these patients, salvage surgery is often the last chance to achieve cure and the surgery can be challenging; in terms of resection and the reconstruction. Judging a surgical margin in post irradiated tissue also presents difficulty, which is why it is our preference to resect pharyngeal mucosa rather than compromise the adequacy of a resection and reconstruct it accordingly.

Objectives: The objective of this clinical review is to describe the flaps we most frequently employ in post irradiated patients in an illustrated fashion. Here, we highlight the use of the pectoralis major muscle flaps for pharyngocutaneous defects, and the use of the platysma flap for chyle leaks and the supraclavicular artery flap for defect reconstruction,

Conclusion: These flaps are reliable in situations where there has been previous flap failure. They are not superior to free tissue transfer, but are effectively able to shorten the operative time in patients that have elevated performance scores and can be rapidly raised in the situation where flap requirement was unanticipated. Although they are considered out dated by today’s reconstructive standards, they still have a role in a subset of patients, where they are very much workhorse flaps.

L.Báguena campos*(1), F.Cogolludo perez(2), J.Vilacampa auba(2), D.Escobar montatixe(2), L.Cubillos del toro(2), I.Alcalá rueda(2)

(1)Hospital Fundación Jiménez Díaz, Madrid, Spain, (2)ENT Department.Universitary Hospital Fundación Jiménez Díaz,, Madrid, Spain

Purpose of the study

We present the case of a persistent tonsillar ulcer in a young male. The need to follow an orderly protocol of differential diagnosis of oropharyngeal ulcerated lesions is discussed, so as not to forget infrequent pathologies, such as that reported in the present case, and to achieve an adequate handling of the patient.

Material and methods/Case Description

We report the case of a 58-year-old male, with a history of left ototubaritis and tonsillectomy in 2009. He reports sensation of optic clogging and left otorrhagia of 7 days of evolution, accompanied by left odynophagia.

Otoscopy reveals a left tympanum macerated with remains of suppuration, which is accompanied at the oropharyngeal level by a fibrin-coated ulcer at the tonsillar level and the middle third of the posterior left tonsillar pillar, along with bilateral cervical lymphadenopathys of benign characteristics.

7 days of antibiotic therapy with oral ciprofloxacin and topical otic is prescribed, accompanied by mouthwashes with antiseptic solution.

In view of the persistence of the ulceration and otic symptomatology after one month of treatment, it is decided to perform a lesion biopsy and a fine-needle lymph node aspiration, obtaining results of lymphoid hyperplasia reactive to Treponemas infection, congruent with syphilitic chancre.

Treatment with Penicillin G is prescribed according to the therapeutic protocol and the serological study is completed, which confirms the diagnosis of syphilis.

Results/Discussion

The syphilitic chancre consists of a usually single ulcer, located at the entrance gate of Treponema Pallydum, which in 80% of the cases is genital, but can be either anal or oropharyngeal much less frequently, a possibility we must include in the differential diagnosis of oropharyngeal lesions.

This case allows us to recall the different diagnostic possibilities posed by an amygdalatic lesion, including infectious disease (tuberculosis, HIV, syphilis, etc.), inflammatory-systemic and benign or malignant oncologic.

Thereby, the need is shown for an orderly diagnostic protocol that points, after the proper examination and anamnesis, which are the most conclusive evidence in each case, minimizing the possibility of obviating rare pathologies such as syphilis.

Conclusion

Syphilis is part of the differential diagnosis of oropharyngeal ulcerative lesions.
In order to make an appropriate approach to oropharyngeal lesions, orderly decisions must be made based on an adequate and proven therapeutic diagnostic protocol, which allows the non-exclusion of atypical diseases.
Results of partial external auditory meatus and/or auricular conchal bowl reconstructions following cancer resections with postauricular island flap.

A.Ilijin*(1), B.Antoszewski(1), M.Durko(2), W.Pietruszewsk(3), T.Zieliński(1)

(1)Department of Plastic, Reconstructive and Aesthetic Surgery Medical University of Lodz, Lodz, Poland, (2)Dept. of Otolaryngology Medical University of Lodz, 91-046, Poland, (3)Department of Otolaryngology and Laryngological Oncology Medical University of Lodz, Lodz, Poland

Purpose

Presenting our clinical experience with the postauricular island flap (pif) and estimation of the results following partial external auditory meatus and/or auricular conchal bowl reconstructions with the pif in patients after carcinoma resections.

Materials and Methods

We analyzed postoperative results in 19 patients after auricular conchal bowl reconstructions with pif following malignant tumor resection between 2000-2015. The patients were followed-up, and evaluated in respect of early and long-term results after surgical treatment considering plastic surgeon’s and patient’s opinion.

Results

The cancers were completely excised in all patients, and there were no recurrences within 2 years of follow-up. Observed complications after reconstructions were venous congestion in five cases (26.3 %), pinning of the operated ear in four patients (21 %), prominent earlobe in three (15.8 %), and external auditory meatus constriction in three cases (15.8 %). Postoperative result was very good in all cases (both in the opinion of plastic surgeon and patients) except patients with pinning of the operated ear, prominent earlobe, and auditory canal/meatus constriction (moderately satisfied).

Conclusions

1. Postauricular island flap reconstructions after partial external auditory meatus and/or auricular conchal bowl resections allowed for complete removal of malignant tumors with no evidence of recurrence, and also preservation proper conchal shape of the reconstructed ear.

2. Reconstructions of auditory meatus and/or auricular conchal bowl resulted in very good postoperative results, which confirms the efficiency of the applied techniques.

3. Reconstructions with postauricular island flap of individuals with partial external auditory meatus and/or auricular conchal bowl defects contributed to satisfaction in patients and doctors’ opinions/estimations.

Key Words: auricular conchal bowl, external auditory meatus reconstructions
RISK FACTORS FOR POST-TONSILLECTOMY HEMORRHAGE WITH ELECTRIC MONOPOLAR CAUTERY TECHNIQUE DURING LAST YEARS. RESULTS AND EVOLUTION AFTER APPLYING NEW PROTOCOLS

M. Andreu Gálvez*(1), A. Guillén Martínez(2), J. Moraleda Deleito(3), R. Moreno-Arrones Tévar(1), N. Fages Cárceles(1), D. Antunes Silva(1)

(1) Hospital General Universitario Santa Lucía, Spain, (2) Hospital General Universitario Santa Lucía, Cartagena, Spain, (3) Hospital General Universitario Santa Lucía, Cartagena, Spain

INTRODUCTION

Post-tonsillectomy hemorrhage is the most serious complication of tonsil surgery. Primary post-tonsillectomy hemorrhage occurs during the first 24 hours after surgery, usually as result of inadequate ligations, while the secondary bleeding occurs frequently between the fifth and eighth postoperative day. The identification of post-tonsillectomy hemorrhage risk factors is essential in order to reduce this important complication.

MATERIALS AND METHODS

We carried out a retrospective study of the tonsillectomies of the year 2014 and 2015. We introduced a new protocol of analgesia and postoperative control at the beginning of the year 2015. The variables collected are: age, sex, weight, height, concomitant diseases, experience of the surgeon and postoperative treatment. A multivariate analysis consisting of logistic regression was performed. The post-tonsillectomy bleeding was the dependent variable. A linear regression was used to compare time until bleeding with Body Mass Index (BMI).

RESULTS

We included 198 patients, 17(8.8%) presented post-tonsillectomy hemorrhage (10.8% in 2014 and 5.2% in 2015). Bleeding occurred in 11 male patients and 6 female patients (p=0.378). Logistic regression showed an OR of 0.11 (p<0.001) for bleeding; there was a significant difference with a higher risk of hemorrhage in patients with a higher BMI and a history of peritonsillar abscess. In addition, there was significant difference with an increased risk of post-tonsillectomy bleeding in patients over 15 years (p<0.001). Nevertheless, there was no statistical difference in bleeding rate according to the surgeon, NSAIDs and steroids postsurgical treatment. Linear regression showed a positive relation between BMI and days until bleeding: each unit of BMI increased 0.109 the days until bleeding. Comparing BMI by age groups there was significant differences (p<0.05) in post-tonsillectomy bleeding.

DISCUSSION

Post-tonsillectomy bleeding incidence decreased while new analgesia and control protocols were applied in 2015. In our center the results are in agreement with the literature.

Hemorrhage is frequently in adults (15 years of age or older). In children group, the risk is higher in males with recurrent tonsillitis history, whereas in adults group peritonsillar abscess history increases the risk. Tonsillectomy in warmer seasons, where the water vapor pressure is higher, may reduce the percentage of secondary bleeding; however, there are no different incidences in our environment.

CONCLUSION

Post-tonsillectomy hemorrhage rate at two years is 8.8% in our centre. There is a reduction in hemorrhage rate from 10.8% (2014) to 5.2% (2015) due to the application of new protocols. High
BMI, patients over 15 years old and cervical abscess antecedent should be considered post-tonsillectomy bleeding risk factors.
AMLODIPINE INDUCED MASSIVE GINGIVAL HYPERTROPHY

C.Nekro*(1), L.Omar(2), J.Benayad(2)

(1)hopital des spécialités Rabat-Maroc, Morocco, (2)hopital des spécialités, Rabat, Morocco

INTRODUCTION:
Drug-induced gingival hypertrophy is a well-documented side effect of some pharmacologic agents, including calcium channel blockers (CCBs), phenytoin, and cyclosporine. Amlodipine, a long-acting CCB, is a commonly used hypertension drug. Here we describe a case of amlodipine-induced massive gingival hyperplasia.

CASE REPORT:
A 63 years old male patient was admitted for gingival swelling. Until 18 months back, patient firstly noted bead like nodular growth over the upper arch gums which progressively enlarged causing masticatory problems due to extensive gingival overgrowth along with pain, bleeding, and foul odor. Intraoral examination revealed diffuse enlargement of the gingiva of both the upper and the lower jaws. On general examination, the patient was moderately built and nourished. Panoramic radiography was normal. History revealed that the patient was diagnosed with hypertension and amlodipine was prescribed. After excluding other potential causes, we considered the diagnosis of amlodipine-induced massive gingival hypertrophy. We substituted an angiotensin receptor blocker for the amlodipine, and within 9 months the gingival hypertrophy had regressed. A periodontal therapy was also recommended in order to reduce residual hyperplasia.

CONCLUSION:
every physician should be aware of this usually overlooked but potentially harmful side effect, particularly if adverse oral symptoms arise during drug use. Gingivectomy should be reserved for severe cases that affect oral hygiene or functionality, or can be performed for cosmetic reasons.

RISK FACTORS FOR POST-TONSILLECTOMY HEMORRHAGE WITH ELECTRIC MONOPOLAR CAUTERY TECHNIQUE DURING LAST YEARS. RESULTS AND EVOLUTION AFTER APPLYING NEW PROTOCOLS.

M. Andreu Gálvez*(1)

(1) Hospital General Universitario Santa Lucía, Spain

Andreu Gálvez, Marina*; Guillén Martínez, Alberto*; Moraleda Deleito, Javier*; Mercader Coste, Ivette*; Moreno-Arrones, Rubén*; Antunes Da Silva, Dinis*; Fages Cárceles, Nathalie*

Hospital General Universitario Santa Lucía*

INTRODUCTION

Post-tonsillectomy hemorrhage is the most serious complication of tonsil surgery. Primary hemorrhage occurs during the first 24 hours after surgery. Secondary occurs frequently between the fifth and the eighth day after surgery. Identification of post-tonsillectomy hemorrhage risk factors is essential in order to reduce the incidence of this complication.

MATERIALS AND METHODS

We carried out a retrospective study of tonsillectomies during 2014-2015. We introduced a new protocol of analgesia and postoperative control at the beginning of 2015. The variables collected are: age, sex, weight, height, concomitant diseases, surgeon experience and postoperative treatment. A multivariate analysis consisting of logistic regression was performed (post-tonsillectomy bleeding as dependent variable). A linear regression compared time until bleeding (in days) with Body Mass Index (BMI).

RESULTS

We included 198 patients, 17 (8.8%) presented post-tonsillectomy hemorrhage (10.8% in 2014 and 5.2% in 2015). Bleeding occurred in 11 male and 6 female patients (p=0.378). Logistic regression showed an OR of 0.11 (p<0.001) for bleeding; there was a significant difference with higher hemorrhage risk in patients with higher BMI and history of peritonsillar abscess. There was significant difference with an increased risk of bleeding in patients over 15 years (p<0.001). There was no statistical difference in bleeding rate according to the surgeon, NSAIDs and steroids postsurgical treatment. The linear regression showed a positive relation between BMI and days until bleeding: each unit of BMI increased 0.109 the days until bleeding. Comparing BMI by age groups there was significant differences (p<0.05).

DISCUSSION

Post-tonsillectomy bleeding incidence decreased while new protocols were applied in 2015. In our centre the results are in agreement with the literature. Hemorrhage is more frequently in adults. In children group, the risk is higher in males with recurrent tonsillitis, whereas in adults group the history of periamigdalar abscess increases the risk. Tonsillectomy in warmer seasons, when the water vapor pressure is higher, may reduce the percentage of secondary bleeding; however, there are no different incidences in our environment.

CONCLUSION

The post-tonsillectomy hemorrhage rate at two years is 8.8%. There is a reduction in hemorrhage rate from 10.8% in 2014 to 5.2% in 2015 due to the application of new protocols. High BMI, patients over 15 years old and cervical abscess antecedent should be considered post-tonsillectomy bleeding risk factors.
ROLE OF NARROW BAND IMAGING SYSTEM IN EARLY DIAGNOSIS OF POTENTIALLY MALIGNANT LESIONS OF ORAL CAVITY

S.Bhalekar*(1)

(1)Pad Dr. D.Y. Patil University School of Medicine, Nerul, Navi Mumbai, Navi Mumbai, India

INTRODUCTION

Oral squamous cell carcinomas (OSCC) are frequently preceded by or associated with leucoplakia, erythroplakia, oral submucous fibrosis or lichen planus. The standard method of revealing PML potentially malignant lesions of oral mucosa or submucosa is usually done via conventional oral examination (COE), direct visualisation and biopsy with the aid of image-enhanced endoscopy along with high-resolution imaging system. In view of the promising results of using Narrow Band Imaging as a screening aid in cancer screening, a prospective randomised study was performed to evaluate statistically the efficacy of NBIS in diagnosis of potentially malignant lesions in oral cavity using histopathology as gold standard.

METHODOLOGY

236 potentially malignant lesions in oral cavity from 195 patients underwent Broadband white light & NBI-endoscopic evaluation according to the Inoue’s classification. The histopathology results were compared with Broadband white light & Narrow Band light evaluation.

RESULTS

The sensitivity, specificity, positive predictive value, negative predictive value and clinical accuracy for the detection of oral potentially malignant disorders or worse by Narrow Band Imaging were 96%, 83%, 96%, 83% and 93.22% respectively. The sensitivity, specificity, positive predictive value, negative predictive value and clinical accuracy with conventional broadband white light oral examination were 72%, 63%, 88%, 36% and 70.33% respectively for the detection of oral potentially malignant disorders.

CONCLUSION

NBI endoscopy has diagnostic utility as ‘Optical Biopsy’ for superficial squamous neoplasms in the oral cavity and hence can be considered as a screening tool in high risk patients.
ROLE OF NARROW BAND IMAGING SYSTEM IN EARLY DIAGNOSIS OF POTENTIALLY MALIGNANT LESIONS OF ORAL CAVITY

S.Bhalekar*(1)

(1)Padmashree Dr. D. Y. Patil University School of Medicine, Nerul, Navi Mumbai, Mumbai, India

INTRODUCTION

Oral squamous cell carcinomas (OSCC) are frequently preceded by or associated with leucoplakia, erythroplakia, oral submucous fibrosis or lichen planus. The standard method of revealing PML potentially malignant lesions of oral mucosa or submucosa is usually done via conventional oral examination (COE), direct visualisation and biopsy with the aid of image-enhanced endoscopy along with high-resolution imaging system. In view of the promising results of using Narrow Band Imaging as a screening aid in cancer screening, a prospective randomised study was performed to evaluate statistically the efficacy of NBIS in diagnosis of potentially malignant lesions in oral cavity using histopathology as gold standard.

METHODOLOGY

236 potentially malignant lesions in oral cavity from 195 patients underwent Broadband white light & NBI-endoscopic evaluation according to the Inoue’s classification. The histopathology results were compared with Broadband white light & Narrow Band light evaluation.

RESULTS

The sensitivity, specificity, positive predictive value, negative predictive value and clinical accuracy for the detection of oral potentially malignant disorders or worse by Narrow Band Imaging were 96 %, 83%, 96%, 83% and 93.22 % respectively. The sensitivity, specificity, positive predictive value, negative predictive value and clinical accuracy with conventional broadband white light oral examination were 72%, 63%, 88%, 36% and 70.33% respectively for the detection of oral potentially malignant disorders.

CONCLUSION

NBI endoscopy has diagnostic utility as ‘Optical Biopsy’ for superficial squamous neoplasms in the oral cavity and hence can be considered as a screening tool in high risk patients.
Role of the Otorhinolaryngologist in the surgical treatment of an extracranial internal carotid artery aneurysm – a case report

P.Lopes*(1), C.Nabuco(2), E.Ferreira(2)

(1)Hospital de Santa Maria, Agualva-cacém, Portugal, (2)Hospital de Santa Maria, Lisboa, Portugal

Purpose of the study: Describe the role of the otorhinolaryngologist as part of a multidisciplinary team in the surgical treatment of a vascular lesion in the neck.

Materials and methods: Case report of an extracranial internal carotid artery aneurysm repaired after a “hockey stick incision” and cervical dissection isolating the internal carotid artery aneurysm in a tertiary portuguese hospital. Outcome measures considered in the study were surgical technique and outcome.

Results: A 47 years-old african female with a prior history of sistemic arterial hipertension was refered from Angola to a tertiary universitary portuguese hospital with a left cervical mass, progressively growing for the past 9 years, without any other symptoms. She had been submitted to several procedures of fine-needle aspiration cytology with inconclusive pathological results. Investigation with neck angio-computed tomography scan showed a large left internal carotid artery aneuryn, starting immediately distal to the carotid bifurcation and measuring approximately 9 cm x 8cm, causing an external displacement and compression of the ipsilateral internal jugular vein. The lumen of the aneurysm presented an important blood clot. A “hockey stick incision” was performed and the neck dissected isolating the aneurysm. An open reconstruction was performed which involved resection of the left internal carotid artery aneurysm, with a left common carotid artery to internal carotid artery bypass using a 7-mm Dacron graft conduit.

Conclusion: The otorrhynolaryngologist is a valuable and indispensable element in a multidisciplinary team treating lesions of the neck, namely dissecting and exposing any anatomical structure of this region.
Sarcoidosis presenting as multinodular nontoxic goiter

K.Khamassi*(1)

(1)Charles Nicolle Hospital Tunisia, , Tunisia

purpose:
Sarcoidosis is a multisystem disease characterized by non-necrotizing granulomas. Direct involvement of the thyroid gland with sarcoidosis is rare and is usually identified at the time of fine-needle aspiration biopsies, thyroidectomy, or autopsies. We report the case of a woman with nontoxic multinodular goiter as the manifestation of sarcoidosis who was diagnosed by histopathology after thyroidectomy was performed for compressive symptoms.

METHODS:
We summarize the clinical presentation and pertinent pathology in a patient with sarcoidosis involving the thyroid gland. A review of literature regarding this topic is also presented.

RESULTS:
A 66-year-old woman was noted to have symptomatic nontoxic thyromegaly. He presented with acute onset of dysphagia two months ago. Ultrasound examinations showed multiple, solid supra centimetric nodules in the remnant tissue. Biopsy of right thyroid nodule was benign while the biopsy from the isthmus nodule was no diagnostic. Three months after the initial presentation a repeat biopsy of the isthmus nodule was again reported as no diagnostic. Because she had persistent dysphagia, she underwent total thyroidectomy with resolution of dysphagia. Histopathological examination of the thyroid revealed non necrotizing granulomas consistent with sarcoidosis. Since the preoperative evaluation of the patient, including a routine chest X-ray, showed no pathological finding. A hepatic biopsy was performed, which also showed non caseating granulomas, which confirmed the diagnosis.

CONCLUSION:
Sarcoid involvement of the thyroid is a rare occurrence. It can have various clinical presentations including acute thyroiditis, toxic and nontoxic multinodular goiter. Given its rarity, it is not often suspected as a cause of thyroid disease and can go undiagnosed. Our case brings to light this uncommon etiology of a nontoxic multinodular goiter.


Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
schwannoma of the tongue: a case report

D.Chafik*(1), S.Challal(2), S.Lazib(2), Y.Mohammedi(2), M.Hasbellaoui(2), A.Saheb(2)

(1)CHU MOHAMMED NEDIR TIZI OUZOU ALGERIA, , Algeria, (2)CHU DE TIZI OUZOU, , Algeria

INTRODUCTION:
Schwannoma is a benign tumor of the peripheral nervous system with very slow growth. The tongue localization is very rare.

OBSERVATION:
A 36 years old male patient, consults for a mass of the right free edge of the tongue with discomfort during the mastication. This symptom is evolving during three years. No medical management has been carried out.

The clinical examination revealed a swelling of the right free edge of the tongue, about 20mm long axis covered with a normal mucosa appearance. The lingual mobility is preserved. This mass is painless, well limited and with a bumpy contour.

DISCUSSION:
We have identified 36 similar cases reported in our literature. 2/3 of the cases (26 cases) concern the mobile language; The remaining 1/3 interests the language base.

The tumefaction of the tongue is the only symptom of tumors of the tongue (25 cases). The mean size of the tumor at diagnosis is 2 cm.

In 86% of the 31 cases the excision is carried out transorally.

Schwannomas, because of their rarity, are not part of the differential diagnoses of tumors in the oral cavity. This tumor affects all age groups with a high prevalence between 10 and 40 years. There is no predominance for sex.

Its growth is slow and the symptomatology is a function of the tumor size. 2/3 of the cases develop at the expense of the mobile language. The remaining third on language basis.

The most common clinical presentation is a tumor about two centimeters under a healthy mucosa.

MRI is the most sensitive examination, it reveals a nodule well limited homogeneous hyper intense T2, iso intense muscle in T1.

The anatomopathological study often reveals a mixed schwannoma A and B of ANTONI. The immuno-histochemical markers S-100 and Leu7 confirm the Schwannian origin of the tumor.

The treatment consists of complete surgical excision; The Trans oral route is the most widely used. For tumors of the tongue base a cervical trans route can be considered. The use of the CO2 laser is an interesting alternative. No recurrence is reported after complete excision.

CONCLUSION:
The schwannomas of the tongue are rare tumors. Nevertheless, they should be evoked before any mass of the language of slow evolution in the young adult. Complete excision is the treatment of choice. The risk of malignant transformation is extremely rare and the rate of recurrence is very low.
Second branchial cleft cyst and other lateral cystic lesion in the neck, 5-year retrospective study.

C.Chiesa estomba*(1), S.Jon alexander(2), J.González garcía(1), E.Larruscain sarasola(1), L.Garcia isa(1), X.Altuna mariezcurrena(1)

(1)Hospital Universitario Donostia, San sebastian, Spain, (2)Hospital Universitario Donosti, San sebastian, Spain

Purpose of the study: Branchial Cleft Cyst is congenital anomalies of the branchial apparatus. The branchial cyst constitutes 20–80% of the incidence of branchial anomalies in the neck (cyst, sinus or fistula). Approximately 90-95% of anomalies originate from the second branchial remnants. Other types of cystic lesion (Malignant or benign) can be diagnosed in the neck, the purpose of this study is to determine the types of cystic lesion in the neck detected in a tertiary university hospital.

Materials and methods: A retrospective analysis of a tertiary university hospital.

Results: 23 patients were included, 12 (52.2%) female and 11 male (47.8%). The age average was 39 years (Min. 15/Max. 65). These 23 patients comes to our clinic with a cervical cystic mass, according to side 12 (52.2%) have a right cystic mass and 11 (47.8%) have a left cystic mass. Fine-needle aspiration (FNA) and cytological examination were performed in 16 (69.6%) patients to assess if epithelial structure was present in the cyst. 3 patients were diagnosed after surgery one as a Warthin tumour, other as a cystic metastasis of an oropharyngeal carcinoma in the right tonsil and the other a papillary thyroid tumour Metastasis. Postoperative complications were noted in 2 (8,6%) patients, one of them had post-surgical infection and the other one have a transient Hypoglossal palsy how recover after 3 months.

Conclusion: Preoperative diagnostic including FNAC and radiological imaging can be helpful doing the differential diagnoses of cystic lesion in the neck. Complete surgical excisions of the branchial cyst are the gold standard of treatment, and help us to establish the definitive diagnosis and exclude the rare occurrence of branchogenic carcinoma.
Selective neck dissection for node positive Oral cavity Squamous cell carcinoma: A Retrospective Cohort Study

S.Hashmi*(1)

(1)PATEL HOSPITAL KARACHI/ BAQAI UNIVERSITY OF HEALTH SCIENCES, Karachi, Pakistan

PURPOSE OF THE STUDY

Background:
Selective neck dissection in clinically node negative neck is considered to be the standard of care for Oral Squamous Cell Carcinomas (SCC). Controversy still prevails in node positive disease regarding extent of neck clearance. In our part of the world, comprehensive neck dissection is considered as minimal optimal treatment for palpable neck disease.

Objective:
To compare regional control and disease specific survival between clinically node positive and node negative patients undergoing selective neck dissection for oral Squamous cell carcinoma at a tertiary care hospital.

MATERIAL AND METHODS:

This was a Retrospective Cohort study conducted in the Department of ENT Head and neck surgery Patel Hospital Karachi. All patients with biopsy proven Oral and Lip SCC that underwent selective neck dissection, between April 2006 and July 2015 were included in the study. End point of the study was regional control and disease specific survival. Patients who underwent comprehensive neck dissection were excluded from the study.

RESULTS:

During the study period, 111 patients with oral carcinoma underwent selective neck dissection. Mean age was 47 years, with over 70% male patients. Of them 71(62%) were clinically node negative and 40(38%) patients had clinically positive nodes in the neck. The mean follow-up Was 18 months (SD =19). The overall regional control rates were 95% vs. 96% for clinical negative vs. positive nodes, respectively (P =0.589). The overall survival was 83% in node negative group vs. 70 % in node positive disease (P=0.73).

CONCLUSION:

Selective neck dissection in neck positive oral SCC has similar regional control rates, when compared to node negative SCC. The difference in Overall survival between the two groups is not significant. Therefore, we suggest that selective neck dissection can be done in selected patients of oral SCC with palpable neck disease.

Authors
Syed Salman Hashmi First author
Syed Akbar Abbas Head of Head and Neck Dept.
Jaweria Saeed Data collection
Amna Bukhari. Fellow Surgeon
Ghulam Murtaza Clinical Research Statistician.
Septic Sternoclavicular Joint Arthritis

K.Momiyama*'(1), K.Kano(1), A.Maki(1), S.Miyamaoto(1), T.Yamashita(1)

(1)Kitasato university, , Japan

Purpose of the study;

Septic sternoclavicular joint arthritis is rare in daily medical practice, however, the patients of that could present to otolaryngologist due to pain and swelling of the neck. Although it is easily misdiagnosed with articular rheumatism at first, the fatality rate of this disease is reported to be 10% because a delay in diagnosis would cause serious complications such as osteomyelitis, mediastinitis, and sepsis. We reported 3 cases of septic sternoclavicular joint arthritis to review the issues to require attentions in this disease.

Materials and methods used;

We experienced 3 cases of sternoclavicular joint arthritis from 2012 to 2015 in our hospital. The patients were a 59-year-old male, a 73-year-old male, and a 56-year-old male with a chief complaint of pain and swelling of their anterior neck. All cases had an uncontrolled diabetes. The first case was associated with the prostatic abscess and left foot gangrene. The second case was associated with mediastinitis. The third case was associated with thoracic empyema and pulmonary abscess.

Results;

Cervical CT revealed arthritis and abscess formation around the sternoclavicular joint in all cases, so that incision and drainage of an abscess in that region were immediately conducted in all cases. Drainage of a thoracic empyema or a mediastinitis at the same time in two of them. Additionally, antibiotic therapy and wound washing for a month were required to improve in all cases. However, septic sternoclavicular joint arthritis of the opposite side occurred in the first case 2 years later from the initial disease. Because of ineffectiveness of antibiotics for 2 weeks, drainage and amputation of the left foot were performed.

Conclusion;

Because septic sternoclavicular joint arthritis are infrequent disease and could have a fatal course, early diagnosis and appropriate treatment is important. Thus, otolaryngologist should pay extra attention to the possibility of septic sternoclavicular joint arthritis for those patients with pain and swelling around the sternoclavicular joint, particularly who have a diabetes.
Abstract

Introduction. Sialendoscopy is a novel branch of minimally invasive surgery, which allows diagnostic and interventional procedures deep in the ductal systems of salivary glands. Clinical Department of Otorhinolaryngology and Cervicofacial Surgery Ljubljana is a joint otorhinolaryngological sialendoscopy center, representing in that field both Slovenian University Medical Centers.

Patients and methods. Since 2011, we have submitted 160 patients to sialendoscopy and sialendoscopy-assisted interventions and performed 173 procedures (79% under local anesthesia), with an attempted examination of a total of 180 salivary glands. The patients had mainly pathology of the submandibular gland (64%). We have determined preinterventional and postinterventional QoL assessment with validated Slovenian version of Chronic Obstructive Sialadenitis Symptoms (COSS) questionnaire.

Results. Our rate of failed sialendoscope introductions is 3.9% so far. The most common interventional procedure was sialendoscopy-assisted combined approach salivary stone removal (44 cases). Adding 25 cases of wire basket stone retrievals, we reached a total of 69 successful stone extraction procedures. We found ductal strictures without sialolithiasis in 53 patients, mostly of parotid systems (32 patients), and in 22 of them, dilatation was performed, followed by a temporary stent insertion in 14 cases. In four patients with submandibular papillary stricture, we performed microsurgical ductostomy; our experience supports its recognition as a specific clinical entity. With no serious complications, the practice of sialendoscopy at our department reduced salivary gland resections because of obstructive disease by 90%.

Conclusions. We believe that sialendoscopy is a valid minimally invasive approach paradigm that fundamentally changes the treatment of obstructive salivary gland diseases. Using only already established objective criteria the obstructive salivary disease seems somewhat underdefined. Authors propose two separate clinical criteria, the classification of the papilla and the depth of the most proximal achieved point.
An aggressive and unexpected outcome of auricular squamous cell carcinoma: report of a rare case of cervical spine metastasis with cord transection.

A. Trinidade*(1)

(1) University of Arkansas for Medical Sciences, Little Rock, United States

Purpose of the study: Cutaneous squamous cell carcinoma (cSCC) of the pinna is a potentially aggressive disease process with potential for metastasis. Metastatic disease is often to regional lymph nodes but may be distal, usually to lung and bone. Metastasis to the cervical spine is rare and may have disastrous consequences. Methods and materials used: Case report. We present the case of a 72-year old male who presented with a painful, fungating, destructive mass of the right auricle that was present for reportedly 2 months. CT scan confirmed extension into the external auditory canal, which could not be examined due to the size of the mass. Biopsy confirmed a poorly differentiated T4N2aM0 cSCC. He underwent radical auriculectomy, lateral temporal bone resection, radical parotidectomy, radical neck dissection and an anterolateral thigh free flap. Results: At Day 9 post-operatively, he developed fever and right shoulder pain. A CT scan of the cervical spine revealed a destructive lesion involving the spinal cord despite negative pre-operative scans. He was deemed palliative at this point. Conclusions: cSCC is a potentially aggressive disease that can result in bony metastasis to the cervical spine with unexpected, fatal consequences. Otolaryngologists involved in the treatment of this condition should be aware of this risk.

Murphy L (1), Speed O (2), Trinidade A (3), Cox MC (3), Dornhoffer JL (3).

1 College of Medicine, University of Arkansas for Medical Sciences, Little Rock, Arkansas
2 Department of Biology, University of Arkansas, Fayetteville, Arkansas.
3 Department of Otolaryngology, University of Arkansas for Medical Sciences, Little Rock, Arkansas.
Smoking cessation intervention for patients with head and neck cancer: A prospective randomized controlled trial

D.Helou*(1), N.Matar(1), H.Smaily(1), T.Richa(1), A.Haddad(1)
(1)Hôtel-Dieu de France Hospital, Saint-Joseph University, Beirut, Lebanon

D.Helou, MD, N.Matar, MD,PhD, H.Smaily, MD, T.Richa, MD, A.Haddad, MD,FRCS(C)

Objective: To evaluate the effectiveness of a brief intervention led by an ENT resident for smoking cessation in adult head and neck cancer patients.

Methods: After approval by the Ethics Committee of Saint-Joseph University, 15 head and neck cancer current smokers admitted to Hotel Dieu de France university hospital for biopsy, surgery or radiotherapy were prospectively approached from March 2016 till the date of abstract submission, of whom 2 declined participation. Thirteen patients were randomized to either usual care or a resident-based brief peri-operative intervention for smoking cessation (based on the NIH “5 A’s” model) with an informative motivational document and nicotine replacement therapy (NRT), offered to the patients in the form of nicotine patches for 8 weeks in gradually decreasing doses. The primary outcome measure was 7-day point-prevalence abstinence at 3, 6 and 12 months after enrollment.

Results: In this randomized controlled pilot study, the results of patients who have benefited from at least a 3-month follow-up are reported: 5 patients were thus assigned to the placebo group and 4 to the intervention group. The mean age was 66 years, with a 7/2 male to female ratio. The great majority (8/9) had laryngeal cancer, while only 1 patient had oral cavity cancer. At the 3-month follow-up, all 9 patients had quit smoking. There was also no significant difference in quit rates at the 6-month follow-up between the usual care (4/4) and intervention (2/3) groups. It is of note that none of the patients completed the full course of NRT, due to either patch intolerance or patient preference.

Conclusion: No firm conclusion can be drawn yet from this small but homogenous sample, but we hope that updated data from this ongoing randomized trial will shed light on the effectiveness of such interventions for smoking cessation in head and neck cancer patients. This is of the utmost importance since smoking continuation have been associated with decreased treatment efficacy, increased risk of recurrence as well as the risk of developing a second cancer.
Study of different Modalities of treatment in Oral submucous Fibrosis

V.Chhaya*(1)

(1)Gujarat Adani Institute of Medical Sciences, Jamnagar, India

Abstract Content:- Oral submucous fibrosis is a very common disease in India, found both in Males and Females, and is due to the Habit of chewing Tobacco with betal nut. This leads to reduced opening of the mouth and fibrosis in the oral mucosa. This is even a precursor of Oral Carcinoma. The objective of this study was to compare different modalities of treatment, given at different levels, and its outcome. This study will help the ENT faternity to decide the modality in Oral submucous fibrosis.

Purpose of Study:- To enable to decide the line of treatment at different stages of Oral submucous fibrosis and to compare the results of different treatments.

Material and Methods used:- 200 patients of Oral submucous fibrosis varying from 1 finger to 3 finger mouth opening were subjected to treatments, varying from oral antioxidant drug therapy, local Injection of Corticosteroid, and Laser surgery, accompanied with physiotherapy.

Results:- out of the 200 patients treated, 105 patients had 3 finger mouth opening and were submitted to oral antioxidant therapy along with physiotherapy. out of these 84 patients had very good result showing the mouth opening from 3 to 4-4and half finger opening, the remaining 19 patients had fair to poor result with a slight increase in mouth opening and this was because of non stoppage of tobacco and irregular physiotherapy.

75 patients, who had 1 finger to 3 finger opening were subjected to local injection of corticosteroid with hyluridinase, accompanied by physiotherapy, those having 1 finger opening had some relief, but those with 2 to 3 finger opening had a remarkable relief. out of 75 patients, 20 had 1 finger opening which showed some response with an slight increase in mouth opening and 5 patients failed to report. remaining 55 patients had a very good response as this was accompanied by physiotherapy and regular followup.

20 patients having mouth opening between 2-3 finger were subjected to laser surgery and out of these 14 had very good response with almost increase in 1-1 & half finger opening and the remaining 6 had partial or complete failure or were subjected for revision surgery

Conclusion: OSMF if treated early has good results with all modalities of treatments and later on local corticosteroids and laser surgery are effective in about 70% of cases

Author Prof Dr Viral Chhaya, Prof HOD ENT Deptt GAIMS
SUBLINGUAL EPIDERMOID CYST: UNUSUAL DIAGNOSIS IN OTORHINOLARINGOLOGY

H. Marcos*(1), P. Gonçalves(1)

(1) Centro Hospitalar de Entre-o-Douro e Vouga, Portugal

OBJECTIVES: We present a case of a 32 year old female patient with a sublingual epidermoid cyst. Dermoid and epidermoid cysts are rare in the head and neck, specially in the oral cavity, accounting for 1.6%. It represents an even smaller percentage of all the oral cysts, less than 0.01%. Usually asymptomatic, however, occasionally, obstructive symptoms like dysphagia or speech difficulties are found.

METHODS: The 32 year old female patient with a sublingual epidermoid cyst was referred to our ENT department with complaints of an oral mass, speech difficulties and solid food dysphagia for 1 month. Physical examination revealed a well circumscribed symmetrical mass on the floor of the mouth with no inflammatory signs, tender and fluctuant on palpation. CT scan was requested. Aspiration was performed to improve symptoms until surgery. Enucleation of the cyst was performed intraorally in the operating room.

RESULTS: CT scan showed a sublingual cystic mass inferiorly limited by the mylohyoid muscle. The liquid that resulted from aspiration showed a granulated white cheesy material. Enucleation showed a big capsulated mass and histopathologic investigation confirmed the diagnosis of epidermoid cyst. The patient fully recovered and there was no recurrence.

CONCLUSIONS: Although uncommon, cases like this exist. There are several differential diagnoses and a high level of suspicion is necessary for a correct workup, diagnosis and follow-up. Surgical excision is usually necessary and curative.
Submandibular combined surgical approach

M. Patrucco*(1), E. Busto(2)

(1) Hospital Policia Federal Argentina Churruca-Visca, Buenos aires, Argentina, (2) Hospital Italiano de Buenos Aires. Argentina, Ciudad de buenos aires, Argentina

The objective is to consider the submandibular combined surgical approach as an alternative to conventional treatment for salivary gland obstructive disease.

Gland resection has been the gold standard for a long time when medical treatment has failed.

Surgical complications following sialadenectomy result in varying amounts of morbidity.

After sialadenectomy, complication rates vary between 20 to 37%.

These include:

- Permanent nerve damage (facial, hypoglossal or lingual nerve) depending on the gland excised;
- Sensory loss in the distribution of the great auricular nerve;
- Frey syndrome;
- Salivary fistula, Sialocele;
- Aesthetic sequela;
- Hematomas, wound infection.

Sialendoscopy has dramatically changed the diagnosis and management of salivary gland diseases.

Sialendoscopy has made us change our minds in respect to preserving the gland even when medical treatment has failed.

Therefore, repeat infectious episodes or persistent symptoms is not the same as a gland irreversibly diseased.

The gland function remains satisfactory after sialendoscopy for obstructive disease.

However interventional sialendoscopy (endoluminal removal via sialendoscopy) has a success rate of about 80%. In the remaining 20%, the procedure fails due to long stenosis or stenosis are too tight to be dilated, or the stone is too big/large.

In these cases, a combined approach using a limited intraoral or external incision under guidance of sialendoscopy can facilitate stone/stricture removal.

Submandibular Combined Surgical Approach represents an alternative of treating large salivary stones and duct strictures

This technique requires:

- salivary gland surgical expertise and
- a great knowledge of anatomy to prevent Lingual nerve injury

It is a well-tolerated procedure, with Low morbility.
Submandibular hilar lithiasis: another border surpassed with sialendoscopy

A. Sánchez barrueco*(1)

(1) HOSPITAL UNIVERSITARIO FUNDACIÓN JIMÉNEZ DÍAZ (HUFJD) and HOSPITAL GENERAL DE VILLALBA (HGV), Madrid, Spain

Purpose of the study:

Sialolithiasis is the most frequent etiology of obstructive sialadenitis and occurs mainly in submandibular glands. The management of the lithiasis depends on the location of the calculi. Stones located in the Wharton duct can be extracted by sialendoscopy (when 5 mm).

In the management of intraglandular lithiasis is widely accepted that the most effective option is glandular excision, the submaxilectomy.

However, when the lithiasis is located in the most proximal part of the main duct, the hilum, it becomes a therapeutic challenge. The traditional treatment was submaxilectomy, which is an aggressive method, involving the possibility of injuring the lingual neurovascular package and with a cosmetic defect. In addition, there is evidence that in a significant percentage of the removed submandibular glands not histological compromise have been found, so a glandular functional recovery could have happened if the obstruction cause were removed.

Material and methods

Sialendoscopy with an endobucal approach was performed in 9 patients with a hilar submandibular calculi. Helped by the translucence of the light coming from the sialendoscope in the Wharton’s duct, the impacted lithiasis is located and the floor of the mouth is opened through a limited incision. This technique minimizes the chances of lingual nerve injury. Once the hilum is reached and opened, the calculus is extracted with or without suture of the Wharton duct.

Results:

Calculi were removed in all cases and total recovery from the sialadenitis symptoms was achieved in the next 90 postoperative days. The size of the lithiasis seems to influence the postoperative process, thus patients with a lithiasis greater than 15 mm showed a worse prognosis. Two remarkable cases; one with a 18 mm lithiasis presented a Wharton megaduct and was conservatively resolved; the other with a 17 mm lithiasis suffered gland swelling for 80 days. None of the patients needed a submaxilectomy.

Conclusion:

The lithiasis of the submandibular hilum can be resolved by sialendoscopy. If the size of the stone is <15 mm and there is no associated severe glandular atrophy, combined sialendoscopy with endobucal approach is an effective treatment that preserves the anatomy and functionality of the submandibular gland. If the size is greater than 15 mm, submaxilectomy can also be avoided despite a worse postoperative recovery process compared with those with <15mm lithiasis.

Y.Darouassi*(1)

(1)Hopital Militaire Avicenne, Marrakech, Morocco

Purpose of the study:
Swellings of the submandibular region are common and characterized by a stereotypical diagnostic and therapeutic approach. The purpose of the study is to report our experience with this disease.

Material and methods:
Our work is a retrospective study over a period of 5 years with a consecutive series of 42 cases of submandibular swellings who presented to the Ear, Nose and Throat department of the military hospital of Marrakech.

Results:
The average age of patients was 41 years. The clinical presentation was dominated by sub-mandibular swellings. All patients underwent neck ultrasound. CT scan was performed in 7 patients. The first etiology was submandibular calculi in 39.02% of cases. Surgical treatment was carried on in all cases. In the light of our results and those of the literature, we will discuss the various diagnostic and therapeutic aspects of the most frequent causes.

Conclusion:
Sub-mandibular swellings are relatively rare and include a wide variety of histological entities. Imaging assessment is essential, it can often suggest the diagnosis, whose confirmation requires histopathology. The treatment protocol depends on the benign or malignant nature of the swelling. The surgical technique must be adapted. The use of minimally invasive techniques is increasing with few side effects.
Prostate cancer is the most common cancer in men over the world. Mostly prostate cancer metastasis occurs to regional lymph nodes, bones and lungs. Lung cancer and gastrointestinal (GIS) cancers rarely spread to cervical lymph nodes and called distant metastasis to cervical lymph nodes. However, presentation of prostate adenocarcinoma with metastasis to cervical lymph nodes is an uncommon condition. In this report, we present a 61 years old male patient with left supraclavicular mass which grew up in three months. The diagnosis, treatment and follow up process of this patient are presented with review of the literature. There were no findings except three centimeter, mobile and painless left supraclavicular mass in head neck examination. Fine needle aspiration biopsy was performed from supraclavicular mass, and reported consistent with malignant cytology. Suspension laryngoscopy, upper GIS endoscopy and colonoscopy revealed nothing about primary tumor. Thereupon, excisional biopsy was performed from the neck and reported as “metastatic adenocarcinoma” mimicking prostatic adenocarcinoma. Positron emission tomography–computed tomography was performed and this study showed increased abnormal metabolic activity in the supraclavicular, paraaortic and internal-external iliac lymph nodes. The abdomen computed tomography revealed that the size of prostate was increased and its paranchyma was seen heterogenous. The patient was consulted to urology and rectal examination revealed that he had a rigid, enlarged prostate. Prostate specific antigen level was increased. Prostate biopsy was performed and histopathologic examination was reported as “adenocarcinoma”. Patient diagnosed stage IV prostate adenocarcinoma and treated with chemotherapy and radiotherapy. At sixth month follow up after treatment; there were no findings consistent with relapse and residue. Besides upper GIS cancer, clinicians should kept prostate cancer in their minds, and serum prostate specific antigen could be analysed for the differential diagnosis of supraclavicular mass especially in elderly male patients.
SURGICAL APPROACHES TO THE PARAPHARYNGEAL SPACE: AN ANATOMICAL-QUANTIFICATION STUDY

M.Ferrari*(1), R.Accorona*(1), A.Schreiber(1), V.Rampinelli(1), D.Lancini(1), P.Nicolai(1)

(1)Unit of Otorhinolaryngology-Head and Neck Surgery, University of Brescia, Italy

Purpose of the study

The parapharyngeal space (PPS) is a deep space of the neck lateral to the pharynx and extending from the skull base to the hyoid bone. The PPS houses a number of noble neurovascular structures and can harbor several types of benign or malignant tumors. In the literature, studies reporting objective data and quantifications to compare surgical approaches to the PPS are lacking.

Materials and methods

Six cadaver heads (12 sides) were employed for the study. PPS was divided in 5 subsites (upper prestyloid, upper retrostyloid, middle prestyloid, middle retrostyloid, and lower). The following lateral surgical approaches were performed bilaterally: transcervical (TC), transparotid (TP), transcervical-transparotid (TCP), modified transcervical-transparotid (MTCP), transcervical-transmandibular (TCMan), transmastoid (TMas), and type C infratemporal (IT-C). The following anterior surgical approaches were performed bilaterally: transnasal medial (TNM), transnasal lateral (TNL), sublabial-transantral (TA), transoral-pharyngeal (TOP), transoral-transvestibular (TOV), transfacial-transmandibular (TFMan). Surgical approaches were compared both qualitatively (trajectory and exposure of neurovascular structures) and quantitatively (exposure of PPS subsites). Moreover, surgical approaches were quantified with neuronavigation using dedicated software (ApproachViewer, GTxEyesII, Toronto, Canada).

Results

TCP and MTCP showed the greatest exposure, allowing to reach all the subsites of the PPS. Middle and lower PPS were adequately exposed with TC, TCMan, and TFMan. TMas, IT-C, TNM, TNL, and TA were appropriate only for the upper PPS. TOP surgical exposure was limited to the middle PPS. Retrostyloid subsites were always more difficult to expose compared with respective prestyloid counterparts. Noble neurovascular structures were at major risk of injury with TP, TCP, TMas, IT-C, TNL, and TFMan.

Conclusions

The present preclinical anatomical study quantitatively delineated the limitations and advantages of surgical corridors to the PPS. The surgical approach should be properly chosen according to the size and topographic extension of the lesion, also considering neurovascular structures at risk of injury during surgery. Moreover, histology (i.e. malignant vs. benign, salivary vs. neurogenic) and vascularization of the lesion should be always taken into account when choosing the adequate approach. In selected cases, multiportal approaches might be considered to minimize surgical morbidity.
Surgical management of Parapharyngeal space tumour

B. Basavarajah*(1)

(1) JSS Medical College, JSS University, Mysuru, Mysuru, India

Surgical management of Parapharyngeal space tumour

Purpose of study

Parapharyngeal space is a hidden deep neck space. Tumors of parapharyngeal space pose a challenge to the surgeon. In the past, various external approaches were used to remove these tumors with considerable morbidity. With the advent of rigid endoscopes and better understanding of anatomy, trans oral endoscopic excision is practised.

Materials and Methods

A retrospective descriptive analytical study design was used. Parapharyngeal tumours diagnosed and treated at JSS Medical college and hospital from 2009 to 2016 were analysed. Clinical evaluation, various radiological investigation, cytopathology, various surgical approaches used, postoperative morbidity analysed. CT scan and MRI done in all case. MRA in vascularised tumors

Results

24 cases of PPS tumors were analysed. 15 were retrostyloid and 9 were prestyloid in distribution. Out of 15 retrostyloid, 10 were schwannomas, three carotid body tumors, one epidermoid cyst, one synvial sarcoma. Out of 9 prestyloid, all were salivary gland tumors - 4 from minor salivary gland tumors and 5 from deep lobe of parotid.

All prestyloid tumors except for three underwent endoscopic excision.

Out of retrostyloid tumors, 5 schwannomas underwent transoral endoscopic excision, with this approach postoperative morbidity is less and duration of hospital stay is less and is cost beneficial.

Conclusion

Neurogenic tumors and less vascularised tumors of retrostyloid PPS and Prestyloid compartment can be excised by transoral endoscopic approach.
Surgical management of primary parapharyngeal space tumours: a 10-year review

L. Tao*(1)

(1) Department of Otorhinolaryngology-Head and Neck Surgery, Eye, Ear, Nose and Throat Hospital of Fudan University, Shanghai, China, People’s Republic of

Purpose of the study: The aim of our study is to present our experience in the treatment of these tumors with emphasis on surgical approaches and employment of endoscope to detect residual tumors through conventional approaches.

Materials and methods used: One hundred and sixty-seven patients (mean age, 45 years) treated surgically over a 10-year period were retrospectively reviewed. A comparison among the surgical approaches of relevant case series was also conducted.

Results: All of the patients underwent preoperative imaging before surgery and intraoperative endoscopy detection was selectively used in large deep tumors. Complete resection of the tumor in 158 patients (95%), with a transcervical surgical approach applied in 144 cases (84%). Of 167 tumors, 150 (90%) were benign and 17 (10%) were malignant, with neurilemmoma/schwannoma being the most frequently occurring pathology (42%). Surgical complications were reported in 26 patients (15%), most commonly unilateral paralysis of the vocal cords (6%). Two patients (1%) presented with recurrence, on average 2.5 years (range: 1–4 years) after initial excision and the mean follow-up time was 3.8 years (range: 10 months–10 years).

Conclusions: Most of parapharyngeal space neoplasms are benign. Transcervical approach is the preferred procedure in most cases. Intraoperative endoscopic exploring offers a new surgical management to reduce recurrence, especially for pleomorphic adenoma with capsule rupture.
Applying NICE guidance for referral criteria for ENT head and neck cancer at a UK district general hospital

D.Grech marguerat*(1), V.Reddy(2)

(1)Royal Cornwall Hospital, United Kingdom, (2)Royal Cornwall Hospital, Truro, United Kingdom

Purpose of the study

In 2015, the National Institute for Health and Care Excellence (NICE) produced clinical guidelines that significantly changed the referral criteria for many cancer services, including those for head and neck services, citing that criteria should have a positive predictive value (PPV) of 3% or more. Services have implemented these recommendations to varying degrees, with colleagues in primary care expressing concern for the absence of previously established criteria. The purpose of this study was to evaluate our experience of the pre-existing 2-week wait referral criteria in the context of the new NICE guidelines to enable an evidence-based approach to deciding on which referral criteria to apply.

Materials and methods used

Retrospective case note review of all cases referred through the ‘Two-Week Wait’ (2WW) fast track head and neck cancer pathway that were seen by the ENT department over an 18-month period from 1st January 2013 to 30th June 2014. All case notes were reviewed to ascertain qualitative information including the reason for referral indicated on the 2WW referral proforma, the actual presenting complaints from a review of the clinical notes, and the eventual diagnosis.

Results

There were 1055 case notes included in the study (46% males, 54% females). Neck lumps accounted for the majority of referrals (461) where 74 patients were diagnosed with head and neck cancer – PPV of 16.1%. Hoarseness accounted for 320 referrals, with 18 being diagnosed with cancer (PPV 4.3%). Referrals for a persistent sore throat with or without otalgia accounted for 415 referrals, 18 of which had head and neck cancer – PPV of 4.3%.

Conclusion

Despite sore throat being absent from the new NICE guidelines, in our institution, this criterion had a PPV >3% so will continue to be an accepted referral reason.
Surgical treatment of malignant non-epithelial tumors maxilla, and paranasal sinuses
A.Khasanov*(1), R.Bekmirzaev(2)

(1)National Cancer Research Centre of Uzbekistan, Tashkent, Uzbekistan, (2)National Cancer Research Centre, Tashkent, Uzbekistan

Objective: Study the role of intra-arterial chemotherapy in surgical treatment of patients with non-epithelial malignant tumors of the maxilla and paranasal sinuses.

Methods. In National Cancer Research Centre in the period 2000-2008 y. and in the 2013-2015 y. 48 patients were treated in the department of head and neck tumors with non-epithelial malignant tumors of the maxilla, the nasal cavity and paranasal sinuses. According to the morphological construction osteosarcoma was most frequent diagnoses - in 15 (31%) patients. All patients had locally advanced tumor process.

Patients depending on the method of treatment were divided into 4 groups: 1) prolonged intra-arterial chemotherapy with local UHF - hyperthermia and radiation therapy (RT) 10 patients, 2) prolonged intra-arterial chemotherapy and RT 14 patients. 3) systemic chemotherapy and RT 12 patients 4) RT 12 patients. As a following stage a surgical treatment was performed.

Results. Surgical treatment of the second stage complex therapy was performed in 38 (79%) of 48 patients. In the study of the volume of surgery in the primary focus made partial resection of the maxilla, in 3 (7.8%) patients. Resection of the maxilla was made in 17 (44.7%) patients. Extended resection of the maxilla was made in 16 (42.1%). Resection of the maxilla to orbit exenteration performed in 1 (2.6%) patient. Resection of ethmoid sinus was performed in 1 (2.6%) patient. Seven though that the group I and II patients with locally advanced tumor forms marked more than Group III and IV, extended resection of the maxilla percentage was less than in Group I and II. These data relate to that the regional intra-arterial chemotherapy increases the concentration of chemotherapeutic medicines to the tumor, which resulted in maximum damage to the tumor and those given by the possibility to transfer 3 patients in unresectable status in resectable. In 2 patients the postoperative period defect formed on the face due to tumor invasion into the soft tissues of the face, which later was made plastic surgery on his face.

Conclusions: In patients who received intra-arterial chemotherapy could reduce the volume of operation and the transfer of patients from unresectable to resectable status compared with patients who received systematic chemotherapy.

Khasanov A.I., Bekmirzayev R.M.,
The clinical and cytological-histological evaluation of neck lymphadenopathies

A. Limani *(1)

(1) University Clinic Center of Kosova, Pristina, Albania

The clinical and cytological-histological evaluation of neck lymphadenopathies

Limani A1, Limani R2, Limani Z1

1. ENT- HNS Clinic, University Clinical Center of Kosova

2. Institute of Pathology, University Clinical Center of Kosova

Purpose of the study:

Head and neck lymph node enlargement has been a field of research in various oncological studies. The clinical and cytological-histological evaluation of neck lymphadenopathies is important in making the diagnosis, and determining treatment and prognosis.

In the present study we correlated the clinical and cytological-histological findings in neck lymphadenopathies, and the influence on the treatment and prognosis.

Material and methods

447 cases were retrospectively reviewed in period time between 2010-2015 in the University Clinical Center of Kosova.

Results

Clinical

From the total number of 447 patients with neck mass, 252 (56.36 %) patients were diagnosed with primary laryngeal and pharyngeal carcinoma, neck tumors were diagnosed in 108 (24.16 %) patients, primary thyroid tumors in 36 (8 %), parotid tumors in 13 (2.9 %), and tonsil tumors in 5 (1.12 %) patients.

Histological

Cytological-histological findings in neck mass were described in 364 (81.43%) patients, whereas in 83 (18.56%) patients no cytological-histological changes were reported.

Lymph node metastatic cancer was described in 99 (22.14%) cases, inflammatory reactive lymphadenitis in 243 (54.35 %) cases, lymphoma in 9 (2 %) cases and tubercular lymphadenitis in 13 (2.90%) cases.
From the total number of cases, 99 (22.14%) presented with metastatic cancer and 256 cases presented with other cytological-histological changes but no cancer. Whereas, there were no cytological-histological changes in 83 cases (18.56%).

Conclusion

Clinical and imaging examinations are important tools in the diagnosis of neck mass, and a careful clinical examination assists the final cytological-histological diagnosis.

A multidisciplinary approach is needed to evaluate the lymph node status in primary head and neck cancer and in other cases with enlarged neck lymph nodes.

A certain percentage of enlarged neck lymph nodes in primary head and neck cancer can have only reactive changes. Neck dissection as a curative procedure is an indication for cytological-histological proven malignant disease.
The Clinical Outcome of head and neck malignancy using multimodality integrated Positron Emission Tomography Computed Tomography (PET-CT) - an initial experience

S.Subha*(1)

(1)UNIVERSITY PUTRA MALAYSIA, Selangor, Malaysia

The Clinical Outcome of head and neck malignancy using multimodality integrated Positron Emission Tomography Computed Tomography (PET-CT)

- an initial experience

Corresponding Author
Sethu Thakachy Subha
Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Serdang, Selangor Malaysia.
Email address –subhast2@yahoo.com
contact number-0060123459420

Co-authors
1.Abdul Jalil Nordin
Diagnostic Nuclear Imaging Centre , Universiti Putra Malaysia, Serdang, Selangor,Malaysia
Johnson Stanslas
Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Serdang, Selangor Malaysia.
2.Fathinul Fikri Ahmad Saad
Diagnostic Nuclear Imaging Centre , Universiti Putra Malaysia, Serdang, Selangor,Malaysia

Purpose of the study
To evaluate the clinical value of integrated multimodality imaging 18F-FDG PET-CT in head and neck malignancies.

Materials and methods
This is a prospective study involving patients who were histologically proven primary head & neck malignancy and clinically staged according to American Joint committee on cancer [AJCC]TNM staging after thorough clinical examination. All these patients underwent whole body 18 F-FDG PET CT study. The results from clinical staging and PET CT staging were compared and tabulated. Our study protocol were reviewed and approved by ethic committees from all involved institutions.

Results
Among 30 patients who were recruited in this study, there were 20 males and 10 females patients, age group varies between 18-80 years (mean age 51.5). While performing 18F FDG
PET-CT scan, we found sensitivity 96%, specificity 50%, accuracy 90%, positive predictive value 96% and negative predictive value 50%. Scan provided additional information and thus upstaged 63% of patients. PET CT incorrectly downstaged 10%(3/30), among these 3 cases, 2 were post operative cases and one case of oncocytooma, initially diagnosed as lymphoma. This integrated imaging technique did not change the staging in 26.6% of our patients. PET CT scan examination shown significant change in tumor staging, nodal staging and distant metastases in our patients compared to clinical staging. Our pilot study demonstrates that intended management was changed in 58% of our patients after 18F-FDG PET CT scan.

Conclusions

Our study revealed that 18F-FDG PET CT scan an invaluable single imaging modality in head & neck malignancy with high sensitivity. Never the less the false positive PETCT scan interpretation pitfalls needs to be carefully evaluated. This imaging provides additional informations and accurate staging. The results in turn assisst in planning adequate treatment and minimizing treatment related toxicity & functional impairment.
The Effect of Post-tonsillectomy Steroid Injection in Pain Control: A National Health Insurance Database Study.

Y.Huang*(1)
(1)E-DA General Hospital, Kaohsiung city, China, Republic of (Taiwan)

Background and Purpose:
Proper post-operation pain management can decrease the risk of co-morbidity and hospitalization. Due to the anatomy of the tonsils, post-operation sore throat and odynophagia cause nausea, vomiting, difficult oral intake and prolonged hospitalization. There is no consensus to injection of steroid to relieve post-operation pain among Otolaryngologists. The purpose of this study is to investigate the effect of post-operation steroid injection on post-operation pain control.

Methods:
The study adopted retrospective cohort research design. The data used in our study was obtained from the National Health Insurance Research Database from 1997 to 2012. Post-tonsillectomy patients were selected as samples to study the tonsillectomy surgery trend, post-operation steroid use trend, predicting factor of steroid use, and post-operation pethidine use. The SPSS 20.0 was used as statistical software. Chi-square test, T-test, multiple linear regression analysis and logistic regression analysis were used to verify the hypotheses.

Results:
The trends of tonsillectomy and post-operation steroid injection were both rising after 1997. The odds ratio of pethidine use in tonsillectomy patients with steroid injection is 0.61 compared with patients without steroid injection.

Conclusions and suggestions:
The trends of tonsillectomy and post-operation steroid injection are rising. Post-operation steroid injection may decrease post-operation pain. For tonsillectomy patients, we suggest post-operation steroid injection to relieve post-operation pain.
The effects of astaxanthin on salivary gland damage caused by cisplatin in the rat

S.Terzi*(1), A.Özgür(2), T.Mercantepe(3), M.Çeliker(4), L.Tümkaya(3), E.Dursun(2)

(1)Recep Tayyip Erdogan university Medicine Faculty Otorhinolaryngology Department, Rize, Turkey, (2)Recep Tayyip Erdogan University, Medical Faculty, Department of Otorhinolaryngology, Rize, Turkey, (3)Recep Tayyip Erdogan University, Medical Faculty, Department of Histology and Embryology, Rize, Turkey, (4)Recep Tayyip Erdogan University Research and Training Hospital, Department of Otorhinolaryngology, Rize, Turkey

Purpose of the study

Cisplatin is a potent antineoplastic agent widely used for a variety of malignancies. However it has many dose limiting side effects such as neurotoxicity, cytotoxicity and ototoxicity. The aim of our study was to determine the effectiveness of astaxanthin as a cytoprotective agent against cisplatin-induced cytotoxicity in the rat submandibular glands.

Materials and methods used

Thirty six adult male wistar albino rats were divided into six groups as following. Group I; Saline control, group II ; 75 mg/kg/day Astaxanthin, group III ; 16 mg/kg Cisplatin, group IV; 25 mg/kg/day Astaxanthin + cisplatin, group V; 75 mg/kg/day Astaxanthin + Cisplatin, group VI Olive oil + Cisplatin. In all groups, the submandibular gland histopathological and histochemical investigations were done using a light microscope. Every rat section was semi-quantitatively scored. Neutrophil infiltration density, myoepithelial cell density in the degeneration area, degenerative granular duct cell density, degenerative seromucous acinus cell density, and changes in the content of the secretory granules of seromucous acini and granular ducts of the parenchyma and stroma were calculated.

Results

In the Cisplatin group, intense acinar atrophy, presence of intense substution of the parenchyma by fibrous tissue were detected. Regular normal submandibular gland histology was seen in the Cisplatin+Asta 25 mg treated group but there was minimal neutrophil cell infiltrations in the connective tissue. In the Cisplatin+Asta 75 mg treated group normal submandibular gland histology was seen. The results also revealed in the analysis of the mean area of the acinus area of the submandibular gland, there were significant decreased cisplatin group rats when compared to control rats (p<0.05, p=0.00). A significant reduction was observed in the Sham group’s mean acinus area than control group (p0.05, p=0.816).

Conclusion

These results suggest the possibility that the clinical use of astaxanthin could reduce or prevent damage to the salivary gland of patients receiving cisplatin chemotherapy.

Keywords : Cisplatin, Astaxanthin, submandibular gland, protective effect
The efficacy of corticosteroids in the treatment of peritonsillar abscess

Y.Lee*(1), Y.Joo(1)
(1)The Catholic university of Korea, St. Mary’s Hospital, Bucheon, Korea, South

1. Purpose of the study

Despite widespread use of antibiotics and surgical procedures for treating peritonsillar abscess (PTA), symptoms of severe inflammation such as pain and trismus during treatment result in patient dissatisfaction. The goal of this study was to perform a systematic review and meta-analysis of the efficacy of systemic steroids on the clinical course of PTA.

2. Materials and methods used

Two reviewers independently searched the databases (MEDLINE, SCOPUS, and the Cochrane Database) from inception to December 2014. Studies comparing systemic administration of steroids (steroid group) with placebo (placebo group), where the outcomes of interest were pain, body temperature, hospitalization, and oral intake during the posttreatment period, were included. Baseline study characteristics, study quality data, numbers of patients in the steroid and control groups, and outcomes were extracted. Sufficient data for meta-analysis were retrieved for 3 trials with a total of 153 patients.

3. Results

Pain-related parameters (patient-reported scores and trismus), body temperature, and dysphagia during the first 24 hours after treatment were significantly improved in the steroid group compared with placebo group. The discharge rate during the first 5 days of the posttreatment period was significantly higher in the steroid group than the control group. However, although more patients in the steroid group returned to normal activities and dietary intake at 24 hours after treatment, the differences between the groups were not significant and disappeared after 48 hours.

4. Conclusion

In the treatment of PTA, systemic administration of steroids with antibiotics could reduce pain-related symptoms, as well as provide a benefit with respect to the clinical course. However, further trials with well-designed research methodologies should be conducted to confirm our results.
The epidemiological profile of cervical adenopathies in Rabat

H. Rahim*(1)

(1)Service ORL et chirurgie maxillofaciale, Rabat, Morocco

H. Rahim, I. Ezzekari, N. Belhaj, A. EL ayoubi, R. Bencheikh, A. Benbouzid, L. Essakali

Purpose of presentation

The cervical lymph nodes are a common reason in ENT consultation. They can be the witness of a severe disorder requiring early diagnosis.

According to WHO estimates for 2014, the annual number of incidences of tuberculosis in Morocco was about 36,000.

The interest of our study is to define the epidemiological and etiological profile of cervical lymphadenopathy in the region of Rabat.

Material and method:

We performed a prospective descriptive study over a period of three months. It was carried out in collaboration with the laboratories of pathological anatomy and bacteriology. We have gathered the following information for each sample of cervical lymphadenopathy: age, patient sex, origin, eating habits, duration of clinical evolution, occupation, history of tuberculosis or with tuberculosis, HIV status and histological diagnosis and also the search for the xpert gene.

Discussion and conclusion:

The cervical lymph nodes involved etiologies as well tuberculosis, the leading cause in our context, lymphomas often responsible for macro lymphadenopathy.

The cervical lymph nodes affect all ages and classes are dominated by tuberculosis, tumor and inflammatory disease. Diagnosis is very late. A better knowledge of their usual histological aspects would make it possible to reorient the strategies of prevention and management in our health system.

The emergence of the AIDS pandemic with the prospect of an increase in the incidence of tuberculosis cases should make it possible to consider the systematic demand for HIV serology in cervical lymph node involvement related to B.K.
The importance of ultrasonography performed first hand by the ENT specialist in the management of head and neck pathology


(1)Carol Davila University of Medicine and Pharmacy, Bucharest, Romania, (2)Department of Otorhinolaryngology and Maxillofacial Surgery, 3rd Faculty of Medicine, Charles University Prague and Military Faculty Hospital., Prague, Czech Republic, (3)Klinikum Augsburg, Department of Otorhinolaryngology, Head & Neck Surgery, Germany, Augsburg, Germany, (4)Universitätsklinikum Erlangen, Department of Otorhinolaryngology – Head and Neck Surgery, Germany, Erlangen, Germany, (5)Johannes Gutenberg-Universität Mainz Department of Otologyngology, Head and Neck Surgery, Germany, Mainz, Germany

We propose a symposium tackling the use of ultrasonography and ultrasound guided procedures performed first-hand by the ENT specialist. Ultrasonography is fast, non irradiating, cost efficient and should become part of standard training during ENT residency programs.

First lecture – Assistant Professor Julian Künzel, MD, PhD, Johannes Gutenberg-Universität Mainz Department of Otologyngology, Head and Neck Surgery, Germany – will review the novelties about lymph nodes sonography, from gray scale sonographic criteria used for differentiating benign from malignant lesions to new applications of elastography and contrast enhanced sonography. Moreover a standardized ultrasound exam enables a preTNM staging of the case expediting further investigations and treatment.

Second lecture – Assistant Professor Georgios Psychogios, MD, PhD, Klinikum Augsburg, Department of Otorhinolaryngology, Head & Neck Surgery, Germany – will present novelties about thyroid sonography. Although the use of Doppler criteria seemed to clarify the diagnosis of thyroid tumors, recent large scale use of elastography raises many controversies. However a quick ultrasound guided fine needle aspiration biopsy performed by the ENT specialist seems to be the answer to this deadlock.

Third lecture – Professor Jaromir Astl, MD, PhD, Department of Otorhinolaryngology and Maxillofacial Surgery, 3rd Faculty of Medicine, Charles University Prague – will present parathyroid ultrasound guided surgery and focused ultrasound surgery. Professor Astl is one of the few experts in this domain in Europe given the fact that there are still important costs regarding the equipment and the learning curve.

Fourth lecture – Assistant Professor Konstantinos Mantsopoulos, MD, PhD, Universitätsklinikum Erlangen, Department of Otorhinolaryngology – Head and Neck Surgery, Germany – will review the novelties about salivary glands sonography. Professor Mantsopoulos is one of the most active researchers in the field of shear wave elastography of the major salivary glands.

Final lecture – Assistant Professor Mihai Dumitru, MD, PhD, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania – will present new trends in head and neck sonography research: laryngeal, nasal and endopharyngeal sonography. These rather exotic sonography techniques gain attention due to the fact that sonography permits serial imaging of pregnant women and pediatric patients and maybe after future standardization will enter daily practice.

If the organizers are not able to find a professor to be the chair of this symposium please list Professor Jaromir Astl, and in the case of not finding a suitable moderator there will be no problem for Assistant Professor Mihai Dumitru to moderate this symposium.
The piercing – stretching suture technique for the treatment of oral floor ranula

M.Gaffuri*(1), M.Mcgurk(2), L.Pignataro(3), M.Mantovani(4), P.Capaccio(5)

(1)Department of Otorhinolaryngology and Head and Neck Surgery, Fondazione IRCCS Ca’ Granda Ospedale Maggiore Policlinico and Università degli Studi di Milano, Milan, Italy, Italy, (2)Department of Oral and Maxillofacial Surgery, Guy’s Hospital, London, UK, London, United Kingdom, (3)Department of Otorhinolaryngology and Head and Neck Surgery, Fondazione IRCCS Ca’ Granda Ospedale Maggiore Policlinico, Milan, Italy, (4)Department of Clinical Sciences and Community Health, Università degli Studi di Milano, Milan, Italy, (5)Department of Otorhinolaryngology and Head and Neck Surgery, Fondazione IRCCS Ca’ Granda Ospedale Maggiore Policlinico, Milan, Italy; Department of Biomedical, Surgical and Dental Sciences, Università degli Studi di Milano, Milan, Italy, Milan, Italy

Purpose of the study: Oral ranulas are cystic lesions located in the floor of the mouth that result from the obstruction of the ductal system of the sublingual gland and consequent extravasation of mucous. Treatment modalities range from conservative to surgical techniques, including sclerotherapy, marsupialization, suture, excision of the ranula and laser excision. Despite all these therapeutic options, high rate of recurrence has been reported in literature. The aim of this study was to evaluate the preliminary results of a minimally invasive suture technique with the piercing and stretching of oral floor ranulas, performed as an outpatient procedure.

Materials and methods: Eight consecutive patients (two pediatric patients and six adults) with oral floor ranulas were treated by means of the piercing-stretching technique at the Department of Otorhinolaryngology and Head and Neck Surgery, Fondazione IRCCS Ca’ Granda, Ospedale Maggiore Policlinico of Milan, Italy, between January and December 2016. The technique, performed under local anaesthesia, consists in dressing two 2-0 silk gauge sutures at the edge of the ranula, leaving them loose without closing knots, in order to decompress the cyst and leave holes through which mucous discharge can flow (piercing technique). Three adjunctive 2-0 silk gauge sutures are placed orthogonal to the first two and knots are tied, in order to stretch the cyst walls causing fibrosis and scarring of the ranula (stretching technique). If still in site, sutures can be removed one month after surgery.

Results: Complete resolution of the ranula was observed in seven patients; only one patient required a secondary procedure because of recurrence. No complications were observed.

Conclusions: The piercing-stretching suture technique is a safe and minimally invasive surgical option that can be considered alternative to traditional marsupialization techniques for the management of oral floor ranulas. Further trials are needed to compare its effectiveness with other therapeutic options.

Authors: Michele Gaffuri1, Mark McGurk2, Lorenzo Pignataro1,3, Mario Mantovani1, Pasquale Capaccio1,4

Affiliations: 1Department of Otorhinolaryngology and Head and Neck Surgery, Fondazione IRCCS Ca’ Granda Ospedale Maggiore Policlinico, Milan, Italy; 2Department of Oral and Maxillofacial Surgery, Guy’s Hospital, London, UK; 3Department of Clinical Sciences and Community Health and 4Department of Biomedical, Surgical and Dental Sciences, Università degli Studi di Milano, Milan, Italy.
Arrested Pneumatization of the Skull Base: Clinical and Pathologic Features

J. Lewis*(1)

(1) Mayo Clinic, Rochester, United States

Purpose: Arrested pneumatization of the skull base (APSB) is an uncommon developmental variant characterized by failure of normal aeration following fatty marrow transformation, affecting the sphenoid and/or adjacent accessory sinus sites. Its apparently lytic nature may lead to the clinical impression of osteomyelitis or malignancy. Although characteristic imaging features have been reported, APSB remains poorly recognized by general radiologists and clinicians. In addition, the pathologic features of APSB have not been previously described. We have recently encountered several consultation cases in which biopsy was performed for a supposedly aggressive skull base process. Because of bland histologic features, submitted images were reviewed with our neuroradiologists, who interpreted the findings as those of APSB. We describe the clinical and pathologic features of 7 cases to help increase recognition of this unusual phenomenon.

Materials and Methods: Pathology consultation files were reviewed to identify possible cases of APSB. Accepted cases had review of images by one of our experienced neuroradiologists to confirm the interpretation, and benign histology without another specific diagnosis. Follow-up information was obtained from submitting pathologists and clinicians.

Results: There were 4 males and 3 females ranging in age at the time of diagnosis from 17 – 54 years (mean, 41). A skull base lesion was detected at the time of imaging for unrelated symptoms. The sphenoid bone was involved in 3 cases, the clivus in 1, and both in 3. The clinical/radiographic differential diagnosis included neoplasm, infection, inflammatory process, and developmental lesions. Biopsy specimens showed fragments of sclerotic bone admixed with mature fat, foamy histiocytes, strands of fibrosis, mild chronic inflammation, and coarse calcifications. These features correlated with imaging findings of sclerotic margins, internal fat and soft tissue densities, and curvilinear calcifications. Clinical follow-up was available in 4 patients ranging from 3 to 61 months (mean, 28 months). All are without clinical evidence of a pathologic process related to the skull base.

Conclusion: APSB is a developmental variant that may be found incidentally during investigation of another condition. Imaging features may appear alarming to those unaware of this phenomenon. Pathologic findings are benign and reproducible. The head and neck surgeon should be familiar with the radiographic and histologic characteristics of this entity, in order to avoid excessive work-up including potential re-biopsy of this critical anatomic site.

Jean E. Lewis, M.D., Carrie Y. Inwards, M.D., Kirk M. Welker, M.D., Mayo Clinic, Rochester, MN, USA
The prognosis factors of laryngeal cancer.

B.Toufik*(1), F.Daoud(1), M.Bencheikh(1), A.Bouamra(1)

(1) Hôpital Frantz Fanon, Blida, Algeria

Introduction: Laryngeal carcinoma is placed currently in first place of the cancers ORL. His carcinogenesis is directly linked to tobacco consumption; while his prognosis depends on tumor stage, the condition of patients, social reintegration and other factors.

Materials and methods: This is a retrospective study of prognostic over 5 years. The inclusion criteria were patients supported surgically by our team, while it has excluded from this study cases that have been treated with radio-chemotherapy concerning conservation of body. Socio-epidemiologique and clinical criteria were analysed on Epi Info. Survival was studied according to the Kaplan-Meier curve.

Results: We have compiled 113 patients with 92% of men and 8% of women. The average age is 62 ans±10.08 years with ends of 29 and 89 years old, and a median of 62. 82% of our patients were smokers, while the notion of laryngitis n was found in 10.6% of cases. Isolated dysphonia was the reason for the consultation in 75% of cases. Tumoral headquarters was glottic in 33% of the case, glottic glotto-sus in 23.9% cases and touched the 3 floors of the larynx in 31.9% of cases. Well-differentiated epidermoid carcinoma represented 77% of the cases, while viral carcinoma represented 4.4%. 23% of our patients were classified as T1 (9.7% T1a), 21.2% of T2, 25.7% T3 and 30.1% T4. The total laryngectomy was performed at 53.1% of our patients, followed by surgery supra cricoidienne in 29.2%, while the cordectomie laser endoscopically has been practiced in 13.2%. We are looking at survival according to age, sex, tumor stage, the type of support and the presence of the Lymphadenopathy.

Conclusion: Surgery of laryngeal cancers keep a place in the management of this type of tumours despite the development of new molecules of chemotherapy in the framework of the preservation of body. The prognosis depends mainly on the tumor stage, hence the early diagnosis.

Authors: Bentebbiche T (1), Daoud F (1), Bencheikh M (1), Rous N (1), Kalafat (1), Bouamra A (2).

(1)- Service ENT & RTC, hospital Frantz Fanon, Blida, Algeria.
(2)- Service epidemiology, hospital Frantz Fanon, Blida, Algeria.
The prognostic value of the modified Glasgow prognostic score and the high-sensitivity modified Glasgow prognostic score in head and neck cancer.

N. Hanai*(1), T. Kimura(2), T. Ozawa(3), M. Sawabe(4), Y. Hasegawa(1), H. Suzuki(1)

(1) Department of Head and Neck Surgery, Aichi Cancer Center Hospital, , Japan, (2) Department of Otolaryngology - Head and Neck Surgery, Nara Medical University, , Japan, (3) Department of Otolaryngology, Toyohashi Municipal Hospital, , Japan, (4) Department of Neuro-otolaryngology, Head and Neck Surgery, Graduate School of Medical Sciences, Nagoya City University, , Japan

Purpose of the study

The purpose of this study was to demonstrate that the modified Glasgow prognostic score (mGPS) has prognostic utility for the evaluation of head and neck cancer. Moreover, we also evaluated the superiority of the high-sensitivity modified Glasgow prognostic score (HS-mGPS) in comparison to the mGPS.

Materials and methods used

We calculated the mGPS and the HS-mGPS using the results of blood examinations that were obtained at the first visit of consecutive 129 patients. We selected levels of C-reactive protein (CRP) > 1.0 mg/dl and albumin (Alb) < 3.5 mg/dl as the cutoff values for the mGPS, and CRP > 0.3 mg/dl as the cutoff value for the HS-mGPS as reported by Proctor et al. We examined the survival rates of the three groups classified according to the mGPS and the HS-mGPS using the Kaplan-Meier method. To analyze any associations between the mGPS or the HS-mGPS and survival, univariate and multivariate analyses were performed using the Cox proportional hazard model.

Results

In the present study, the prognosis of patients with head and neck cancer became worse as the mGPS/HS-mGPS increased, and there was a significant difference between the survival of the groups based on the mGPS (p=0.003, log-rank test)/HS-mGPS (p<0.001, log-rank test). The HS-mGPS was statistically superior to the mGPS. A multivariate analysis using the HS-mGPS as an independent variable indicated that the HS-mGPS (RR=2.073, P=0.025) and PS (RR=2.25, P=0.015) were significantly correlated with overall survival. On the other hand, when the mGPS was used as an independent variable, no statistically significant results were obtained. We also examined the cut-off levels of CRP and Alb in the present data set. The cut-off CRP level was 0.31 mg/dl, while the cut-off Alb level was 4.1 g/dl.

Conclusion

We demonstrated that the mGPS has prognostic utility in head and neck cancer and that the HS-mGPS can be a more sensitive index. The HS-mGPS was also found to be an independent prognostic factor.
The Role of Elective Neck Dissection in Clinically N0 Oral Cavity Squamous Cell Carcinomas

E. Bhargava*(1)

(1) Maulana Azad Medical College and associated Loknayak Hospital, New Delhi, India

Title: The Role of Elective Neck Dissection in Clinically N0 Oral Cavity Squamous Cell Carcinomas. Background: The risk of missing subclinical cervical lymphatic metastasis is the source of one of the greatest controversies in the history of head and neck oncology: whether or not to electively treat the clinically node negative neck in squamous head and neck cancers, the role of which is yet unresolved. We endeavour to shed further light on this controversy by assessing the prevalence of occult metastasis to cervical lymph nodes in clinically N0 oral cavity squamous cell carcinomas. Methods: 63 proven cases of oral cavity squamous cell carcinoma with no palpable neck nodes were selected, requiring surgery for the primary tumour. Detailed clinical evaluation and contrast enhanced computed tomography scans were done. Patients underwent elective neck dissection along with surgery for the primary tumour. Specimens were sent for histopathological examination. Occult cervical nodal metastases were reported. Results: Overall occult metastasis rate for oral cavity cancers was 23.8%, with 16.7% in early stage (T1/T2) disease and 33.3% in advanced stage (T3/T4) disease. Site wise occult metastasis rates were 50% for lower alveolus, 30% for buccal mucosa, and 16.7% for tongue primaries. Conclusions: The early detection and aggressive management of suspected nodal metastases may prevent a fatal outcome in patients of oral cavity squamous cell carcinomas. Authors: Bhargava EK, Rathore PK, Raj A, Meher R, Rana K (Department of Otolaryngology - Head and Neck Surgery, Maulana Azad Medical College and associated Loknayak Hospital, New Delhi, India).
The role of PET/CT in the evaluation of head and neck squamous cell carcinoma from an unknown primary

M.Gil*(1)

(1)Hospital Universitario Marqués de Valdecilla, Santander, Spain

Gil Aguilar M*; Santiago Setién I**; Castañeda Curto N*; Viana Cora A*; Castillo Ledesma N*; Morales Angulo C*;

*Servicio de Otorrinolaringología del Hospital Universitario Marqués de Valdecilla (Santander. España)

**Facultad de Medicina. Universidad de Cantabria (Santander. España)

Background.
Metastatic head and neck squamous cell carcinoma (SCC) with an unknown primary represents between 1 and 3 percent of new cases of head and neck carcinomas. As a diagnosis of exclusion, a thorough history and physical examination (including flexible endoscopy) and CT and/or MRI are essential steps to locate the original site of the tumor. The aim of the study is to determine the usefulness of the PET-CT in the diagnosis of the primary tumor in patients with SCC from an unknown origin in Cantabria.

Methods
A retrospective descriptive study was performed which included 46 patients initially diagnosed with SCC with unknown primary from December 1st 2005 to January 30th 2016 in the Department of Otolaryngology of the Marqués de Valdecilla University Hospital (Santander, Spain). Patients were eligible for enrolment if they had a neck mass with a confirmed diagnosis of metastatic squamous cell carcinoma with an unknown primary and had a PET–CT performed.

Results
Of all patients, 37 (86%) were males. In 85,4 % of all cases, the malignancy diagnostic method was a fine needle aspiration biopsy. A positron emission tomography-computed tomography (PET/CT) was used to find out about the localization of primary lesion and presence of distant metastases in 33 of 46 patients. This method detected the primary tumor in 6 cases (18%). In half of them the primary tumor was located in the oropharynx.

Conclusions
All patients diagnosed with neck squamous cell carcinoma in a lymph node or in multiple lymph nodes, should be subjected to a thorough evaluation in an effort to identify a primary tumor. The PET/CT improves the detection of primary lesions when a physical examination is negative and it allows to take guided biopsies.
The role of PET/CT to diagnosis cervical lymph node metastases

R.Kanamura*(1), N.Takeda(1), K.Abe(1), G.Sato(1), T.Fujii(2), S.Motoyuki(3)

(1)Tokushima University Hospital, , Japan, (2)Osaka Medical Center for Cancer and Cardiovascular Diseases, , Japan, (3)Osaka University Hospital, , Japan

Purpose of study : The maximum standardized uptake values (SUVmax) is often used as an indicator of PET/CT uptake. However, there is not a baseline of SUVmax to diagnose lymph node metastases. So, the purpose of this study is to consider that setting an appropriate cut-off value of SUVmax makes PET/CT useful for diagnosis of cervical lymph node metastases.

Materials and methods used : In this retrospective study, 282 patients with squamous cell carcinoma of tongue cancer were diagnosed in Osaka medical center for cancer and cardiovascular diseases between 2005 and 2013. Among them, 126 patients who underwent PET/CT for staging and unilateral or bilateral neck dissection as initially radical operation were enrolled. No patients had been treated by head and neck cancer previously and had a double cancer or distance metastasis.

In the preoperative contrast-enhanced CT, one lymph node with the largest short diameter for each level was extracted and the SUVmax value of the lymph node was measured by PET/CT. We compared the SUVmax value and pathological diagnosis of lymph node metastases.

Results : When the cut-off value of SUVmax was 3.0, the positive predictive value was 77.4%, when it was 4.0, it was 90.3%, and when it was 5.0, it was 100%.

Conclusion : We set appropriate cut-off value of SUVmax, PET/CT can be a helpful tool for diagnosis of lymph node metastases.
The subcranial/transglabellar approach: Our experience after 60 cases

J.Solivera vela*(1), S.Heredero jung(2), J.Aguilar cantador(3), R.Carlos(3), J.Lozano sánchez(4), F.Muñoz del castillo(5)

(1)U.G.C. de Neurocirugía y Neurocirugía. Hospital Universitario Reina Sofía., Córdoba, Spain, (2)U.G.C. de Cirugía Oral y Maxilofacial. Hospital Universitario Reina Sofía., Córdoba, Spain, (3)U.G.C. de Otorrinolaringología. Hospital Universitario Reina Sofía., Córdoba, Spain, (4)U.G.C. de Neurocirugía y Neurofisiología. Hospital Universitario Reina Sofía., Córdoba, Spain, (5)U.G.C. de Otorrinolaringología, Córdoba, Spain

Purpose of the study: The subcranial approach was developed by Raveh in 1978 for the management of severe frontobasal fractures and it was later adapted for the resection of anterior skull base tumors. Our objective is to describe our case series of 60 consecutive patients managed surgically with this approach at our institution since 2007.

Materials and Methods: The patients were collected from our prospective data base. Clinical and surgical data was extracted from patient’s charts and analyzed.

Result: The mean age was 36 years (1-71), with a mean follow-up of 30 months. A standard zig-zag bicoronal approach was used in all cases. The osteotomies where planned with iPlan software (BrainLab, since 2012) and were performed using a high speed drill or, in most recent cases, with a piezoelectric device. This approach was used in 24 trauma cases with craniofacial fractures, 12 patients with late sequelae of trauma, 5 benign frontal sinus tumors, 5 anterior skull base or paranasal sinuses malignant tumors, 1 epidermoid of the third ventricle, 3 complicated sinusitis, 4 spontaneous CSF leaks, 4 congenital encephaloceles and 2 frontonasal dermoid cysts. None of the patients died. Short term complications related to approach were: three postoperative CSF leaks (one was later diagnosed of intracranial hypertension) and one meningitis with full recovery. The piezolectric scalpel proved to be extremely useful in pediatric cases. Thanks to this device, we were able to perform very thin osteotomies with a more cosmetic result than traditional drills. When guided by intraoperative navigation, it allowed a very precise delimitation of oncological margins on the anterior skull base.

Conclusion: This approach remains a perfect option for the treatment of a variety of pathologies of the anterior skull base and gives wide access to the frontal sinus, anterior cranial base and clival-sphenoid region. It has excellent cosmetic results as there is no need to make any incision on the face. Also, this open approach easily allows an adequate water and airtight reconstruction with minimal frontal lobe retraction. Craniofacial and anterior skull base osteotomies can be performed with great safety and precision thanks to preoperative planning, navigation and piezosurgery.
The use of a synthetic, self-adhesive patch for the reinforcement of pharyngeal closure in laryngectomy and pharyngolaryngectomy patients: Initial case series analysis

S.Burrows*(1)

(1)Norfolk and Norwich University Hospital, , United Kingdom

PURPOSE OF THE STUDY:

The development of a post-operative pharyngocutaneous fistula following laryngectomy and pharyngolaryngectomy occurs in up to 40% of patients. This leads to significant morbidity along with prolonged inpatient stays and tube-feeding. Here we present our experience with a synthetic self-adhesive patch (TissuePatch®, Tissuemed, Leeds, UK) and its ability to prevent pharyngocutaneous fistula development. The patch is a multi-laminate consisting of thin films of a commonly used structural polymer, poly(lactide-co-glycolide) and a tissue reactive polymer providing fast and strong chemical bonding of the patch with the underlying biological surface.

MATERIALS AND METHODS USED:

A synthetic, self-adhesive patch was applied to the pharyngeal reconstructive anastomosis in patients undergoing primary or free-flap closure. The cohort included both primary and salvage surgeries. The indication for use was to adjunctively seal and reinforce the pharyngeal reconstruction. A standard pharyngeal closure of 2 layers of continuous inverting monocryl sutures was undertaken. Following the closure the Tissuepatch was applied along the suture line with a minimum of 1cm of patch either side of the line of the anastomosis. Intraoperative handling and efficacy, and postoperative observations/follow-up were analysed. Outcome measures were the development of a post-operative fistula, time to oral intake and time to discharge. Other complications were analysed, in particular, returns to theatre and infections. These outcome measures were then compared to historical data on laryngectomy and pharyngolaryngectomy patients to act as a control group.

RESULTS:

The device provided fast and efficacious sealing and adhesion to the pharyngeal suture line. 1 out of our initial 10 patients developed a postoperative fistula, which may be secondary to patient factors predisposing to the leaks. Factors affecting these patients are discussed. Surgical handling was straightforward. Wound healing was unremarkable. No clinical evidence of foreign body reactions was observed. There were no differences noted in complication rates between the patients that underwent Tissuepatch assisted closure and the control cohort.

CONCLUSION:

Safe and effective sealing can be accomplished with this bio-absorbable, purely synthetic sealant. The product has shown to be effective in assisting with watertight closure of the pharyngeal repair. We view its use as an adjunct to pharyngeal closure as clinically beneficial and cost effective.
Thyroid gland management in Total laryngectomy

O.Hassan*(1)

(1)Cairo University, FACULTY of Medicine, , Egypt

Purpose

to assess the incidence of thyroid gland invasion in advance cancer larynx, and indication of thyroidectomy during total laryngectomy.

Methods

This study is a prospective study performed at faculty of medicine, Cairo University, Egypt from 2011-2014. It contains forty patients with T3, or 4 cancer larynx who are candidates for total laryngectomy with at least hemithyroidectomy. All preoperative, operative, and post and operative data where collected and statistically analysed. We excluded T1, T2, and T4B cases, patients with history of previous thyroidectomy or history of 1ry thyroid cancer, and distant metastasis M1 cases.

Results

37 cases were males (92.5%). The mean age was 61.1 years. We found four cases (10%) with thyroid gland invasion (TGI). All were males. Of those four cases with TGI three were transglottic carcinoma 75%, one was glottic carcinoma 25%. All were staged preoperatively as stage T4 100%. All had fixed vocal cord, invaded anterior comissure, and subglottic extension > 1 cm 100%. C.T. showes thyroid cartilage invasion 100%in all cases that was statistically significant (p value =0.026). Two cases were grade II SCC. One was grade III SCC, and the last one was adenoidcystic carcinoma. TGI by cancer larynx could be anticipated in all 4 cases 100%; that was of high statistical significance (p value < 0.001). None of the cases with TGI had preoperative tracheostomy. During postoperative period, there was no postoperative hypothyroidism in the four cases, Two of them developed hypoparathyroidism (hypocalcemia) in the first week which improved after one month. Three cases developed postoperative complications in the form of wound infection, and pharyngocutaneous fistula.

Conclusion

Histological TGI by advanced tumors must not be underestimated. Thyroid gland invasion is more coinciding with transglottic tumors and tumors with subglottic extension. Hemithyroidectomy with total laryngectomy for cancer larynx patients is recommended when there is extralaryngeal spread evident by C.T. scan, subglottic extension more than one cm, transglottic tumors, and anterior commissure infiltration. Hemithyroidectomy with total laryngectomy can be done safely without increase of incidence of postoperative complications. Total thyroidectomy with total laryngectomy for cancer larynx patients is recommended when there is evidence of thyroid gland invasion by CT scan with preservation of at least one parathyroid gland.
Total Laryngectomy using Automatic Stapling Device

N.Rabinovics*(1), J.Cerne(2), T.Teknos(2), A.Agrawal(2), R.Carrau(2), E.Ozer(2), M.Old(2)

(1)Rabin Medical Center, Tel aviv, Israel, (2)Ohio state university, United States

Introduction: Stapling device for repair of pharyngeal defect following total laryngectomy has first been sporadically described in the literature. This technique minimizes wound contamination by pharyngeal salivary secretions and simultaneously allowing for rapid pharyngeal repair. Other Potential benefits of this approach include decreased operative time and perioperative morbidity with reduced risk of wound. We aim to present our experience with this approach.

Methods: A retrospective chart review was conducted of all patients treated for laryngopharyngeal tumors with total laryngectomy using the stapling device, in the past 10 years at the Ohio State University.

Results: Overall, 520 patients underwent TL, 70 (13%) of whom had pharyngeal defect repair with a stapling device. Forty-two had previously been treated with radiation or chemoradiation (salvage laryngectomy). All procedure were completed successfully. Pharyngocutaneous fistula rate in the salvage laryngectomy patients was 12 (28%) and 9 (32%) in the non- salvage laryngectomy patients. This pharyngocutaneous fistula rate in the salvage laryngectomy was not statistically significant compared to our primary pharyngeal closure group and flap-closure group (p=1).

Conclusions: Repair of pharyngeal defect following total laryngectomy is a safe and feasible procedure even in previously radiated patients. More large-scale studies are required to verify the advantages of this approach.
Tracheal stoma recurrence after total laryngectomy in patients which requiring prior tracheotomy.

C.Chiesa estomba*(1), F.Betances reinoso(2), J.Sistiaga suarez(1), J.Gonzalez garcia(1), C.Santidrian hidalgo(2)

(1)Hospital Universitario Donostia, San sebastian, Spain, (2)Complejo Hospitalario Universitario de Vigo, Vigo, Spain

Purpose of the study: Acute dyspnea is usually one of the most common causes for urgent consultations in patients with advanced larynx carcinoma, emergency tracheotomy is usually the most often chosen. However in patients who are treated with total laryngectomy, there is some controversy regarding the influence of stomal recurrence on overall survival. The aim of this study is to try to determine the rate of stomal recurrence in patients treated with total laryngectomy.

Materials and Methods used: A retrospective analysis of a group of patients treated with total laryngectomy for squamous cell carcinoma of the larynx on a 3rd level hospital between January 2007 and January 2012.

Results: 48 patients were included, 47 men (97.9%) and 1 woman (2.1%), the average age was 59 ± 4 (Min 39 - Max 71). A total of 11 (22.9%) patients required an urgent tracheotomy, while in the remaining 37 was not necessary, the average time between the tracheostomy and the total laryngectomy was 16 ± 4 days (Min: 14 / Max 31). As for the group of patients in whom it was necessary to do, only 1 of them developed local recurrence (1/11 = 9%), while in the group of patients who did not need urgent tracheotomy, 4 developed local recurrence (4/37 = 10.8%), no statistically significant differences between groups in the rate of recurrence (p = 0.679).

Conclusion: Based on the findings in our study, we believe that in the urgent traqueotomy, only T stage will represent a higher risk of recurrence in the tracheal stoma, however, the carrying out of the way urgent tracheotomy will not increase significant risk of recurrence in the tracheostoma.
Assessing parathormone early measurement after total thyroidectomy as a predictive marker of day one hypocalcaemia: a prospective study

R.Hervochon*(1), V.Madelain(1), D.Simon(2), I.Fligny(2), R.Maalouf(2)

(1)Assistance Publique - Hôpitaux de Paris, Paris, France, (2)CHI Poissy St Germain en Laye, Poissy st germain en laye, France

BACKGROUND: Hypocalcaemia is a common complication of total thyroidectomy related to a mostly temporary dysfunction of parathyroid glands. Given the current trend of shortening hospital stays, we propose to assess early postoperative Parathyroid Hormone (PTH) assay as a predictor of day-one hypocalcaemia.

MATERIALS AND METHODS: This prospective observational study was designed and performed in a French hospital. The pre-operative PTH assays was performed at the time of anesthesia induction, and post-operative ones 1 hour (PTHh1) and 4 hours (PTHh4) after the gland removal. Day one hypocalcaemia was the main outcome and was defined as a serum corrected calcaemia less than 2.0 mmol/l. We calculated for each patient R-ratio: postoperative PTH / preoperative PTH. Using ROC curves, we compared the positive predictive value (PPV) of PTHh1, PTHh4, R-PTHh1, R-PTHh4 for hypocalcaemia screening.

RESULTS: We included 109 patients treated by total thyroidectomy between October 2015 and October 2016. Ten patients presented hypocalcaemia at day one (9.2%). Area under the curve of the ROC curves defined for each of the 4 parameters (PTHh1, PTHh4, R-PTHh1 and R-PTHh4) did not significantly differ (0.8292 ; 0.8272 ; 0.8039 and 0.8064 ; p > 0.05). The thresholds established from ROC curves were 19.5mmol/l for PTHh1; 13.5mmol/l for PTHh4; 0.38 for R-PTHh1; and 0.37 for R-PTHh4. At these thresholds, all tests had sensitivities of 100%. The greatest PPV was 28% for PTHh4. PPV was 21% for the other three tests. Mean calcaemia in patients with PTHh4>13.5mmol/L reached a nadir on day two of 2.12 ± 0.13 mmol/L and increased the days after. Mean calcaemia in patients with PTHh4 ≤ 13.5 mmol/L was 1.99 ± 0.16 mmol/L at day two (p = 0.013) and decreased until day four.

CONCLUSION: 9.2% of our patients reached hypocalcaemia at day one. Areas under ROC curve were similar for the four tests. Our results suggest no interest to perform preoperative PTH assay and to study its decay. The only PTH assay at h4 with a threshold of 13.5ng/L (100% sensitivity, 28% PPV) seems to be a reliable and sufficient tool, potentially usable in the development of ambulatory surgery in well-selected patients.
Advances in optics, miniaturization, and endoscopic instrumentation have revolutionized surgery in the past decades. Current progress in the field of endoscopy promises to further this evolution: endoscopic telescopes and instruments have improved upon the optical and technical limitations of the microscope, and require an even less invasive approach to the sella. The minimally invasive endoscopic pituitary surgery is performed through the natural nasal pathway without any incisions and is performed via Trans-nasal Trans-sphenoidal approach. Pituitary surgery is traditionally within the realm of the neurosurgeon. However, since the introduction of the endoscopic transnasal transsphenoidal approach to the sella turcica for resection of pituitary adenoma, otolaryngologists have been active partners in the surgical management of these patients. Otolaryngologists have lent their expertise in nasal and sinus surgery, assisting the neurosurgeon with the operation. The otolaryngologist has the advantage of familiarity with the techniques and instruments used to gain exposure of the sella turcica by transnasal approach. Hence, the otolaryngologist provides the exposure, and the neurosurgeon resects the tumour. Such collaboration has resulted in decreased rates of complication and morbidity. We hereby discuss our experience of treating 72 cases of pituitary tumour by endoscopic transnasal approach. In our study, conducted from 2005 to 2015, we started operating pituitary adenomas with conventional Trans nasal Trans-sphenoidal endoscopic approach. Close and long period of follow up was maintained. In our experience of 10 years, adopting the endoscope heightens the surgeons’ visualization of pituitary tumors, thus no external incision, no nasal packing and overnight stay with minimal complications. Endoscopic transsphenoidal approach is the less traumatic route to the sella turcica, avoiding brain retraction, and also permitting good visualization, with lower rates of morbidity and mortality.
TRANSTRACHEAL APPROACH FOR INTRAMURAL ESOPHAGEAL HEMATOMA DRAINAGE. ABOUT A CASE.

J.Prada pendolero*(1), K.Montaño rueda*(1), N.Bilbao garitagoitia(1), L.Reynoso paulino(1), M.Saenz datsira(1), E.Raboso garcia-baquero(1)

(1)Hospital Universitario de la Princesa, Madrid, Spain

1. Purpose of the study: Description of alternative approach for drainage of intramural esophageal hematomas.

Esophageal hematoma is a rare disease. Predisposing factors include portal hypertension, esophageal procedures, antiaggregant or anticoagulant treatments, repeated vomiting or ingestion of foreign bodies. Clinically, it usually presents as a triad consisting of chest pain, odynophagia / dysphagia and hematemesis, with the occurrence of the complete triad being unusual. In the differential diagnosis, acute coronary syndrome, aortic disease, pulmonary thromboembolism, perforated peptic ulcer and pancreatitis will be considered. Diagnostic tests are gastrointestinal endoscopy and computed tomography (CT) of the chest. The recommended treatment is conservative with absolute diet and measures of symptomatic support, presenting favorable evolution in most cases. Surgery would be indicated for massive bleeding or esophageal perforation.

2. Materials and methods used: Case report: 81-year-old hypertensive female with anticoagulation in the context of Atrial Fibrillation. A transesophageal echocardiogram is performed to detect infective endocarditis with no incidences during the procedure. A few days after the study, she presented progressive dyspnea, dysphagia, odynophagia and retrosternal pain. Cervical and thoracic CT compatible with extensive esophageal mural hematoma of 4 cm transverse axis and 11 cm longitudinal, which conditions anterior displacement of the trachea, with bulging of the posterior wall towards the tracheal lumen. Patient with torpid evolution requiring IOT and ICU monitoring. Due to the poor baseline situation, invasive therapeutic measures are ruled out and conservative treatment is decided. After 22 days of admission without spontaneous resolution, and given the need to perform tracheostomy by prolonged intubation, it was decided to perform drainage of the hematoma by transtracheal route at the same surgical time.


3. Results: Compatible CT scan with significant decrease in hematoma size with 2 cm of transverse axis, good clinical evolution and complete hematoma resolution after a few weeks.

4. Conclusion: We describe a new surgical approach that may be useful for specific cases of intramural esophageal hematoma.
Treatment and Outcome of Advanced External Auditory Canal and Middle Ear malignant tumors.

G.Cristalli*(1), V.Manciocco(2), G.Spriano(1)

(1)Regina Elena National Cancer Institute, Italy, (2)Regina Elena National Cancer Institute, Italy

Purpose of the study: The recommended therapeutic strategy in advanced ear cancer consists of surgical excision and postoperative radiotherapy. The purpose of this study was to evaluate the complications and oncologic outcomes of patients treated by surgery, intraoperative radiotherapy (IORT) and combined image modulated radiotherapy (IMRT) in locally advanced ear cancer.

Materials and Methods: 38 consecutive patients with locally advanced ear cancer treated between January 2002 and February 2014 were retrospectively evaluated. 25 (65%) patients had a primary tumor, while 13 (35%) patients had a recurrence. 7 (19%) patients were stage II, 17 (46%) patients were stage III and 14 (36%) patients were stage IV, according to the University of Pittsburgh staging system. No preoperative facial paralysis was present. 33 (89%) patients underwent lateral temporal bone resection, 4 (11%) patients were treated by “sleeve resection”. Neck dissection and parotidectomy were also performed in 32 (85%) of 37 cases. Pedicle flap was used for reconstruction in 29 (77%) cases. No patients had gross tumor residual. 13 (34%) patients received IORT followed by IMRT, 13 (33%) cases had IMRT alone, while 12 (32.5%) cases did not received any adjuvant treatment.

Results: Median follow-up was 40 months. The 5-year disease free survival was 79.1% for stage II-III and 49.3% for stage IV. The 5-year overall survival was 80.4% for stage II-III and for stage IV 49.4%. The facial nerve was sacrificed in 13 cases. Sural nerve grafting was performed in 7 of 12 cases after facial nerve resection, recovery to stage IV according to the House-Brackmann classification was achieved in 3 cases, to stage V in 2 cases and no recovery 1 case. Peripheral flap necrosis was observed in 4 cases and condritis of the remnant external ear in 2 cases.

Conclusion: Advanced external auditory canal and middle ear malignancies are rare. Treatment options include surgery and radiotherapy. Radical resection of the primary followed by radiotherapy may allow good prognosis in early stages. IORT seems to maximize the results of radiation therapy reducing side effects. Further studies are required to confirm the advantages of IORT in terms of survival.
Background: Delays in the treatment of head and neck cancer can have significant implications on patient outcomes. Disease progression can affect the technique, modality and intent of treatment. Retrospective analyses demonstrate that time to treatment initiation (TTI) beyond 45 days from diagnosis correlates with increased mortality.

Purpose: The Royal Adelaide Hospital Department of Otolaryngology is the major provider of head and neck cancer services in South Australia. We conducted a retrospective analysis of all new cancer referrals to identify delays in the initiation of treatment. The aim was to establish a protocol to apply to future head and neck cancer referrals to ensure all patients are treated expeditiously.

Method: We analyzed all new head and neck cancer referrals from January 1 to December 31, 2015. All milestones were recorded, including diagnostic procedures, ancillary appointments and multi disciplinary meetings.

Results: The head and neck clinic received 484 new referrals. 94 received a diagnosis of squamous cell carcinoma. 91 were treated with curative intent. 75 underwent surgery, 13 received primary chemo-radiotherapy and 3 received radiotherapy alone. A third of patients attended their first appointment without diagnostic imaging; two thirds required diagnostic procedures and two-thirds required multi disciplinary meetings. The mean time from first appointment to curative therapy initiation was 39.43 days (median 32, mode 30.) 29 cases (31.87%) had a TTI exceeding 45 days and 15 (16.48%) exceeded 60 days. The surgical cohort had a significantly shorter mean TTI of 34.41 days (median 30, mode 30) relative to 65 days (median & mode 56) in the non-surgical cohort. In the surgical cohort, 58 patients (77.33%) commenced definitive treatment within 45 days compared with 2 patients (12.5%) in the non-surgical cohort.

Conclusion: The disproportionately high TTI in the non-surgical cohort emphasizes the importance of early multi disciplinary engagement. These results have inspired the development of a 30 day protocol from first head and neck consultation to initiation of definitive management which will apply to all referrals in 2017. Future studies will assess the efficacy of our protocol in achieving an absolute TTI and mortality benefit.
Purpose of the study

Transoral laser resection is a well-established alternative for treatment of early glottic carcinoma, allowing preservation of laryngeal function with good oncological results.

Our aim was to perform a retrospective analysis of the patients who underwent endoscopic cordectomy over the period of five years, in the Department of Otorhinolaryngology of Centro Hospitalar Vila Nova de Gaia/Espinho.

Materials and methods used

From December 2010 to October 2015, twelve patients with early stage glottic squamous cell carcinoma were treated primarily with CO2 laser surgery. The type of cordectomy was graded according to the European Laryngological Society Classification based on the depth and extension of the excision, and the tumour staging was performed following the 2010 criteria by the American Joint Committee on Cancer.

Univariate analysis was used to test the association of the factors related to the host, tumor and treatment on overall and disease-free survival, through the Kaplan-Meier method.

Results

Twelve patients were included, eleven males and one female, with median age of 64 years at diagnosis. The disease was in situ in two cases (17%), seven (58%) had T1a, two (17%) had T1b and one patient (8%) had a T2 tumour. All were clinically node negative. The median follow-up was of 43 months (range 14-69m).

Anatomically, there were eight lesions (67%) involving the anterior commissure at diagnosis, including one which impaired vocal cord mobility. Regarding risk factors, seven patients (58%) presented tobacco and/or alcohol use.

Of the twelve cordecomies performed, three were type I (25%), one was type II (8%), three were type IV (25%) and five were type V (42%). Concerning perioperative morbidity, no tracheotomy was necessary, although three subjects later developed local complications, namely webbing and synechiae or granulations.

According to the Kaplan-Meier method, the five-year overall survival and the disease free-survival were 72% and 54%, respectively. The overall larynx preservation rate was 75%.

Four patients developed local recurrences that were managed with total laryngectomy in three cases, and laser excision plus postoperative radiotherapy in one case; all presented anterior commissure involvement at diagnosis.

Conclusion

Transoral laser surgery represents an effective treatment of early glottic carcinoma in comparison to radiotherapy, both in terms of oncological results and function-preserving management.
Local recurrence occurred only in cases with anterior commissure involvement, which should reinforce the importance of appropriate endoscopic access and excision with safe margins, complemented with attentive follow-up.
Tumor Vascular Bursts Provides New Pathway for Nanoparticle Delivery

Y. Matsumoto*(1)

(1) The University of Tokyo, , Japan

Purpose: The unique vascular pathology of tumors could play a central role in the extravasation and localization of nanoparticles, but the mechanisms by which this happens has thus far eluded direct observation. The predominant theory for the last 30 years regarding accumulation of nanoparticles within tumors is widely known as the enhanced permeability and retention (EPR) effect. Most depictions of EPR indicate ‘static pores’ in blood vessels that allow extravasation of large particles. Here, we report our discovery that identified ‘dynamic vents’ which transiently open and close over time within tumor vasculature.

Materials and Methods: Two different sizes of fluorescent-labeled polymeric micelles were used to evaluate distribution in mouse xenograft models.

Results: Short-interval and long-term intravital microscopy revealed an interesting phenomenon of vascular bursts, followed by brief, vigorous outward flow of fluid (termed ‘eruptions’) into the tumor interstitial space. Smaller micelles could facilitate both eruption and static permeability, whereas larger nanoparticle relied largely on eruption. Furthermore, this phenomenon was modeled using fluid dynamics simulation, which confirmed that eruption events occur in a certain pressure range that trigger vascular wall breakdown and its spontaneous closure.

Conclusion: we report spatial and temporal changes in vascular permeability in the tumor microvasculature. Dynamic vents should be considered as another pathophysiological aspect of the tumor, in conjunction to or in contrast with the static pore that has been widely accepted for EPR effect. Our findings would support the design of advanced drug delivery systems and therapeutic strategies.
Two different tumours masquerading as a possible submandibulitis. Case report

B.Fuentes pérez*(1), D.Hernanpérez hidalgo(2), A.Poch pérez-botija(2), E.Martínez portes(2), J.Roán roán(2), M.Iglesias moreno(2)

(1)Hospital Clínico San Carlos. Madrid, Madrid, Spain, (2)Hospital Clínico San Carlos. Madrid. Spain, Madrid, Spain

PURPOSE OF THE STUDY: The purpose of the study is to present the case of a patient having two different tumors coexisting in the same place (submandibular gland) masked under an apparent chronic submandibulitis. Additional to exposing the case and studying characteristics of both tumors we also wish to point out the peculiarity of this finding and to talk about how previous chemotherapy treatments may suppose a tumor inducing role.

MATERIALS AND METHODS: For this purpose we present the case of a seventy six-year old patient with a history of left breast cancer eleven years ago (treated with surgery+chemotherapy+radiotherapy) who came to our outpatient clinic showing symptoms of left chronic submandibulitis. This patient had experienced a very slow growth of the submandibular gland with occasional infectious reactions and a further medical examination showed no suspicious evidence of malignancy.

The radiological test made (CT) was reported as an “enlarged gland supposedly related to an inflammatory process”, with no radiological evidence of malignancy. The fine needle aspiration cytology did not show any suggestive sign of malignant pathology.

A few weeks later, during surgery in order to remove the gland, it was found stony and attached to deep planes with a macroscopic appearance of two different malignant pathological tissues. Biopsies were taken for intraoperative assessment.

RESULTS: Analysis of such biopsies revealed the presence of two tumors coexisting in the same gland: squamous cell carcinoma and diffuse large B-cell non-Hodgkin lymphoma. The gland and the affected tissue were then removed until malignant-free surgical margins were reached. After discarding any remote hematological disease, a treatment with chemotherapy drugs for lymphoma was initiated.

To date, this patient has been under external clinical observation and shows no clinical or radiological signs of tumor recurrence.

CONCLUSION: Squamous cell carcinoma at this site is an uncommon tumor (<1% of salivary glands tumors) and only near 15 % are located in the submandibular gland. Lymphomas represent around 2% of salivary glands tumors, and diffuse large B-cell lymphoma is one of the most frequents. The case described above reveals an association of tumors not known in the revised scientific literature and simulated a benign entity.
Uncommon but possible nasal tumours: a leiomyoma report case and its diagnostic and therapeutic management

L. Báguena campos*(1), D. Escobar montatixe(2), J. Vilacampa auba(2), L. Cubillos del toro(2), I. Alcalá rueda(2), C. Cenjor español(2)

(1) Hospital Fundación Jiménez Díaz, Madrid, Spain, (2) ENT Department. Universitary Hospital Fundación Jiménez Díaz, Madrid, Spain

Purpose

We expose the case of a painless tumour on the nasal ala, of fluctuating size and 2 months of evolution, of infrequent histology in the cervico-facial area.

We propose the advantages and the need to follow an orderly protocol of differential diagnosis of lesions of unknown origin in this area, in order to assure a correct management and evolution of the patient.

Material and methods

We present the case of an 82 year old male, referred from Dermatology to assess a non-cystic lesion, of variable size (between 1 and 3 cm) located in the left nasal ala, of 2 months of evolution.

In the rhinoscopy, we observe a fluctuating and painless lesion, which occupies practically the entire left lateral nasal alar crura, together with a protrusion of the nasal pyramid. No associated endonasal mucosal lesions are observed.

For a further study a magnetic resonance imaging is required which reveals, in addition to an obstructive left septal deviation, a defined left deep submucosal 11 mm lesion, hyperintense in T2 and with intense homogeneous intravenous contrast uptake, all of it congruent with lesions such as angioma or schwannoma, without being able to rule out other possibilities.

Surgical intervention is decided for resection and anatomopathological study of the lesion.

A septoplasty is performed using a modified Cottle technique, associated with a removal by a marginal approach of alar cartilage. A septal cartilage graft is placed as an alar reinforcement.

The anatomopathological study revealed a vascular leiomyoma with free margins. Six months later, it has not recurred, and the patient remains asymptomatic.

Discussion

A leiomyoma is a benign tumour composed of multiple walled vessels. They usually present in women between 40 and 60 years of age, in the subcutaneous cellular tissue of the extremities as unique and frequently painful lesions.

However, our patient is an uncommon form of presentation, so resection and anatomopathological study are of vital importance in the diagnosis.

According to the literature, the probability of relapse is low. In our case, the patient is currently asymptomatic.

Conclusion

A leiomyoma is an infrequent and mildly aggressive benign tumour that must be taken into account in the differential diagnosis of tumours in the head and neck area.
This case reveals the need to follow an orderly diagnostic-therapeutic protocol of lesions of unknown origin in the otorhinolaryngological area, which will allow not forgetting infrequent lesions and the correct management and evolution thereof.
Unconventional conservative management of chylous leak after neck dissection

Z.Zhao*(1), S.Hao(2)

(1)The Fourth hospital of Hebei Medical University, Shijiazhuang, China, People's Republic of, (2)Shin Kong Wu Ho-Su Memorial Hospital, Taiwan, , China, Republic of (Taiwan)

Introduction:

Chylous leakage after neck dissection could be managed conservatively and/or surgically. We herein report a conservative approach to successfully treat the chylous leak after neck dissection in six consecutive patients.

Material & Method:

We conducted a retrospective study of 337 patients who underwent 388 sides neck dissections from January 2012 to June 2016. The age of the patients range from 22 to 78 years with the mean age of 46.5 years. Six sides of neck appeared chylous leakage (1.55%). The chyle leak were diagnosed whenever there were milk-like drainage. The patients were initially managed conservatively with low-fat diet and wound pressure compression. Surgery was undertaken if conservative treatment failed.

Results:

Three patients showed chylous leak at the second day after operation. Three patients (100%) were successfully treated conservatively, while they would form a “cyst” in the left supraclavicular fossa. The average dimensions about 3×3×3cm, soft, and cystic. There were no associated symptoms with the retention cyst. It is speculated that the cysts formulate a free communication with the lymphatic drainage system and cause no harm to the patients.

Conclusion:

The chylous leakage occurs very rare in neck dissection. They could be managed conservatively as long as they form a cyst with free communication with the lymphatic drainage system.

Key Words:

Chyle leak, neck dissection, Conservative treatment

Reference:

Undifferentiated Pleomorphic Sarcoma of the neck – a challenge to diagnose and manage

P.Lim*(1)

(1)Tan Tock Seng Hospital, , Singapore

Purpose of the study

Undifferentiated pleomorphic sarcomas of the head and neck region are exceedingly rare. They are high grade aggressive tumours which can be difficult to surgically excise with clear margins due to the close proximity to important structures in the neck. We report a case of undifferentiated pleomorphic sarcoma in the head and neck which presented in an unusual way and describe the challenges faced in managing it.

Materials and methods used/Case report

A 62-year-old gentleman presented with a painless right neck swelling after sustaining an injury to that area in a road traffic accident more than a year ago. Imaging suggested the possibility of a thrombosed varix. However, intraoperative frozen section showed that it was a spindle cell tumour. The patient subsequently underwent a repeat resection of the margins but the final histology results showed that there was still involvement of the great auricular nerve. The case was discussed at a multidisciplinary board and the patient opted for adjuvant radiotherapy.

Results/Discussion

As there are far too few cases of undifferentiated pleomorphic sarcomas, most of the literature focuses on head and neck sarcomas as whole. Surgical excision with clear margins is still the mainstay treatment for sarcomas. As clear margins can be difficult to achieve, adjuvant radiotherapy is also recommended as part of the management. Radiotherapy is also found to be beneficial in high grade sarcomas.

Conclusion

One should have a high degree of suspicion of malignancy in any mass growing in size. Surgery is the main treatment and adjuvant radiotherapy improves local control and overall survival.
Association of Intraoperative Neuromonitoring with reduced recurrent laryngeal nerve injury in patients undergoing total thyroidectomy

Ioannis Vasile

I.Vasileiadis*(1)

(1)Department of Otolaryngology/Head and Neck Surgery, Venizeleio-Pananeio General Hospital, Herakleion, Greece

PURPOSE: Injury of the recurrent laryngeal nerve (RLN) is one of the most serious complications of thyroid surgery. Intraoperative neuromonitoring (IONM) has been introduced to verify RLN function integrity and may be a helpful adjunct in nerve dissection. The purpose of our study was to determine whether the use of IONM can reduce the incidence of RLN injury in patients undergoing total thyroidectomy.

MATERIALS AND METHODS: This cohort study included 2556 patients who underwent total thyroidectomy between January 2002 and December 2012 in the Department of Otolaryngology-Head and Neck Surgery of Venizeleio General Hospital, Heraklion, Greece. Patients who had IONM during the procedure (n = 1481) were compared with patients who underwent surgery with nerve visualization alone (n = 1075). All patients underwent indirect laryngoscopy-fiberoptic nasopharyngoscopy both preoperatively and on day 2 after surgery to assess vocal cord motility.

RESULTS: A total of 2556 patients (2028 women and 528 men [5112 RLNs at risk]; mean [SD] age, 51.35 [14.18] years; age range, 18-89 years) underwent total thyroidectomy. Univariate analysis showed that the use of IONM resulted in a significant reduction in RLN injury incidence (3.3% vs 0.7%) with a relative risk reduction of 2.6% (odds ratio [OR] = 5.15; 95% CI = 3.12-8.49; number needed to treat, 19). Multivariate logistic regression showed that no use of IONM was an independent risk factor for RLN injury in patients who underwent total thyroidectomy (p<0.001, adjusted OR [AOR] = 5.44; 95% CI = 3.26-9.09). Additional risk factors for RLN injury were operative time (p<0.001, AOR = 12.91; 95% CI = 6.66-25.06), maximum diameter greater than 45 mm of right thyroid lobe (p<0.001, AOR = 4.91; 95% CI = 3.12-8.56) and left thyroid lobe (p=0.027, AOR = 2.24; 95% CI = 1.39-4.32), extrathyroid extension (p=0.021, AOR = 3.26; 95% CI = 1.62-6.59), incidental parathyroidectomy (p=0.001, AOR = 3.30; 95% CI = 2.13-5.09), and tumor size larger than 10 mm (p=0.019, AOR = 3.24; 95% CI = 1.59-6.62).

CONCLUSIONS: Our findings showed that the use of IONM decreased significantly both temporary and permanent RLN injuries. The technology of IONM is safe and reliable, and this technique is an important adjunct in nerve dissection and functional neural integrity. The routine use of IONM reduced pitfalls and provided guidance for our surgeons in difficult cases, reoperations, and high-risk patients.
Unicentric Castleman's disease: a rare presentation of a supraclavicular neck lump

R.Jackson*(1)

(1)Norfolk and Norwich Hospital, Norwich, United Kingdom

Introduction:

Castleman's disease is a rare lymphoproliferative disorder broadly categorised into two main disease entities. Unicentric Castleman's disease which is confined to a single lymph node or localised group of nodes and multicentric disease which can affect multiple lymphatic chains. Distinguishing the type of Castleman's disease is essential as treatment and the long-term prognosis can vary considerably.

Case:

We describe the case of a 25-year old woman presenting to ENT outpatients with a 3-month history of an asymptomatic, unilateral supraclavicular (level 5) neck lump. Despite extensive investigations over a 9 month period including 2 ultrasound scans, MRI neck, CT angiography and a true cut biopsy no definitive diagnosis of the lesion was established. Under general anaesthetic the neck lump was excised and the histopathology report concluded Castleman's disease of hyaline vascular variant. Follow-up imaging including a PET CT showed no extension of disease beyond the supraclavicular mass and the patient made a full recovery.

Conclusion:

Castleman's disease is a rare condition causing lymphatic hyperplasia. It can manifest itself in a multitude of ways and in some cases with very few presenting features, making it challenging to diagnose. Surgical excision of the pathological lymph node can be invaluable in identifying Castleman's disease and in the case of unicentric disease can often be curative.
Use of Flexible Ureteric Cystoscopic forceps to unblock obstructed Tracheostomy

S.Cowrishankar*(1), G.Ghaly*(2), J.Graystone*(1), S.Prabhu*(1)

(1)John Radcliffe Hospital, Oxford, United Kingdom, (2)Broomfield Hospital, Chelmsford, United Kingdom

Introduction

We are presenting a case in which flexible cystoscopic forceps were used to clear tracheal obstruction after head and neck surgery.

Case

80 year old male underwent a tracheostomy as part of surgical management of an advanced recurrent T4 SCC of the mandible. A few days after surgery the patient developed acute stridor while on the Head and Neck ward due to blocking of his tracheostomy tube. Tracheal Suctioning and cleaning of the inner tube failed to clear the blockage. Flexible Nasoendoscopy revealed blocked by a combination of dried mucous encasing a coagulam. This was thought to be from blood oozing from the tumour which had clotted and become encased in dried phlegm.

Procedure/Intervention:

A flexible cystoscopic forceps is normally used to retrieve ureteric stones. In this case it was deemed to be a suitable instrument for the tracheostomy site. This allowed visualisation of the obstructing clot and mucous plug with a fiberoptic nasoendoscope through the nostril. We are presenting a pictorial representation of the technique used, learning points, and precautions to be taken.

Result

Patient’s airway was cleared safely and promptly under continuous visualisation and patient could maintain a patent airway afterwards.

Conclusion

Our presentation highlights the importance of adapting and use equipment in different specialities of surgery. There is a big advantage of keeping up to date with changes in different specialities both in terms of equipment and techniques. Many of the surgical techniques are transferrable between specialities and as some of it can be adapted and used in your own area of specialisation.
Usefulness of systematic ultrasound examination for detection of cervical lymph node recurrence in the early stage and salvage in patients after oral excision of T1 or T2 N0 tongue squamous cell carcinomas

M. Furukawa* (1), M. Furukawa (2)

(1) Department of Head and Neck Surgery, Kanagawa Cancer Center, Yokohama, Japan, (2) Hiro-Yama clinic, Hiroshima, Japan

Purpose

Recently, medical ultrasound equipment has been developed and the imaging resolution has been improved. According to this improvement, ultrasound became to be able to detect small metastatic focus growing inside of lymph node. We examined the usefulness of our standardized systematic ultrasound examination methods and diagnostic criteria using highly qualified imaging including gray scale static image, real-time moving image and color Doppler mode for detecting early phase of lymph node metastasis and disease control.

Patients and Methods

Between January 2013 and March 2016, 8 patients with nodal recurrence after oral excision of primary cancer in clinically T1N0, T2N0 patients with tongue cancer. We examined all of them using high resolution ultrasound before surgery, and after surgery (full digital hi-vision equipment and linear high frequency transducers, ranging from 10-13 MHz). The diagnostic criteria were designed based on the thickness of lymph node and change of internal structure.

Results

7 patients were diagnosed as T1N0 and 1 patient was T2N0. All patients underwent oral excision of tongue cancer with adequate margin by diode laser knife. Follow up ultrasound examination was performed by head and neck surgeons, every 1 month for first 1 year after surgery and after passing this 1 year without any problem, every 2-3 months. The period of the nodal recurrence after surgery ranged from 1 month to 24 months. The numbers of recurrent metastatic node diagnosed by ultrasound were, 1 node in 5 cases, 2 nodes in 2 cases, 6 nodes in 1 case. The thickness of metastatic lymph node diagnosed by ultrasound ranged from 4 mm to 12 mm. All patients underwent enhanced CT scan and PET-CT, but neither CT scan nor PET-CT could detect these metastatic lymph nodes except 1 case with the greatest metastasis (thickness 12 mm). Seven patients are alive without cancer, and 1 patient is alive with cancer.

Conclusions

Our standardized systematic ultrasound examination methods and diagnostic criteria using highly qualified imaging were thought to be useful to earlier detection of lymph node recurrence in the patients with early stage tongue cancer.
Versatility, reliability and clinical utility of US-guided FNAB in head and neck pathology. Our experience


(1)Institute of Otolaryngology Università Cattolica del Sacro Cuore Policlinico Agostino Gemelli, Roma, Italy,
(2)Institute of Histopathology - Università Cattolica del Sacro Cuore - Policlinico Agostino Gemelli, Rome, Italy,
(3)Department Of Otolaryngology - Ospedale Cristo Re, Rome, Italy, (4)Institute of Otolaryngology - Università Cattolica del Sacro Cuore - Policlinico Agostino Gemelli, Rome, Italy

Purpose of the study

Non-thyroid pathology of the head and neck region is extremely heterogeneous under both a clinical and a histological point of view. In particular head and neck masses pose always a diagnostic issue. Aim of the present study is to evaluate the clinical role and reliability of US guided FNAB in this setting.

Materials and methods used

We collected for the present analysis all the fine needle aspiration biopsies of head and neck lesions, performed in a single service from April 2013 to July 2015. All the procedures were performed by a team of otolaryngologists and histopathologists and included an immediate cytologic assessment for every biopsied lesions. In the procedure we biopsied one (269 cases) or two different (16 cases) lesions. The aspired material was used for smears and for thin-prep.

When a surgical procedure was performed following the FNAB we recorded the histopathological report and specifically evaluate two main endpoints and namely

– Concordance with cytology
– Concordance in excluding/confirming malignancy

Results

Out of 301 lesions sampled, 139 (46%) were finally treated in our department.

Among these cases the definitive histological examination documented a very low number of non neoplastic disease compared with FNABs (5.8% vs 33.1%): in most of these cases FNAB helped avoiding useless surgery.

In almost 90% of cases, cytology was able to formulate the correct diagnosis.

Most interestingly only in 3.8% of cases cytology was wrong in estimating the malignant potential of the lesion.

Conclusion

Our data show a higher diagnostic reliability and a lower inadequacy rate of FNAB in ours than in most of the literature series.

We believe that is because we routinely exploited technologies and competences that effectively increase the power of this diagnostic tool, and in particular:

• When the FNAB occur through the skin we always use the ultrasonography to check the path of the needle.
• The real time integration of competences and knowledge between the cytopathologist and the clinician. The cytopathologist is always on site with the clinician and performs an immediate review of all the specimens, if the sample looks inadequate other punctures are performed up to a maximum of 3.

• We always use the material from the FNAB both for smears and for thin-prep, giving potentially complementary information to the histopathologist.

Our results suggest that this strengthened approach makes FNAB an extremely powerful and reliable diagnostic tool for the clinicians dealing with head and neck pathology.
Waving Elective Neck Dissection for Elderly patients with Oral Cavity SCC.

S.Stern shavit*(1), L.Kampel(1), G.Bachar(1), T.Shpitzer(1)

(1)Rabin Medical Center, Petach tikva, Israel

Introduction: Continuously rising life expectancy results in greater numbers of elderly cancer patients. Elective neck dissection (END) has been proved to result in better outcomes among clinically node-negative patients with oral squamous-cell carcinoma (SCC). However, considering higher comorbidities and operative risk in the elderly, END is questionable.

Methods: The medical charts of all patients older than 70 years diagnosed with oral SCC at a tertiary medical center were retrospectively reviewed. Patients with resectable tongue, floor of mouth or alveolar ridge SCC and clinically negative neck were eligible for the study. Demographic data, tumor features and clinical outcomes were analyzed.

Results: Twenty-one patients underwent primary tumor resection alone and 33 patients had simultaneous END. Most primary tumors were located on the mobile tongue (80%, 81%) and were T1-T2 (95%, 85%) with no significant difference between the groups. Patients who did not undergo END were older (83 yo vs 77, p<0.001), with higher rate of comorbidities than those who had END (66% vs 21%, p=0.0014). Duration of surgery and hospitalization were both significantly shorter for those not undergoing END. Occult cervical metastases were found in 15% of the patients. No significant difference was found in overall survival or recurrence rate between the two groups.

Conclusion: Waving of END in the elderly patient with no clinical evidence of neck metastases did not result in poorer survival or higher recurrence rates. It should be considered for all octogenarians with early-stage oral cavity SCC in order to reduce operative risk and adverse post-operative outcomes.
What are the real waiting times for therapeutic management of head and neck cancer: a study in the general population in the north-west of France

E.Babin*(1), A.Guizard(2), K.Ligier(3), O.Dejardin(4), L.Launay(5), G.Launoy(6)

(1)CHU Caen, Caen, France, (2)registre général des tumeurs du calvados, Caen, France, (3)Registre général des cancers de Lille et sa région, GCS “Centre de Référence Régional en Cancérologie”, CHRU de LILLE, Hôpital Calmette, Pavillon Breton, Boulevard du Professeur Jules Leclercq, 59037 Lille Cedex, France, Lille, France, (4)U1086, Caen, France, (5)U, Ca, France, (6)U, Caen, France

Head and neck cancers (HNC) have a poor prognosis and a long treatment delay may have a negative impact on this. Some studies have investigated the determinants of this delay but not in the general population and rarely taking into account socio-economic factors. A high-resolution population-based study about cancer management was conducted, using registries in the north-west of France, on HNC diagnosed between 2008 and 2010. The median time between diagnosis and multidisciplinary team meeting (DMI) (N = 1631) was 14 days (Q1: 7 to Q3: 26). The median time between diagnosis and first treatment (DTI) (N = 1519) was 35 days (Q1: 21 to Q3: 54). When the first treatment was radiotherapy, the interval was 54.5 days (Q1: 40 to Q3: 71). In multivariate analysis, DTI was associated with the type of first treatment and place of treatment. For advanced stage HNC, DTI was associated with comorbidities, topography of the cancer and socio-economic status, underprivileged patients being treated later than privileged ones. Given the French governmental cancer plans which set out to coordinate care pathways via nursing coordinators and to improve the availability of radiotherapy, the waiting times observed in this study still seem long. The optimal care pathway should include adapted social management but the DTI was still longer for underprivileged patients.
What Myiasis May Be Hiding

N.Bilbao*(1), K.Montaño(2), M.Saenz(2), L.Reynoso(2), J.Prada(2), E.Raboso(3)

(1) Hospital Universitario de la Princesa, Madrid, Spain, (2) Hospital universitario de la Princesa, Spain, (3) Hospital Universitario de la Princesa, Spain

Introduction: Myiasis is an infection in living or necrotic tissue caused by fly larvae. There are few reported cases in developed countries, since infestation is most frequent in tropical regions where warm weather and humidity help it develop. It is observed in patients with poor hygiene or psychiatric disorders. The treatment of myiasis consists in removing the larvae and cleaning the affected area. Malignant auricular tumors constitute 6% of all head and neck tumors and are generally squamous or basal cell carcinomas. The main treatment consists in surgery with excision of the lesion.

Materials and methods: A 75-year-old man, admitted to the emergency room complaining of an earache in his right ear that had lasted two days. The social history showed that the patient was homeless and therefore lived in poor hygienic conditions.

Examination showed a right ear parasitosis with the absence of the auditory pavilion and exposure of the temporal bone. On the cranial CT scan, no cranial involvement was showed and the middle ear seemed to be unaffected. Empirical antibiotic treatment was chosen, with piperazillin/tazobactan and metronidazole, to prevent secondary infections, and ivermectin (200 mg/kg) as anti-parasite. After the diagnosis of myiasis, the whole area was cleaned and all the parasites were removed.

The removed larvae were identified by a microbiologist as belonging to the Calliphoridae family, Lucilia species.

Biopsies of the frontal and periauricular area were performed, where a cutaneous lesion was also observed. As a result, both lesions were diagnosed as squamous carcinoma.

The chosen surgical intervention was an extensive resection operation on the periauricular and frontal lesion, a parotidectomy and a right functional neck dissection. The reconstruction was performed using an anterolateral thigh flap with superior laryngeal vessel anastomosis. The pathological anatomy showed free borders and negativity of involvement of parotid and lymph nodules. The patient’s condition improved after the surgery and periodic check-ups are still performed.

Conclusion: The aim of this poster is to present a case of cutaneous and subcutaneous myiasis caused by the Lucilia species, with an underlying squamous cell aural carcinoma. The treatment of myiasis consists in larvae removal. The use of oral anti-parasites is controversial. The squamous carcinoma is treated by excising the lesion and in some cases radiotherapy is also given.
**Wide anterior neck dissection for definitive management of recurrent thyroglossal duct cysts in adults**

L.O’neil *(1)*, D.Gunaratne(2), A.Cheng(3), F.Riffat(2)

*(1)*The University of Newcastle, Australia, (2)Westmead Hospital, Sydney, Australia, (3)Children’s Hospital at Westmead, Sydney, Australia

**Purpose**

Thyroglossal duct cysts (TGDC) arise from the failed involution of the thyroglossal duct, an embryological remnant of thyroid gland development. Recurrence following resection is attributed to anatomical variability and residual thyroglossal ducts. In the adult population, TGDC and sinus occurrence and recurrence is extremely rare and description of definitive surgical management is yet to be well explored. In this regard, we describe our experience with wide anterior neck dissection for the definitive management of recurrent TGDC and sinuses in adults.

**Methods**

A retrospective chart review was performed to identify adult patients who had undergone a wide anterior neck dissection for management of a recurrent TGDC or sinus between January 1st 2009 and January 1st 2015.

**Results**

Six males and one female were included in the series, mean age 26.4 ± 10.9 years. Primary surgical management included cystectomy *(n=3)* and Sistrunk’s procedure *(n=4)* with recurrence occurring at a mean of 18 ± 9.8 months. Thereafter, all seven patients underwent wide anterior neck dissection to excise their thyroglossal remnant without subsequent recurrence over an average 12 month follow up.

**Conclusion**

A wide anterior neck dissection is an surgical technique that should be considered when managing a recurrent TGDC or sinus in the adult, as it adequately addresses the anatomical variability of the thyroglossal duct.
Rare clinical observation: Removing fibrosarcoma of the oropharynx using video-assisted technique.

P. Pryanikov*(1), A. Golubtsov(2), V. Vasiliev(3), V. Astashov(4), I. Ivanov(3), E. Ivanova(3)

(1) FSBI FSCC PGOI n.a. Dm. Rogachev, Moscow, Russia, (2) SBIH "MROC" (State budget health facility in Moscow region Moscow Regional Oncology Center, Balashikha), Russia, (3) SBIH "MROC" (State budget health facility in Moscow region Moscow Regional Oncology Center, Balashikha), Russia, (4) SBIH "MROC" (State budget health facility in Moscow region Moscow Regional Oncology Center, Balashikha), France


SBIH "MROC" (State budget health facility in Moscow region Moscow Regional Oncology Center, Balashikha).

Fibrosarcoma is a rare malignant tumor that occurs mainly in the field of cartilage and large tendons, and extremely rare in the larynx and pharynx. Fibrosarcoma treatment in adults in most cases—is surgical.

Patient K. 62 years, Women, from November of 2016 said on the foreign body sensation in the throat. During pharyngoscopy we have found from the soft palate at the back and the right wall of the oropharynx tumor formation with the disintegration phenomena 35x25mm? it was on a wide basis, the distal border at the upper boundary of hypopharynx. According to the MRI: in the lumen of the oropharynx is defined by an additional tumor mass coming from the back wall with sharp jagged contours, heterogeneously increased MR signal T1, T2, sizes up 2.3x3.3x2.7sm. Tumor is intimately adherent to the right and front walls of the oropharynx, pushes the tongue upward, infiltrates middle pharyngeal constrictor muscle. After the contrast medium is marked non-uniform increase in signal intensity of the tumor. According to additional methods of regional surveys and distant metastases were not founded. According to the histological examination of biopsy oropharyngeal tumors - in the material is determined by the growth of small cell tumor with hyperchromatic nuclei. Immunohistochemical study on tumor cells derived expression vimentin, SMA, Desmin, CD34. Not NMV45 expression of antibodies detected, CD99, S100, chromogranin, TTF-1, SK7, synaptophysin, CD45, CD56, ERB, rapSK, SK56. Proliferative activity of Ki67-8%.

Conclusion: The immunophenotype of the tumor corresponds fibrosarcoma G1 (FNCLCC).

12.01.2017 we performed surgery: Transoral videoassisted removal of oropharyngeal tumor. Tracheostomy. The operation was carried out using an ultrasonic scalpel Harmonic Wave with manual activation, video endoscope rack and set of tools for video-assisted resection of the company Storz. One unit is removed and the right side of the rear wall of the oropharynx tumor with the underlying muscle structures to prespinal fascia. The upper limit of resection: the projection of the soft palate, the lower limit - a level hypopharynx. The postoperative period was uneventful. Naso-gastric tube removed on 14th day, and patient recovered eating through the mouth and the tracheostomy tube was removed. The morphological study confirmed the diagnosis: fibrosarcoma G1, removed in R0 volume. Postoperative diagnosis of the patient: the soft tissue Fibrosarcoma oropharyngeal stage Ib pT1bN0M0.

Conclusions: The use of video-assisted technique in the surgical treatment of sarcoma of oropharynx provides a reliable and high functional and aesthetic results.
Association Tuberculosis with localization ENT and Cancer of the VADS (about 30 cases)

H. Rahim*(1)

(1) Service ORL et chirurgie maxillofaciale, Rabat, Morocco

H. Rahim, S. Rokhssi, A. EL ayoubi, R. Bencheikh, A. Benbouzid, L. Essakali

Purpose of presentation

Tuberculosis is one of the most widespread infectious diseases in the world. In Morocco, the disease is still endemic and a public health problem.

The ENT localizations of tuberculosis are dominated by lymph node involvement, which can sometimes be associated with a cancer of VADS simulating a locoregional metastasis or only the anatomopathological examination confirms the diagnosis.

Extra-ganglionic ENT tuberculosis is not unusual, it is a relatively rare event, polymorphic translation and various localizations, mimicking an ENT cancer, causing a diagnostic problem.

Materials and methods

Through a retrospective study, were identified:

- 7 cases of cancers of the ENT sphere associated with lymph node tuberculosis.
- 23 cases of extra-ganglionic tuberculosis with bacteriological and histological confirmations.

Results

The clinical picture varied according to ORL localization with dysphonia in 90% of laryngeal tuberculosis, nasal obstructions in 50% of the nasosinus and rhinopharyngeal sites, and parotid swelling in 4 cases.

The topographic forms noted were: Laryngeal tuberculosis in 35.71% of cases, nasosinusian tuberculosis in 14.28% of cases, glandular tuberculosis with a percentage of 17.85%, endobucal tuberculosis with 7.14% of cases, and cancer association And tuberculosis in 25% of cases: 4 cases of laryngeal cancer associated with lymph node tuberculosis, 1 case of hypopharyngeal cancer associated with lymph node tuberculosis, 2 cases of UCNT associated with lymph node and cavitary tuberculosis. The diagnosis was histopathological by the demonstration of epithelial-gigantocellular granuloma with caseous necrosis.

Conclusion

This study invites us to mention in our context, tuberculosis in two situations: in case of strong suspicion of a primary cancer ENT, or even in a secondary location of a neo of the VADS.
Association Warthin tumor of the under mandibular gland and thyroid goiter: About a case

O. Lassikri*(1), S. Rokhss(2), J. Benayad(2)

(1) Service d'Otorhinolaryngologie et chirurgie cervico-faciale, Hôpital des spécialités, CHU Ibn Sina, Rabat., Salé, Morocco, (2) Service d'Otorhinolaryngologie et chirurgie cervico-faciale, Hôpital des spécialités, CHU Ibn Sina, Rabat., Rabat, Morocco

Purpose of the study:

The Warthin tumor or cystadenolymphoma, is a benign tumor of the salivary glands associating an oncocytic epithelial proliferation, and a lymphoid formation. It almost exclusively affects the parotid gland.

The interest of this work is to describe an exceptional localization of the Warthin tumor of mandibular gland, associated with a goiter.

Material and methods:

We report the anatomo-clinical observation of a patient with a right mandibular Warthin tumor, associated with a suspected goiter of malignancy.

Results:

This is the case of a 65-year-old active tobacco man who has consulted for an anterior basi-cervical swelling that has evolved for 1 year, associated with a right latero-cervical swelling that has appeared for 5 months.

The physical examination revealed a cervical mass under right angulo-mandibular, associated with a left thyroid nodule, and poorly limited. The cervical scan concluded a hyper-vascularized adenopathy under right mandibular, and a nodular goitre at the expense of the left lobe, plunging in endothoracic, compressive, with calcifications.

The patient underwent total thyroidectomy, with biopsy of lymphadenopathy. The anathomo-pathological study with immunohistochemistry concluded that there was a microvesicular adenoma of the thyroid, and the adenopathy corresponded to warthin tumor under right mandibular gland.

Conclusion:

The histogenesis of the Warthin tumor remains unknown, despite the second benign tumor of the salivary glands. Its localization in the submaxillary gland remains exceptional, even more its association with a thyroid goiter.

Authors:

LASSIKRI. O, ROKHSSI S, BENAYAD. J, NITASSI. S, EL AYOUBI. A, BENCHIKEKH. R, BENBOUZID. M A OUJILAL. A, ESSAKALLI. L.
Atypical Presentation of Meningioma as a neck mass

S.Bayounos*(1)

(1)King abdullah medical city, , Saudi Arabia

At our tertiary care hospital, king Abdullah medical city. We were presented with a 31 years old male medically free at our otology and skull base clinic. Complaining of right upper neck mass for 6 months associated with decreased hearing and pulsatile tinnitus. On clinical examination the patient had an upper right neck mass which was firm with limited mobility and with microscopic examination of the right ear, a pulsatile mass were seen in the right middle ear cavity. His MRI and CT neck showed right cervical mass at level II arising from the jugular form compressing the right jugular vein and opacification of the right middle ear cavity. Using mastoid transcervical and retrofacial approach with neck exploration excision of the mass was done almost completely and only sparing a small remnant on the jugular foramen. Post operatively the patient had grade 3 right facial paralysis and right vocal cord paralysis. and the patient was shifted to head and neck oncology to receive radiation therapy for the remnant. Following up the patient, his right facial nerve paralysis improved to grade 1.

authors: Sara bayounos ENT saudi board resident level 3

prof. Esam Saleh, ENT consultant in Otology and skull base. King Abdullah Medical City, Makkah- Saudi Arabia.

Dr. Sherif Kamel, ENT consultant in head and neck oncology. King Abdullah Medical City, Makkah- Saudi Arabia.
Awake Flexible CO2 Laser in Outpatient for Treatment of Upper Aerodigestive Tract Lesions

H.Mohammed*(1), L.Masterson(2), R.Nassif(3)

(1)Norfolk and Norwich University Hospital, Norwich, United Kingdom, (2)NNUH, Norwich, United Kingdom, (3)Norfolk and Norwich University Hospital, Norwich, United Kingdom

Purpose of study: To assess outcome and patients’ tolerance of flexible CO2 laser in a clinic-based setting

Materials and methods: A prospective study in a head and neck oncology tertiary centre. We looked into indications, clinical outcome and satisfaction (using a validated questionnaire) in patients who were treated with flexible CO2 laser and followed up over an average of 6 month. Safety of the procedure and compliance with laser standards was undertaken before starting the study.

Results: A total of 22 patients are included in this study. Most patients had undergone either a failed approach with rigid instruments or were not fit for general anaesthesia. Clinical indications for the procedure were variable. Patients with malignant conditions were discussed in multidisciplinary team before they were offered the procedure as a last resort. Patient satisfaction was assessed after each procedure using a validated questionnaire.

Conclusion: This work is the largest to date to report use of flexible CO2 laser in a clinic-based setting. Early data would suggest that flexible CO2 laser is a versatile and feasible instrument with potential application to a range of pathologies in the head and neck. Flexible CO2 laser is a promising technology offering versatility and accuracy when compared with other traditional flexible lasers. Cost of set up might delay widespread implementation of this technology.
Benign Fibro osseous lesions (BFOL) of Head neck

S.Varshney*(1)

(1)ALL INDIA INSTITUTE OF MEDICAL SCIENCES, Dehradun, India

By definition, all BFOL possess an osseous and a fibrous tissue component. Benign fibro-osseous lesions of the head-neck are represented by a variety of disease processes that are characterized by pathologic ossifications and calcifications in association with a hypercellular fibroblastic marrow element. The definitive diagnosis can rarely be rendered on the basis of histopathologic features alone; rather, procurement of a final diagnosis is usually dependent upon assessment of microscopic, clinical and imaging features together. Fibroosseous lesions (FOL) are a group of lesions which affect the jaw and the craniofacial bones and are a challenge to pathologists and clinicians in their diagnosis and treatment. The current classification includes neoplasms, developmental dysplastic lesions and inflammatory/reactive processes. Many other lesions share the clinical, radiological and histopathological features of FOL. The common denominator to all these pathologic entities is replacement of normal bone with fibrous tissue. The identification of benign FOL and their sub classification is important because the therapeutic management varies depending on the actual disease process. The aim of this study was to analyse the spectrum of FOL and its mimickers that presented in our hospital and to study its clinicopathological aspects and treatment outcomes. A retrospective analysis of 62 cases of benign FOL and its mimickers which presented between 2010 & 2015.
Bilateral parotid sialolithiasis

G.Kharrat*(1), A.Charfi*(2), R.Ben hammouda(3), S.Mansour(1), K.Ayachi(1), A.Sethom(1)

(1)Hôpital Md Tahar Mâamouri, Nabeul, Tunisie, , Tunisia, (2)Hôpital Md Tahar Maâmouri,Nabeul, Tunisie, , Tunisia, (3)Hôpital Md Tahar Maâmouri, Nabeul, TunisieTT, , Tunisia

Introduction: salivary lithiasis is a frequent pathology, however, parotid lithiasis is characterized by a lower prevalence compared to submandibular glands. Multiple and bilateral involvement is rare. The therapeutic management of sialolithiasis has been revolutionized by the sialendoscopy which has made it possible to minimize parotidectomies and their complications.

We propose to present an original observation of a patient presenting a bilateral parotid lithiasis, to discuss epidemiological, clinical and therapeutic aspects, to show the importance of sialendoscopy.

Observation: This is the case of a 85-year-old man. He has medical history of bilateral parotid lithiasis which was operated repeatedly ten years ago by an endobuccal approach. He has presented a left painful parotid swelling for a month preceded by bilateral colic and salivary hernias of parotid glands.

Physical examination showed a large left parotid swelling with an inflammatory skin. The left Stensen's duct orifice brought back pus. The rest of the examination was normal. We practiced a cervical ultrasound which showed enlarged and heterogeneous parotid glands. Cervical computed tomography (CT) found bilateral parotid lithiasis whose diameters were equal to 11 and 4 mm respectively on the left and right sides. In addition, there were multiple intra-parotid hypodensities on the left side signing an obstructive abscessed parotitis.

The patient received a double treatment: medical and surgical

The medical treatment consisted of a triple intravenous antibiotic therapy for 7 days: amoxicillin-clavulanic acid + metronidazole + gentamycin (5 days) supplemented with amoxicillin-clavulanic acid orally for 8 days.

The evolution was satisfactory: regression of the parotid swelling, drying of the purulent endobuccal secretions.

Surgical treatment was initiated at the end of antibiotic therapy:

On the left side, we practiced a mixed approach: an external one which allowed parotid gland exposure supplemented with an endobuccal approach which consisted in catheterizing the Stensen's duct. This mixed approach made it possible to preserve the gland and to extract the voluminous lithiasis by means of a minimal incision directly above the calculation.

On the right side, calculation was extracted endoscopically by the Dormia probe.

There were no surgical complications. No recurrence of lithiasis within 6 months after surgery.

Conclusion: parotid lithiasis is an uncommon disease. Bilateral location is rare. This pathology has benefited from advances in imaging but especially in sialendoscopy. The latter plays a major therapeutic role. Surgical treatment remains indicated in case of voluminous lithiasis but must be conservative whenever possible.
Biopsy mapping in laryngeal cancer: Initial experience in Hospital Clínico Universidad de Chile

N.Cabrera*(1), L.Fernández(1), C.Aravena(1), P.Boettiger(1), R.Zamorano(1)

(1)Hospital Clínico Universidad de Chile, , Chile

Introduction: The diagnosis of laryngeal cancer is histological, after a study with flexible endoscopy and computed tomography (CT) of the neck. The biopsy can be performed with rigid or flexible endoscopy, or by direct laryngoscopy which allows biopsy mapping. The latter with great implications for staging and treatment.

Purpose of the study: To describe the clinical, radiological and endoscopic presentation and biopsy mapping results in patients with clinical suspicion of laryngeal cancer, attended at the Hospital Clínico Universidad de Chile (HCUCH) between the years 2013 and 2016.

Materials and methods: We performed a retrospective and descriptive study of a series of 12 patients with suspected laryngeal cancer, who underwent direct laryngoscopy and biopsy mapping of the larynx. The mapping consisted of a compromised vocal cord biopsy and ipsilateral band, anterior commissure and contralateral vocal cord, despite of macroscopic alterations.

Results: We examined twelve patients, of whom eleven were men with a history of smoking. The mean age was 61 years. The main symptom was dysphonia. Eight patients presented a lesion confined to a vocal cord with preserved cord mobility (T1a glottis), one patient had a T2 glottis tumor, another had a T2 supraglottis tumor and two patients had a T3 glottis tumor. Ten patients underwent neck CT, with two patients switching to T4a because of compromised laryngeal cartilage. Histological diagnosis was squamous carcinoma in eight patients, adenosquamous carcinoma in one patient, high grade dysplasia in two patients and laryngeal papillomatosis in one patient. In three of the nine patients diagnosed with carcinoma, there was a change in the "T" staging after biopsy mapping (T1a to T2).

Conclusions: Laryngeal cancer prognosis depends on initial staging and laryngeal mapping could contribute to precise T staging and subsequent treatment and survival. Although a greater number of cases are required to establish if its usefulness is significant, in our study the "T" stage changed in 30% of our patients with important treatment implications.
Bipolar vessel sealing and cutting with the marClamp / marClamp Cut IQ / marCut and the maxium system in head and neck surgery

P.Mauz*(1), J.Thiericke(2), S.Wolpert(2), S.Stannek(2), A.Kübler(2)

(1)Department of Otorhinolaryngology, Head And Neck Surgery, University Hospital Of Tübingen, Germany, Tübingen, Germany, (2)Department of Otorhinolaryngology, Head And Neck Surgery, University Hospital Of Tübingen, Germany, Tuebingen, Germany

The primary endpoint of the study was the achievement of the complete vessel sealing and cutting process. Secondary endpoints were the minimizing of UE’s i.e.reduction of secondary haemorrhage, reduction of surgery time and the reduction of costs.

There were two study arms consisting of 90 surgeries of matched cases. The KLS Martin group used the maXium® high- frequency generator, the marClamp® bipolar vessel sealing clamp, the marCut® bipolar scissors and other high frequency surgical instruments during the operations (tumor resections with neck dissection, flap plasties, thyreoidectomies). In the control group the patients were treated with conventional clamp and tie technique.

Regarding the first endpoint there was no measurable difference between operations with the marClamp®, marCut® and maXium® system and the use of the conventional methods. In terms of unrequested problems there are similarities in secondary haemorrhage between the KLS Martin group and the control group. Time savings in bipolar vessel sealing increases with surgical duration and were the highest in complex head and neck surgeries with 33,1% (p=0,0028). The reduction of the procedure time results in obvious lower personal costs and as well as in savings of material and cleaning charges.

In conclusion the safe vessel sealing and the reduction in the operating time is an improvement in the quality of treatment that can be offered to patients. Due to the significantly lowered operation time the risk of infections and the risk caused by anaesthesia by the period between incision and sewing up can be decreased.

The first results of of a new instrument, the marClamp Cut IQ, are presented. This is a new instrument for vessel sealing and cutting in the same process.

We demonstrate the safety, efficacy and reduction of operating time with this new combined instrument.
Body Mass Index: an association with TNM stage and patient outcome in pharyngolaryngeal cancer

L.Ferraria*(1), J.Vaz de castro(1), C.André(1), M.Rosa(1), C.Santos(1), J.Fonseca(1), L.Antunes(1)

(1)Hospital Garcia de Orta, , Portugal

Purpose of the study: Patients with pharyngolaryngeal cancer often suffer from malnutrition. Relationship between malnutrition, disease evolution and outcome is seldom evaluated. This study aims to investigate the influence of body mass index (BMI) and serum albumin on cancer evolution and outcome of pharyngolaryngeal cancer patients.

Methods: A retrospective study of patients with pharyngolaryngeal squamous cell carcinoma undergoing treatment between 2009 and 2014 in Hospital Garcia de Orta was conducted.

Patient files were reviewed and clinical data was documented: age, gender, TNM stage, percutaneous endoscopic gastrostomy, BMI, serum albumin, postoperative complications (pneumonia, wound infection and antibiotic change), recurrence and overall survival.

The impact of pretreatment BMI and serum albumin on the postoperative complications and overall survival was analyzed. Statistical analysis using SPSS 20.0 included Pearson’s correlation, logistic regression and Cox proportional hazards models to identify relationships between preoperative body mass index, serum albumin and postoperative outcomes. Survival analysis was performed using the Kaplan-Meier method and Cox regression model.

Results: A total of 90 patients, with male predominance (93.3%), were diagnosed with pharyngolaryngeal cancer during this period. Patients with low BMI showed a high incidence of advanced TNM stage (p=0.001). The Kaplan–Meier curve and the log-rank test demonstrated that the low-BMI group exhibited worst survival outcomes compared with the normal-BMI group, whereas the high-BMI group exhibited best survival outcomes (p=0.03). The 2-year survival rates for underweight, normal, and overweight groups were 31.3%, 51.9%, and 72.7%, respectively. In univariate analysis, BMI and TNM stage were significant predictors of overall survival (hazard ratio(HR)=0.535, p=0.011; HR=1,880, p=0.001, respectively). In multivariate analysis, BMI did not achieve significance as an independent predictor (HR=0.698, p=0.220), whereas TNM stage remained significant (HR :1,724, p=0.007).

No association was establish between albumin and poor outcome, with regard to postoperative complications or length of stay.

Conclusion: Low BMI before treatment was significantly associated with advanced TNM stage and poor overall survival in pharyngolaryngeal cancer patients. Good nutritional status is favorable to improve survival in patients with this cancer. Therefore a medical nutrition therapy protocol headed to patients with pharyngolaryngeal cancer is being established.
Bone repair after therapeutic irradiation with cells and biomaterials
F.Espitalier*(1), G.Michel(2), J.Guicheux(1), P.Weiss(2), O.Malard(2)

(1)CHU DE NANTES, Nantes, France, (2)CHU Nantes, Nantes, France

Surgery and radiotherapy are both necessary to treat squamous cell cancer of the upper aerodigestive tract. The side effects of these treatments are important. Reconstruction of the mandible bone requires a vascularized bone autograft. Complications are observed with this technique, which cannot always be performed after radiotherapy. Bone tissue engineering gives an alternative. Previous animal studies showed that an association of a bone marrow graft with a calcium phosphate scaffold was necessary to regenerate bone in irradiated areas. More recently, an association of bone marrow cells or adipose tissue cells with calcium phosphate scaffold has been performed in irradiated areas. These cells have shown better bone repair abilities than bone marrow graft in healthy bone. Furthermore, adding a lysate of bone marrow cells intravenously was performed. Bone marrow graft showed its superiority in bone repair in irradiated areas when compared to bone marrow cells or adipose tissue cells. However, the contribution of vascular fraction of adipose tissue allowed neovascularization without bone formation. Hypotheses were in favour of the trophic role of the bone marrow, through growth factors and cytokines present in the bone marrow and secreted by the cells. The addition of a lysate of bone marrow cells intravenously allowed a better new bone formation in irradiated areas. The association of bone marrow and calcium phosphate scaffold is currently the most effective filling material for bone reconstruction in irradiated areas and can be improved by adding a lysate of bone marrow cells intravenously in a rat model.
Branchial Cleft Cyst Carcinoma with Synchronous Squamous Cell Tonsill Carcinoma. Could it happen or not?

A.Marinou*(1)

(1)GENERAL HOSPITAL OF ATHENS ' GEORGIOS GENNIMATAS', Athens, Greece

Purpose: The entity of branchiogenic carcinoma has divided the scientific community and it still sparks bitter controversy among top academics. Some authors support the existence of squamous cell carcinoma arising in a branchial cyst. On the other hand, clinicians are convinced that cystic carcinomas of the neck are cystic metastases from oropharyngeal carcinomas, more specific from tonsils. Purpose of this study is to present a case of branchiogenic carcinoma with synchronous primary tonsil carcinoma and share our skepticism about this diagnosis.

Materials and Methods: We present the case of a 55-years-old male with left upper neck cystic mass of 5 months duration diagnosed as branchial cleft cyst (according to imaging and FNA results) without other clinical findings. Pathologic findings, after the surgical excision, identified a squamous cell carcinoma arising in an epithelial lined cyst, with gradual transition of benign epithelium to squamous cell carcinoma. In order to exclude the existence of a primary site elsewhere panendoscopy was performed and primary tonsil carcinoma was revealed.

Results: According to the literature, the diagnosis of a branchiogenic carcinoma should met specific criteria as these have been posed by Martin et al. and later by Khaffif et al. Our patient fulfilled the criteria about the location, the histologic appearance of the tumor without any histologic evidence about metastatic cystic mass but another primary carcinoma was identified.

Conclusion: A branchiogenic carcinoma is extremely rare and it should not be confused with cystic metastasis of squamous cell carcinoma. The question that arises is whether the histologic appearance of the carcinoma is the most powerful evidence of the diagnosis of branchial cyst carcinoma and whether another synchronous oropharyngeal carcinoma could occur. Nevertheless the approach all cystic neck lesions in an adult should be very careful and the lesions should be presumed to be cancer until proven otherwise.

Affiliation:

1. Athanasia Marinou, Otorhinolaryngologist Consultant, ENT Clinic, General hospital of Athens ‘ Georgios Gennimatas’, Athens, Greece
2. Evangelia Zacharioudaki, Otorhinolaryngologist, Director of ENT Clinic General hospital of Athens ‘ Georgios Gennimatas’, Athens, Greece
4. Irene Angelidaki, specialist Otorhinolaryngologist, ENT Clinic, General hospital of Athens ‘ Georgios Gennimatas’, Athens, Greece
BRANCHIAL CLEFT CYSTS IN QUITO, ECUADOR

Luis Pacheco-Ojeda, Andrés Ayala

ABSTRACT

Introduction. Branchial cleft cysts (BCC) are benign lesions caused by anomalous development of the brachial cleft. They more usually are found in children than in adults. This is a review of our experience of surgically treated BCC in a third level general hospital.

Materials and Methods We studied retrospectively 51 cases of histologically proven and surgically treated BCC at the Ecuadorian Social Security Hospital in Quito, Ecuador. Mean age was 31 (47 adults). Twenty-seven were females. Second branchial cleft cysts account for 45 cases. Twenty-six lesions were located at the right side, 22 in the left side and 3 in the midline. Three patients presented infected fistulae. Among imaging studies, ultrasound was diagnostic in 73% of 26 cases and computed tomography in 95% of 21.

Results. All 51 patients underwent complete resection of the lesion. Moderate scar fibrosis and temporary wound secretion were the only 2 complications. All histological reports were BCC associated in one case to ectopic salivary gland tissue.

Conclusions. BCC are uncommon lateral neck masses that can occur in the adult period of life. Clinical suspicion is important for diagnosis and surgery is a successful treatment in practically cases.
PURPOSE OF THE STUDY: Burkitt’s lymphoma is malignant non-Hodgkin’s lymphoma due to malignant proliferation of B lymphocytes. It accounts for about 7-8% of malignant tumors in 15-19 year olds. It is a rare and aggressive tumor. It is a real public health problem. Through this observation the objective is to analyze the epidemiological, clinical, paraclinical and histological aspects of the rare maxillary localization of this lymphoma in order to improve its management.

MATERIALS AND METHODS: We report a case of Burkitt’s lymphoma with maxillary localization and we discuss the epidemiological, clinical, paraclinical, histological, therapeutic and evolutionary aspects of this disease.

RESULTS: A 9-year-old child with no significant pathological history, admitted in ENT consultation for a right jugal swelling that has evolved for two months and which progressively increases in volume with onset 15 days rather than the endobuccal level of a mass Ulcer-budding occupying the right half of the hard palate and bleeding on contact. On clinical examination, it is a hard, fixed, painful mass, poorly limited with homolateral cervical adenopathies. The nasal endoscopy has objectified an inflammatory nasal mucosa with purulent rhinorrhea and an oedematous bulging of the right middle meatus. A computed tomography scan of the facial mass was performed, demonstrating a process of the maxillary sinus with lysis of the sinus walls and extension to the masseter muscle and adipose muscle of the cheek, and at the bottom destroying the lower wall of the sinus overflowing towards the oral cavity. A biopsy under general anesthesia was performed. Histopathological examination with immunohistochemical study concluded a Burkitt’s lymphoma. Chemotherapy was performed with a tumor regression of nearly 100% was noted.

CONCLUSION: Maxillary localization is rare in Burkitt’s lymphoma. The immunohistochemical study is of great interest for diagnosis. Intensive chemotherapy is the reference treatment. The prognosis is good with a cure in 80% of the cases.

AUTHORS: LACHHAB OMAR, LAASSIKRI OMAR, ALLOUCH IHSSANE, NITASSI SOPHIA, OUJILAL ABDELILAH, ESSAKALLI LEILA.
Can lymph node yield of neck dissection predict recurrence of head and neck Squamous Cell Carcinoma?

L.Langstaff*(1), S.Meghji(1), H.Limmer(1), R.Nassim(1)

(1)Norfolk and Norwich University Hospital, Norwich, United Kingdom

Purpose of study

Neck dissection is performed as part of the surgical management of mucosal squamous cell carcinoma (SCC) of the head and neck. The relevance of the total yield of lymph nodes in the pathological specimen remains controversial, as does the relevance of the ratio of pathological to normal lymph nodes in the specimen.

This study aims to assess the predictive value of lymph node yield and lymph node ratio on recurrence of SCC of the Head and Neck.

Methods

Retrospective case note review of patients treated in a single centre. The patients were identified using the pathology database of specimens labelled as neck dissection. The patients were treated between June 2011 and March 2016. The pathology report and clinic letters were used to find the lymph node status and current disease status of the patient at the time of conducting the study. A two-tailed unpaired t test was performed to compare lymph node ratios of the two patient groups.

Results

The results of 135 patients were included. That is made up of 90 cases in which no recurrence was present at the time of the conducting the study and 45 cases in which recurrence was present.

The mean lymph node ratio of the non recurrent groups was 0.05, the mean lymph node ratio of the patient group with recurrent disease was 0.06. This produced a p value of 0.61.

Conclusion

From our data set, there is a small difference in the lymph node ratio between the two patient groups but this did not reach statistical significance.

Lymph node yield and lymph node ratios remain a controversial factor in prediction of recurrence. The failure to reach statistical significance in this data set could reflect the limitations of this study and more work could still be done.
Carotid blowout syndrome in patients treated by larynx cancer.

C.Chiesa estomba*(1), A.Osorio velasquez(2), F.Betances reinoso(2), M.Gonzalez cortés(2), J.Araujo nores(2)

(1)Hospital Universitario Donostia, San sebastian, Spain, (2)Complejo Hospitalario Universitario de Vigo, Vigo, Spain

PURPOSE OF THE STUDY:
Carotid blowout syndrome is an uncommon complication for patient treated by head and neck tumours, related with a high mortality rate. The aim of this study was to study the risk of carotid blowout in a large cohort of patients treated only by larynx cancer.

MATERIAL AND METHODS USED:
Retrospective analysis of patients older than 18 years, treated by larynx cancer who developed a carotid blowout syndrome in a tertiary academic centre.

RESULTS:
197 patients met the inclusion criteria, 192 (98.4%) were male and 5 (1.6%) were female. 6 (3%) patients developed a carotid blowout syndrome, 4 patients had a carotid blowout syndrome located in the internal carotid artery and 2 in the common carotid artery. According to the type of rupture, 3 patients suffer a type I, 2 patients a type III and 1 patient a type II. Five of those patients had previously undergone radiotherapy and all patients underwent total laryngectomy. We found a statistical correlation between open surgical procedures (p=0.004) and radiotherapy (p=0.023) and the development of a carotid blowout syndrome.

CONCLUSION:
Carotid blowout syndrome is an uncommon complication in patients treated by larynx tumours. According to our results, patient underwent radiotherapy and patients treated with open surgical procedures with pharyngeal opening have a major risk to develop this kind of complication.
Carotid body tumors. Report of 215 cases

L. Pacheco-ojeda*(1)

(1)Centro Médico Oncológico, Quito, Ecuador

CAROTID BODY TUMORS. REPORT OF 215 CASES.

Luis Pacheco-Ojeda

ABSTRACT

Introduction. Carotid body tumors (CBT) are very unusual neck lesions. However, at high altitudes, they are less rarely found. This study intended to review our experience, one of the largest ever reported, in diagnosis and surgical treatment of these lesions.

Materials and Methods. Among 242 clinically diagnosed CBT, 215 tumors, arising in 202 patients (13 bilateral), were operated in Quito, Ecuador, and retrospectively studied. All patients came from the Andean plateaux. Mean age was 52.5 years (22-83); 180 were females and 22 males. Mean size was 4.21 cm (1-8cm).

Shamblin type distribution, described in 187 patients, was: Type I 29(15%), type II 118(63%) and type III 40(22%). Complete resection was performed in 209 tumors (97%). Twenty-three (11%) accidental peroperative vessel injuries were successfully repaired. Peroperative blood transfusion was used in only 16 (7.5%) surgical procedures.

Results. There was no operative mortality. Postoperative complications occurred in 59(27.5%) procedures, mostly minor and related to cranial nerve dysfunction. Seven (3%) cases were malignant.

Conclusions. A correct preoperative diagnosis of CBT is possible in practically all patients based on clinical grounds and imaging studies. A systematic surgical technique allowed us to perform a complete tumor resection in most patients, unusual operative vascular accidents, low morbidity and no mortality.
CERUMINOUS ADENOMA OF EXTERNAL AUDITORY CANAL

E.Hernandez-garcía*(1)

(1)Hospital Universitario Fuenlabrada, Fuenlabrada, Spain

Hernandez-Garcia E. , García-Peces V. , Eisenberg Plaza G., Plaza G.

INTRODUCTION

Ceruminous gland neoplasms are rare and can present a difficult diagnostic. They can be confused with external auditory canal (EAC) cholesteatoma, and other tumors. Besides there are a varied clinical and histologic manifestations of these tumors.

CASE

A 73 year-old man who is remited to our office because his doctor has seen a mass in his external auditory canal of the right ear. At the physical exploration, we observe a mass which obliterate the right canal from the posterior part. The mass is soft, opaline, and it seems that a EAC cholesteatoma. In the audiometry we observe a mixed hearing loss with PTA in 80dB with GAP of 30dB. In the left ear the PTA was 50dB.

In the CT, we can observe a mass in EAC right which displace medially the tympanum, with minimal erosions, that it seems a EAC cholesteatoma. With these diagnose, we decide to operate and perform a canaloplasty of the right ear, with a biopsy.

In the revision, we analyzed the patology and they confirm that the mass was a cerominous adenoma of external auditve conduct of high grade. We perform a CT of the neck, without adenopathies, and we decide to review the surgery with a tympanoplasty with mastoidectomy canal wall down, with severals biopsies, all negative. Actually, we review the patient each mouth without news.

DISCUSSION

Ceruminous gland adenomas are one of the external auditory canal tumors, and we had to think about it when we see a mass in the EAC. Complete surgical excision results in an excellent long-term clinical outcome.
Cervical Desmoplastic Fibroblastoma

A.Cortez*(1), T.Rivera rodriguez(1)

(1)Hospital Universitario Principe de Asturias, Madrid, Spain

Introduction:
Desmoplastic fibroblastoma is a rare benign fibrous soft tissue tumor that was described by Evans in 1995 for the first time, originated from fibroblastic and myofibroblastic cells.

Material and methods:
A 53 year old woman, who presented a right submandibular tumor of 2 months of evolution that was increasing progressively in size, without any other symptoms.

In the physical examination, we found a right submandibular tumor of 2 cm, of hard consistency and not adhered to deep planes, the rest of the exploration was completely normal.

Results:
TC scan showed a lesion of 15 mm in the right laterocervical region, in the union of the submandibular and parotid space affecting the platysma, some adenopathies were founded in the limit of normality.

Anatomopathological results of FNA under ultrasound guidance showed mesenchymal proliferation of low grade fusocellular cells compatible with nodular fasciitis.

The patient underwent surgery with the total exeresis of the tumor, without complications.

Histopathological findings describe a whitish solid lesion with poorly defined and non-encapsulated borders of 2,5 x 1,5 x 2 cm, of firm and elastic consistency, presence of benign myofibroblastic proliferation with histological characteristics compatible with desmoplastic fibroblastoma. Immunohistochemistry was positive to vimentin and total actin, with a low tumor proliferation index.

Discussion/Conclusion:
This benign tumor is rare and has a female predominance and a peak incidence in the fifth decade of life, as the case presented.

The etiology is uncertain but cytogenetic analysis showed that the lesion is clonal and harbour a t(2;11)(q31;q12) translocation.

The differential diagnosis included a wide variety of soft tissue lesions like neurofibroma, giant cell fibroma, traumatic fibroma, fibromatosis and nodular fasciitis. In the case presented, the FNA suggested a diagnosis of nodular fasciitis, the difference is that nodular fasciitis is positive to desmin and desmoplastic fibroblastoma is not.

Even though this tumor is not frequent, we should consider it in the differential diagnosis of mesenchymal tumors.
Cervical Esophagectomy for Removing Upper Esophageal Foreign Body

A. Osman*(1)

(1)Clinical County Hospital, Craiova, Romania, Craiova, Romania

The following paper presents our successful attempt in removing a foreign upper esophageal body (removable partial dental prosthetics anchored with a metal system onto the patient’s remaining natural teeth) through lateral cervical esophagectomy. The foreign body was lodged into the esophageal wall with its own grappling device and previous endoscopic attempts of removal proved unsuccessful.

The patient was transferred to our clinic with cervical and retrosternal pain and aphagya after undergoing an unsuccessful endoscopical attempt in removing the foreign body in another hospital. We made an endoscopic attempt of removing the body but on closer study realized its grappling device penetrated the lateral esophageal wall, lodging it tightly into place, thus an endoscopic retrieval would just tear open the esophagus. As the current state of the patient was degrading (iminent risk of mediastinitis) we considered another hospital transfer would be too much of a risk and decided to perform a cervical esophagectomy. The surgery was performed under general anesthesia, and the foreign body removed. The lateral wall of the esophagus was torn vertically in one spot and lacerated in another adjacent spot.

Postoperatively a nasogastric feeding tube was maintained for 20 days. A follow-up CT scan was performed 3 days after surgery without showing any inflammation in the mediastinum. Upon removing the feeding tube the patient was able to resume oral nutrition without any subjective complaints or any reminiscent pain.

Authors: Osman Andrei1, Osman Ionel1, Mitroi Mihaela1,3, Anghelina Florin1,3, Alina Căpitănescu1,3, Mioriţa Toader2

1. ENT Department, Clinical County Hospital Craiova, Romania;
2. ENT Department, „Grigore Alexandrescu” Hospital, Bucharest, Romania;
3. University of General Medicine and Dentistry, Craiova, Romania.
Cervical Ganglioneuroma: a rare cause of cervical mass in pediatric age

A.Lima*(1), M.Breda(1), D.Silva(1), D.Miranda(1), S.Ramalho(1), L.Dias(1)

(1)Hospital de Braga, Braga, Portugal

Purpose: Describe a case of a cervical ganglioneuroma in pediatric age.

Material and methods: case report, intraoperative photographic documentation and review of literature.

Results: Ganglioneuroma is a rare, benign, non-invasive tumor which usually arise from the sympathetic system. There are few published cases in pediatric age. They are most frequently located in the abdomen or thorax; only 5-8% of them occur in the head and neck region. A 13 year-old girl with a 2 year history of neck enlarging mass presented for ENT evaluation, referred by her Pediatrician. Her only complaint, besides neck swelling, was dysphagia. She had been submitted to eco-guided biopsy, which had been inconclusive. On physical exam, she presented with medial bulging of the right lateral pharyngeal wall, accompanied by cervical right swelling. MRI showed a mass of 6 cm in diameter centered in the right carotid space, extending to the skull base. A transcervical surgical approach was used to excise the tumor under general anesthesia; the mass arose from the sympathethic chain. Post-operatively the patient developed temporary Horner's syndrome, with full recovery. Histology was compatible with a ganglioneuroma.

Conclusion: The only definite treatment of cervical ganglioneuroma is surgical excision, which prevents further grow and compression of the neighboring structures. It is also the only way to confirm the diagnosis. These tumors are usually not agressive. Injury during surgery may result in significant morbidity, such as lesion of vascular and neural structures, occasionally leading to Horner's syndrome.
Cervical schwannomas: report of a series of cases

L.Fernandez-vañes*(1), F.López(1), J.Rodrigo(1), P.Garcia-cabo(1), D.Pedregal(1), S.Reda(1), J.Llorente(1)

(1)Hospital Universitario Central de Asturias, Oviedo, Spain

Purpose of the study: Schwannomas are uncommon tumors that arise from the Schwann cells that cover the peripheral nerves. They are benign, encapsulated, and generally slow growing tumors. A third of the solitary schwannomas appear in the head and neck region, being the vestibular ones the most frequent. Although they can arise from any nerve, schwannomas originated in cervical nerves (not spinal nerves) are infrequent. The most common clinical presentation consists of an asymptomatic neck mass and malignant transformation is rare. They are most frequently diagnosed in adults between 30 and 50 years of age. The gold standard treatment is the complete surgical excision. The aim of the study is to describe the features of the cervical schwannomas and the results obtained in our centre.

Materials and Methods: We performed a retrospective study of 14 cases of cervical schwannomas treated in our institution from 2003 to 2016.

Results: The case series consists of 5 male (36%) and 9 female (64%) with a mean age of 47 years. In 6 cases (43%) the vagus nerve was the origin of the tumor, in another 7 (50%) it was the sympathetic chain and there was one case (7%) of a schwannoma arising from the descendant root of the hypoglossal nerve.

The most common clinical presentation of sympathetic schwannomas was as a neck mass, and in the case of vagal neuromas patients also presented with persistent dysphonia. Other symptoms included neck pain, otalgia and paresthesias. All patients were treated by surgical excision through a transcervical approach, and the resection was complete in all cases.

The most frequent postoperative sequelae were Horner’s Syndrome and first bite sSyndrome in the case of sympathetic neoplasms, and vocal fold paralysis in vagal schwannomas. There were no recurrences.

Conclusion: Schwannomas are a challenge for otolaryngologists due to the difficult preoperative diagnosis, as a result of their low frequency and non-specific symptoms. The ideal treatment consists of the most conservative surgical excision possible, as they are slow growing tumors with rare malignant transformation. However, due to their origin, preservation of nerve function (specially in the case of vagal schwannomas) after surgery is infrequent.
Cervico-pharyngeal chordoma: clinical case

S.Sousa*(1), M.Rocha(2), M.Carvalho(3), G.Pereira(3), J.Marques dos santos(3)

(1)Centro Hospitalar Tondela-Viseu, , Portugal, (2)Centro Hospitalar Tondela-Viseu, Viseu, Portugal, (3)Centro Hospitalar Tondela Viseu, Viseu, Portugal

Introduction: Chordoma is a bone neoplasm derived from the remains of the embryonic notochord, which can affect the skull base and the axial skeleton. It is an uncommon disease, representing less than 4% of the primary bone tumors. Usually presents slow but very aggressive growth and, predictably unfavorable outcome. Predominantly sacrococcygeal (50-55%) and occipital (30-35%) located, cervical chordomas constitute less than 10% of these tumors. There’s a predilection for the male gender with a 2:1 ratio and the incidence peak occurs between the fourth and sixth decades of life. Due to its destructive behavior and the high recurrence rate, the treatment of choice is the complete surgical resection, associated with proton radiotherapy in the persistent cases or tumoral relapse.

Material and methods: Presenting a clinical case of cervico-pharyngeal chordoma from the Department of Otorhinolaryngology-Head and Neck Surgery of the Tondela-Viseu Hospital Center.

Results: Review of literature. Case description, including diagnostic and therapeutic intervention.

Discussion/ Conclusion: The rare incidence of chordomas on the cervical region, especially with pharyngeal projection, and the difficulty in establishing a differential diagnosis with other regional neoplasms can delay the timely treatment.

The physician should be alert to the possibility of this neoplasm in order to institute an insightful investigation leading to an early diagnosis and, therefore, a correct and timely surgical intervention, which constitute crucial factors for a better prognosis.
Clinical Consequences of SDHB mutations in Head and Neck Paraganglioma Patients

J.Rijken*(1)

(1)VUMC, Amsterdam, Netherlands

Purpose of the Study:
SDHB mutations predispose to hereditary paraganglioma syndrome and have been associated with a higher risk of extra-adrenal paraganglioma and metastatic disease. Here we evaluate the outcome and associated risks of SDHB-linked head and neck paraganglioma patients.

Methods:
In a nationwide retrospective study, SDHB mutation carriers in The Netherlands were identified through clinical genetics centers. Patients were evaluated according to structured protocols comprising physical, biochemical and radiological screening for paragangliomas and associated tumors. Patients with at least one head and neck paraganglioma (HNPGL) were included in this study.

Results:
We identified 54 SDHB-linked HNPGL patients in The Netherlands, with a total of 62 HNPGLs, carrying 21 different SDHB mutations. Sixteen patients (30%) had a positive family history, 38 (70%) presented with a negative family history. The most prevalent location was the jugular foramen (25 tumors). Eight patients had multiple HNPGLs (15%). Only 3 patients developed a malignant paraganglioma (6%). Three HNPGL patients were diagnosed with non-paraganglionic tumors: a pituitary microprolactinoma, a melanoma and low-grade Non-Hodgkin lymphoma. In total, 27 patients had an operation for their HNPGL and 15 patients received radiotherapy. In 12 patients a policy of watchful waiting was opted for. Of the patients that underwent surgery 17 patients showed no evidence of disease at the end of follow-up. Thirty-one HNPGL patients were alive with disease at the time follow-up ended. One patient died of the disease. Five patients were lost to follow-up. A major determinant for the choice of treatment appeared to be tumor location and size.

Conclusion and recommendation:
We recommend genetic counseling and DNA testing for all HNPGL patients, also in case of solitary tumors or a negative family history. Identification of the causative gene is important, because different paraganglioma-associated genes confer different clinical risks and may warrant different management strategies. If a pathogenic SDHB mutation is identified in HNPGL patients, the clinician should be aware of the variable manifestations of the SDHB-linked tumor syndrome.
Clinical significance of orbital invasion in maxillary squamous cell carcinoma

Y.Rho*(1), M.Park(2), J.Park(1), O.Kwon(1), K.Kwon(1)

(1)Ilsong Memorial Head and Neck - Thyroid Cancer Hospital, Hallym University Medical center, Seoul, Korea, South, (2)Ilsong Memorial Head and Neck Thyroid Cancer Hospital, Hallym University Medical Center, Seoul, Korea, Seoul, Korea, South

Purpose: Pre-operative radiologic evaluation of the extent of orbital invasion in maxillary squamous cell carcinoma is very important in planning curative surgery. The aim of this study was to examine the treatment outcome of maxillary squamous cell carcinoma according to orbital invasion and to investigate the accuracy of pre-operative radiologic evaluation with computed tomography(CT) and magnetic resonance(MR) image for the extent of orbital invasion in maxillary squamous cell carcinoma.

Methods: A retrospective study was conducted with patients who received total or radical maxillectomy with or without craniofacial resection for maxillary squamous cell carcinoma in our institution. A radiologist re-reviewed pre-operative CT and MR image without any information of pathologic report. We compared extent of orbital invasion of the pre-operative image with those of intra-operative or post-operative pathologic findings.

Results: Seventy-one patients were evaluated, including 51 men and 20 women. The median age was 57.6 years old. The majority of patients presented with T4 (59%), N0 (90%) disease. The 5-year overall survival and disease-free survival rates were 55.9% and 52.2%, respectively. The 5-year disease free survival rate was not significantly different according to pathological orbital invasion(33.9% vs 55.5 %, p = 0.14), 5-year local control rate was significantly higher in patients without orbital invasion(53.6% vs 64.8%, p = 0.02). Of the 33 patients who showed suspicious orbital invasion in pre-operative image, pathologic findings revealed no periorbital involvement in 35 patients(49%), periorbital involvement without orbital fat or muscle involvement in 19 paientes(27%), and orbital fat or muscle involvement in 17 patients(24%). There was no significant difference in recurrent rate between orbital preservation and exenteration(13% vs 20%, p=0.21). The ocular function preservation rate of orbital preservation in suspicious orbital invasion of pre-operative image was 88%.

Conclusion: The orbital invasion in maxillary squamous cell carcinoma may be a poor indicator of local control but not overall survival and preservation of orbit may not increase the recurrence rate. In addition, the careful evaluation of orbital extension is needed when planning curative surgery for maxillary squamous cell carcinoma because of limitation of pre-operative evaluation for orbital invasion.
Clinicopathological features and surgical management of head & neck paragangliomas: a single institution experience

M.Kmeid*(1)

(1)Lebanese University, , Lebanon

Abstract

Background: Paragangliomas are rare neoplasms of the head and neck. They arise from the paraganglia, clusters of neuroendocrine cells related to the great vessels of the head and neck. Although surgical excision is the gold standard for treatment, some controversy remains regarding management of complicated cases and the role of other treatment modalities such as radiotherapy and embolization. Furthermore, some authors advocate for partial or subtotal tumor resection in an effort to minimize postoperative cranial nerve injury.

Objective: To describe the clinical characteristics, histopathologic findings, surgical management and outcomes of patients diagnosed with a head and neck paragangliomas in a tertiary care center in Lebanon.

Methods: We conducted a retrospective chart review of patients with head and neck paragangliomas managed at Sacré-Cœur hospital, Lebanon for the past 10 years. Data reported included demographics, clinical presentation, histopathologic findings and course of treatment. Descriptive statistics were utilized and data was tested for the presence of correlations.

Results: 21 patients were identified from July 2005 to July 2015. 9 patients (43%) were diagnosed with glomus jugulare, 5 cases (24%) glomus tympanicum, 4 cases (19%) carotid paraganglioma and glomus vagale was found in 3 cases (14%). Only 1 case exhibited systemic secretory function resulting in episodic hypertension. All cases were sporadic. All patients had a single unilateral tumor localized to the head and neck. All patients underwent preoperative embolization and complete surgical excision was achieved in all cases. No intraoperative complications were noted. However, mild cranial nerve dysfunction (IX, X and XII) was reported in 5 patients (24%) postoperatively. Patient follow up was carried and was based on clinical evaluation and varied according to patients from 1 to 10 years. Tumor recurrence was seen in only 1 patient and was therefore referred for radiotherapy.

Authors: Michel Kmeid1, Selim Nasser2, Jade Nehme1, Antoine Nehme1, Elie Azar1, Nabil Moukarze1

1. Lebanese University, Beirut, Lebanon
2. Lebanese American University, Byblos, Lebanon
Cluster or coincidence? Association of Mycoplasma hominis and head and neck squamous cell carcinoma.
S.Atallah*(1), C.Hoffmann(2), V.Laurence(3), C.Fieschi(4)


Introduction
Beside HPV infection, there is currently no evidence of association between head and neck squamous cell carcinomas and microbial infections. Here we report the first case of a cervical squamous cell carcinoma with unknown primary, HPV negative but colonized by Mycoplasma hominis (M. hominis).

Case report
A 20-years-old woman, consulted for a swelling on the left side of her neck. Clinical examination found a large painless fixed mass and no fever. Biological tests found no evidence of infection. CT scan revealed a 10cm mass with a hypodense core and a peripheral enhancement invading the cervical muscles and surrounding the carotid artery. Biopsies of the cervical lesion diagnosed an HPV negative squamous cell carcinoma. Microbiological tests with two different techniques of 16sRNA identification showed the presence of M. hominis in the 3 specimens. An MRI, a TEP-CT and a left tonsillectomy were unable to identify a primary tumor. A second biopsy was performed and confirmed this unexpected diagnosis of unresectable cervical squamous cell carcinoma with unknown primary infected by M. hominis. The patient was treated by induction chemotherapy associated to antibiotherapy, followed by chemo-radiotherapy.

Discussion
16sRNA gene technique is a new reliable and reproducible technique of bacteria identification. In this case, this technic identified M. hominis in a cervical head and neck squamous cell carcinoma. This pathogen is usually isolated from the urogenital tract.

Rates of oropharyngeal colonization ranging between 6% and 14% have been previously reported, without being necessarily associated with sore throat or other upper respiratory diseases. M. hominis infections, particularly extragenital infections, are probably underdiagnosed for 3 main reasons: (i) the test is not performed, (ii) culture technique is difficult and long, and (iii) 16sRNA is not routinely used. Although pathogenic relation between cancer and M. hominis isn’t established, this bacteria is found in 50% of prostate cancers and some recent studies suggest that it could be an oncogenic factor through epigenetic mechanisms.

The present case suggests that oropharyngeal infection by M. hominis might be more frequent than expected, that 16sRNA is an efficient technic to isolate this pathogen and finally that further studies are required to document its potential oncogenic role in head and neck squamous cell carcinomas.
COCAINE ABUSE, A CONFOUNDING FACTOR IN THE DIFFERENCIAL DIAGNOSIS OF SEVERE EPISTAXIS

M.Boavida*(1), M.Gião(2), D.Raposo(2), L.Barbosa(2), C.Adónis(2), F.Freire(2)

(1)Hospital Professor Doutor Fernando Fonseca, Lisboa, Portugal, (2)Hospital Prof. Doutor Fernando Fonseca, Lisboa, Portugal

Introduction:

One of the possible side-effects of cocaine is epistaxis. The mucosal damage induced by cocaine is multifactorial, with the vasoconstrictive effect of the drug thought to be the most important factor. The aim of this work is to present the clinical case of a young woman with recurrent episodes of severe epistaxis and a history of cocaine abuse.

Clinical Case:

We present the case of a 27 year old woman who came to the Urgency Department complaining of asthenia, dizziness and recurrent episodes of epistaxis from the right nasal cavity (6 months evolution). She denied other nasal symptoms or bleeding from other sites. At physical examination she wasn’t bleeding, and she had no abnormal findings on the anterior rhinoscopy or nasal flexible endoscopy except of a very friable mucosa in the right nasal cavity. She performed a CT scan of the paranasal sinuses, with no abnormal findings. Blood works revealed severe anemia (Hb 4.6 g/dL). The other results were consistent with iron deficiency. She was a regular tobacco and marijuana user, and occasional cocaine user (preferential inhaling in the right nasal cavity). She was hospitalized, and received blood transfusions and iron and folic acid supplements. She needed nasal packing to control bleeding. She was evaluated for bleeding diathesis disorders, but these tests were normal. After a few days, she had stable blood pressure and heart rate and a growing Hb value (8.6 g/dL) and she was discharged, despite persistent mild bleed. As an outpatient procedure and because bleeding persisted after stop consuming cocaine, she was submitted to an endoscopic nasal evaluation, under general anesthesia. During this procedure, a small mucosal irregularity of the head of the right inferior turbinate was found and excised with an electrocautery. The histopathological examination revealed an appearance consistent with angiosarcoma.

Conclusions:

There are no reports in literature of the association between cocaine abuse and angiosarcoma. Angiosarcoma is a very uncommon high-grade malignant vascular neoplasm. In such a case, one could fall for a stereotype and fail to recognize the true nature of the patients’ illness.
Combined sialendoscopic and external approach for management of salivary gland obstructive diseases.

E.Busto*(1), M.Patrucco(2)

(1)Hospital Italiano de Buenos Aires. Argentina, Ciudad de buenos aires, Argentina, (2)Hospital Italiano de Buenos Aires, Buenos aires, Argentina

Introduction:

Traditional treatment of large stones of the salivary glands (parotid and submandibular) involves the removal of the gland with subsequent morbidity associated with the procedure. The sialendoscopy has meant a breakthrough in organ preservation because it allows using a minimally invasive procedure, diagnose and treat obstructive salivary diseases secondary to alterations in their ducts.

However sialendoscopy procedure has a success rate of about 80%. In the remaining 20%, the procedure fails due to the large size of the stones or long stenosis.

Combined endoscopic and external approaches constitute a therapeutic alternative in such situations.

Objective:

Analyze the benefits of conservative treatment of parotid and submandibular gland in large stones localized in main duct, secondary and tertiary canals.

Study Design:

Retrospective and observational study

Place of application: Hospital de la Policia Federal Argentina Churrusa-Visca and Hospital Italiano de Buenos Aires. Argentina.

Patients

Twenty eight Combined, Endoscopic and External or Intraoral Approach, were performed in 26 patients, diagnosed with large stones/stenosis of major salivary glands, evaluated in both institutions between December 2012 and October 2016.

Methods

It was considered large stones, those with greater than 5mm in size. In all cases the initial endoscopy was performed to define behavior. It was included another patient with a 4 mm calculi, located in a tertiary submandibular duct. The combined procedures used were: endoscopic / external and endoscopic / intraoral.

Results

The stones´ removal, preserving the gland, was performed in 23/26 patients. In three cases submandibular gland resection was performed, one of them with a history of submandibular abscess, and the others two with multiples and big stones. No complications associated with the procedure were recorded. In two patients were necessary a second endoscopic procedure, due to parotid stones. No symptomatic recurrence was observed in the other twenty four patients. Optimal cosmetic results.

Conclusions
The combined endoscopic and external approach represents a new treatment for large salivary stones and duct strictures of both, the parotid and the submandibular glands.

This operation results in a significant reduction of the number of salivary gland removals.

The sialendoscopy emerges as a good alternative to conventional surgery in the treatment of obstructive pathologies of the salivary glands. It usually prevents the glandular excision.

The procedure should be performed by surgeons with surgical expertise, to turn it in a classical approach of the gland when necessary, and with the ability to resolve potential complications.
COMPARISON OF PENETRATING NECK INJURY MANAGEMENT IN COMBAT VERSUS CIVILIAN TRAUMA: REVIEW OF 55 CASES

S. Ballivet de régoix*(1)

(1) Military Training Hospital Percy, Clamart, France

Purpose of the study. Penetrating neck injuries are more common in military setting. Their management has evolved since World War II. The objective of this retrospective study was to describe a case series of penetrating neck injury and to compare their management in combat versus civilian trauma.

Materials and methods used. From 2012 to 2014, all military and civilians referred to the Military Training Hospital Percy for a penetrating neck injury were analyzed. It was noted the mechanism of injury, the type and the seat of the lesion, the initial emergency management, the sequelae and the duration of hospitalization and follow-up.

Results. Among the 55 patients, 26 were wounded in action and 29 were civilians. Penetrating neck injuries were commonly related to assault (56%) by stab wounds (57%). Anatomical zone II was the most affected area, and the central neck compartment. The most frequently affected organ was the larynx. 74% of patients underwent Computed tomography angiography, surgical exploration was performed for 42% of patients, and one third of patients required an initial intensive care unit monitoring. The differences between the two groups (military and civilians) in terms of medical care were not statistically significant. No sequelae were observed. Mortality was 11%, mainly military patients (n = 5/6).

Conclusion. In France, the current management of patients is similar between military wounded in action and civilians. The surgical exploration is less common thanks to the use of CT angiography, which is a fast and minimally invasive imaging modality to evaluate penetrating injuries of the neck for stable patients. It improved detectability of vascular injuries and extravascular injuries. The classification by penetration site in terms of the compartment (central and lateral) seems more relevant than the old classification by anatomical zones (I, II and III) when you have to decide a surgical exploration, particularly in the lack of CT-scan.
Comparison of Tumor volume and Thickness as predictors of nodal metastasis and survival.

P.Chaturvedi*(1)

(1)tata Memorial Hospital, Mumbai, India

Background : Tumour(T) stage is an important predictor for nodal metastasis But T stage as defined by AJCC fails to represent the true three-dimensional volume of primary tumors. As a result, superficial tumors with a favorable prognosis are fallaciously clubbed together with unfavorable, deeply infiltrating lesions in the same stage. There is no available literature comparing T stage, tumour volume(TV) and tumour thickness as a prognostic factor for nodal metastasis and extracapsular spread in the same group of patients, we have compared these three parameters in the same group of patients. This might help us to decide which of them is a better predictor of nodal metastasis, ECS and survival.

Methodology : 588 treatment naïve tongue cancer patients operated between 2007-2010 were included in the study. Multivariate analysis was done using binary logistic regression. As tumour thickness is a component of tumour volume, two different models of logistic regression were made. One model had tumour volume and the other model had tumour thickness along with other factors significant on univariate analysis. Comparison among these two models was done using -2 log likelihood ratio, Nagelkerke R Square and overall percentage. In addition to this, Nomogram was developed for both these models. ROC based on these nomogram was generated for both these models and compared. C -index - generated to quantify predictive accuracy of T stage, thickness and tumour volume for survival.

Result: The median age was 47 yrs (20-80 yr) with male to female ratio 2.5:1. Majority of the patients were T2(47.4%). Node positivity was seen in 53.23% and Extracapsular spread was seen in 34.9%. The two model were compared using Nagelkerke R Square, -2 log likelihood, overall percentage and accuracy, we found almost similar values for Thickness model and tumour volume model. Even difference between AUC for TV and thickness ROC was not significant. As far as disease free survival is concerned, C index was highest for Tumour volume(0.61), followed by thickness(0.60) and T stage(0.59). For overall survival, c index was equal for tumour volume and thickness (0.69) followed by t stage(0.64)

Conclusion: Thickness and Volume are equal in prediction of nodal metastasis, extracapsular spread and survival. As per C Index , Thickness and Volume are better predictors of DFS and OS than T stage.
Computed tomography predicts occult cervical lymph node metastasis in oral squamous cell carcinoma

Y.Lin*(1), C.Lin(1), L.Chan(1)

(1)Department of Otorhinolaryngology-Head and Neck Surgery, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Kaohsiung, Taiwan, , China, Republic of (Taiwan)

Purpose

This study aimed to investigate the effectiveness of computed tomography (CT) to predict occult cervical lymph node metastasis in oral squamous cell carcinoma, and to propose a suitable surgical plan for elective neck dissection.

Material & methods

A total of 119 patients were enrolled in this retrospectively study. All of the patients underwent primary cancer wide resection and elective neck dissection, even with clinically nodal-negative neck.

Result

Out of 119 patients, 113 (94.96%) were males and 6 (5.04%) were females, whose ages ranged from 33 to 86 years, mean age of 54.77 years. They were grouped to four subsites, including tongue, buccal, gum, and others (lip, mouth, hard palate, and retromolar trigone), to compare the occult neck metastasis rate. The sensitivity and specificity of CT were 66.77% and 88.16%, respectively in this study. Both were similar to that found in the literature.

In respect to primary tumor site, the nodal status on CT of the “others” group showed significant false negative (cN0, pN+) rate, compared with tongue, buccal, and gum groups (p=0.026). Classification using the cut-point of 1.5 cm for cervical lymph node provides more accurate risk stratification of pathological positive node (AUC=70%).

Conclusion

Tumor site, as well as lymphovascular invasion, perineural invasion, extracapsular spread, and histopathologic grade, has significant higher pathologic nodal positive rate. However, oral cavity except tongue, buccal, and gum sites, has significant nodal false negative rate on CT and it should be kept in mind to prevent patient from undertreating.
Cribiform Adenocarcinoma of the Tongue and Minor Salivary Glands occurring in the larynx: an uncommon entity in a rare location

A.Pinto*(1), Â.Reis-rego(1), M.Santos(1), F.Rosa(1), T.Soares(1), C.Sousa(1)

(1)Centro Hospitalar do Porto, Portugal

Purpose of the study: To present a unique clinical case of Cribiform Adenocarcinoma of the Tongue and Minor Salivary Glands (CATMSG) occurring in the larynx.

Materials and Methods: Clinical records of the patient in question were analysed and a bibliographic review on the subject was performed.

Case Report A 58-year-old male patient presented with a 3 month progressive dysphonia associated with occasional mild dyspnea and stridor. Physical examination showed a smooth submucosal bulging of the right aryepiglottic fold and false vocal cord that obliterated the ipsilateral vocal fold. Paralysis of the right hemilarynx was observed. No ulceration or other mucosal alterations were described. Computed tomography scan was carried out and corroborated the findings in indirect laryngoscopy showing a transglottic infiltrative lesion affecting the pre-epiglottic fat and the subglottic space circumferentially. Marked infiltration of laryngeal cartilages (mainly thyroid and cricoid) causing dysmorphia and destruction with probable extra-laryngeal extension was noteworthy. The patient underwent tracheostomy and transoral biopsy that showed mild dysplasia. Taking into account the clinical and imaging alterations a total laryngectomy and bilateral cervical neck dissection with intraoperative extemporaneous examination was performed. Final histopathologic diagnosis was CATMSG with metastasis in two lymph nodes. Patient received adjuvant radiotherapy and up to this date there is no evidence of recurrence or metastatic disease.

Discussion and Conclusions: CATMSG is a relatively recent described tumour, which shares some similarities with polymorphous low-grade adenocarcinoma and papillary thyroid carcinoma but shows distinct histopathologic features that are now largely accepted and confirm it as a distinct entity.

We present the second case of this rare tumour described in literature at this location so far. The other case refers to an 11 mm tumour in the epiglottis with apparent invasion into the cartilage but without cervical lymph node extension. Of the 31 remaining published cases, the majority was located in the tongue (n=21).

Each of these tumours showed invasive margins and in most cases infiltrated the muscular layer of the tongue and/ or adjacent tissues. Lymphovascular invasion was observed in a third of cases. Care should be taken when biopsing these lesions to ensure proper collection of material for definite histological diagnosis.

The indolent behaviour of CATMSG associated with early metastatic disease seen in most cases makes it a unique neoplasm among all low-grade salivary gland tumours.
Cystic lymphangioma of neck in adult - a case report

Y.Kaurani*(1)

(1)sn mc, , India

Purpose of the study- The purpose of this case report is to present a case of cystic lymphangioma of neck in adult, which has been removed surgically.

Material and method used- A 34 years old gentleman presented with left side neck swelling for 10 months. The swelling was gradually increasing in size and painless. During examination a swelling of 4×3 cm cystic seen in left side of neck which was normothermic, non tender, cystic in consistency. The swelling was not adherent to skin.

Results- Ultrasonography was suggestive of cystic lymphangioma and MRI was done which was also suggestive of cystic swelling of neck. Excision of the swelling was done. The histopathological report revealed cystic lymphangioma of the neck.

Conclusion- A case of excised cystic lymphangioma of neck in adult is presented. Cystic lymphangioma are developmental malformation of lymphatic tissues. Lymphangioma are often present at birth and diagnosed before the age of 2 years. Lymphangioma occurs rarely in adults. Very few cases are noted in the literature. This case suggest to consider lymphangioma as differential diagnosis in lateral neck mass and also to corroborate the preoperative diagnosis with imaging and cytological study.

Author- Dr. Yogesh kaurani

Resident, Department of ENT, Dr. SNMC
Deep Neck Infections in Cervical Injection Drug Users

S.Ovnat tamir*(1), T.Marom(2)

(1)Edith Wolfson Medical Center, Holon, Israel, (2)Assaf Harofeh Medical Center, Zerifin, Israel

Objectives: To characterize deep neck infections (DNIs) in adult intravenous drug users (IDUs) who injected illicit substances into their neck, in comparison to DNI in non-IDUs.

Methods: Study design: Retrospective cohort study. Data were retrieved from medical charts of adult DNI patients in a secondary hospital during 2000 to 2013. Clinical, radiologic, and microbial data were extracted and tabulated following categorization into 2 patient groups: IDUs and non-IDUs.

Results: Of the 136 patients identified with DNI, 20 (15%) were IDUs; of them, 80% were men. IDUs were significantly younger than non-IDUs, mean age 35 ± 10 versus 44 ± 16 years, P = .01. All IDUs had multiple comorbidities. IDUs presented for medical examination and hospitalization later in the course of their disease, and the most common involved neck spaces were consistent with areas where cervical injections are commonly performed. Abscess formation was more common in IDUs than non-IDUs, 16 (80%) versus 79 (68%), respectively, P = .04. Despite later presentation of IDUs and their higher rate of comorbidities, laboratory data, microbiology cultures, and disease course were nearly similar to non-IDUs.

Conclusions: Although IDUs and non-IDUs differ in DNI presentation, both groups had good outcomes. DNI in IDUs frequently evolved into abscesses, and most were found in the anterior triangle deep to the sternocleidomastoid muscle (SCM), posterior triangle and anterior triangle superficial to SCM, in concordance with the injection sites.
Depression in head and head and neck cancer patients undergoing surgical treatment

N. Hassan*(1)

(1) Shaheed Mohtarma Benazir Bhutto Medical College, Karachi, Pakistan

Purpose of Study:

Depression is an important condition in HNC patients often remains under diagnosed and leads to major problems in these patients like non-compliance to treatment.

There are multiple causes which may include diagnosis of cancer itself, treatment, pain, and disfigurement.

With this study we aimed to determine the frequency of depression in post-surgical head and neck cancer patients.

Methods:

To screen these patients different structured diagnostic instruments are available. We used HADS, as it was designed originally as a screening test, and was meant to be used with medically ill populations and it was also validated in URDU.

HADS score more than 11 which shows a depressed patient

Study Design:

Cross-sectional

Setting:

Section Otolaryngology, Aga Khan University Hospital

Subjects:

Biopsy proven SCC

96 patients participated in the study the questionnaire was filled pre and post operatively and results were compared.

Results:

The mean age of patients was 44.85 years +13 (range 22 years to 82 years); there were 72 (75%) males and 24 (25%) females. The frequency of depression in post-surgical HNC patients was found to be 53.1% and worsens in patients with, large tumor size, some specific sites involved by tumor. In an attempt to look for the relationship between presence of depression with different variable we came up with the finding that size of tumor of more than 6 cm is significantly associated with the presence of depression as out of 27 patient with tumor size more than 6 cm 19 had post-operative depression. Similarly the involvement of bone and skin is also significantly associated with the presence of depression.

Extent of surgery also had its impact on depression and all 8 patients underwent laryngectomy developed depression this is mentioned. Per-operative gastrostomy does not had any influence on development of depression shown in table but reconstruction whenever needed had a significant impact on development of depression.

Conclusion:
The frequency of depression in head and neck cancer patients post operatively is 53.1% in our region.
Desmoid Fibromatosis of the neck: a double case report

O.Borbényi*(1)

(1)University of Debrecen, Faculty of Medicine, Department of Otorhinolaryngology and Head and Neck Surgery, Hungary

Purpose of the study: Desmoid fibromatosis is a rare, locally aggressive, non-metastasizing mesenchymal neoplasm with various growth patterns and high recurrence rate. While total surgical removal has remained the first-line therapeutic method, non-surgical therapies can give an alternative to advanced staged diseases. Two middle-aged female patients are presented, who both were diagnosed with advanced stage of desmoid fibromatosis infiltrating vital structures.

Materials and methods used: After histological sampling with H&E staining the first patient was diagnosed with desmoid fibroepithelioma (desmoid fibromatosis). She underwent chemoradiotherapy: the chemotherapy was based on the combination of Ifosfamide, Doxorubicin and Cisplatin between Cycle I. to Cycle IV. In Cycle V and VI. the drugs were interchanged for Methotrexate and Vinblastine. Tamoxifen and Sulindac were also applied. 3 months later following the chemotherapy the neck and the upper mediastinum were irradiated with a total dose of 40 Gy. In the case of the second patient after tissue sampling the diagnosis by H&E staining was desmoid fibromatosis, which later was confirmed by immunohistological staining with β-catenin and Cyclin-D1. Debulking surgery was performed due to the involvement of vital structures. Postoperative irradiations were given after surgery, in a total dose of 60 Gy.

Results: In the case of the first patient the tumor mass which infiltrated the paratracheal, parapharyngeal space, aortic arch and mediastinum has shrunk half of its size. The follow-up period was 10 years, CT scans showed the mediastinum was tumor free. The second patient’s tumor has infiltrated the right supraclavicular fossa, deep cervical muscles and spread under the scapula. After debulking surgery and radiotherapy the tumor showed no further progression, the size of the tumor decreased by 80%. During the 2 years follow-up period the tumor mass was found to be a scar tissue.

Conclusion: Total surgical removal of tumors in the head and neck region is not always possible due to the proximity of vital structures. In these cases radiotherapy or complex radiochemotherapy can give good results according to our experience.

Dr. Olivér Borbényi

Dr. György Pfliegler PhD.

Dr. László Tóth PhD.

University of Debrecen, Faculty of Medicine, Department of Otorhinolaryngology and Head and Neck Surgery. Chairman: Dr. László Tóth, M.D., PhD.

University of Debrecen, Faculty of Medicine, 2nd Department of Internal Medicine, Division of Rare Diseases. Head of Division: Dr. György Pfliegler, M.D., PhD.
Development of a novel method for rapid detection of head and neck cancer using activatable fluorescent probes for aminopeptidase

M.Yoshida*(1)

(1)Department of Otolaryngology and Head and Neck Surgery University of Tokyo, , Japan

Purpose: For the improvement of the mortality rates of head and neck cancer, detection of tiny cancer at early stage, or accurate intraoperative diagnosis of tumor lesion are important. Recently, a novel method for rapid cancer detection using fluorescent probes for various aminopeptidase has been developed. At first, these probes are colorless and no fluorescent, but turn to be highly fluorescent by the cleavage of amino acid by the enzymatic reaction of aminopeptidase.

We applied these several fluorescent probes for aminopeptidase to head and neck cancer, aiming to establish a novel method for detecting head and neck cancer by fluorescent imaging.

Materials and Methods: Surgically resected tissues of head and neck cancer were used in this study. Within several hours after resection, fluorescent probe was applied to resected tissue by topically spraying, following the fluorescent imaging study by the imaging system.

Result: Of various probes for aminopeptidase, we find that probes for dipeptidyl peptidase-4 (DPP-4) and gamma-glutamyltranspeptidase (GGT) are useful to detect head and neck cancer. Increase of fluorescent intensity is so rapid that fluorescence enough to detect cancer tissue is obtained within several minutes and on the other hand, almost no fluorescence is observed in normal epithelium.

Conclusion: We expect this novel method will be widely used in the future for detection of head and neck cancer in various ways such as cancer screening by fiberscope, and intraoperative decision of surgical margin.
Dexmedetomidine reduces surgical complications in major head and neck surgery

C. Joseph*(1)

(1) Sandton Head and Neck Forum, Johannesburg, South Georgia & South Sandwich Islands

Purpose of study:
Determine the role of Dexmedetomidine in patients undergoing major head and neck procedures.

Materials and methods:
A retrospective study of 497 consecutive surgeries was undertaken. 3 separate groups were identified namely 146 patients (group 1) who did not require ICU care post operatively (ward patients), 351 required ICU care of these 286 (group 2) were given Dexmedetomidine, 65 patients (group 3) were admitted to ICU without Dexmedetomidine.

Dexmedetomidine is a specific alpha 2 adrenoceptor agonist approved by the FDA for cardiac surgery and ICU sedation. The potential advantages of Dexmedetomidine in head and neck surgery are: respiratory sparing, sedated and awake, analgesia and sympatholytic (lowered blood pressure).

Both ICU groups had similar profiles for pathology, age and male/female ratios. The difference between these groups was whether Dexmedetomidine was administered (286 cases) or not (65 cases). The ward group of patients did not receive Dexmedetomidine. All surgery was performed by one surgeon (author).

The overall complication rates were analysed.

The 2 similar ICU groups (either given Dexmedetomidine or not) are compared to evaluate possible factors affecting the complications rates. This was also compared to the complication rates of the ward patients where no Dexmedetomidine was given.

Results:
The overall complication rate was 3.0%. Operative mortality was 0.2% (1 case).

Both ICU groups (those given Dexmedetomidine and those without Dexmedetomidine) had comparable profiles but significantly different complication rates of 1% and 12.9% respectively. This was statistically significant with Chi-square test p=.0000 and Fisher exact p=.0001

Ward patients (no Dexmedetomidine) had a 2.7% complication rate.

ICU stay was 2 days or less in 75% of cases. Assisted ventilation was required in 15% of patients receiving Dexmedetomidine (85% spontaneous breathing).

Conclusion:
Dexmedetomidine significantly reduces surgical complications in major head and neck surgery.
Diagnostic and decision making checklist in Head and Neck Surgery

E.Soler-lluch*(1), M.Gil-calero(2)

(1)Infanta Cristina University Hospital. Madrid. Spain, Madrid, Spain, (2)Infanta Cristina University Hospital., Madrid, Spain

Diagnostic and decision making checklist in Head and Neck Surgery.

Purpose: Many patients diagnosed with head and neck cancer patients suffer from comorbidities, its management sometimes is controversial, require special care, and need very often multidisciplinary approach. That means that their management implies many steps before the treatment decision is made.

Materials and Methods: we describe some rules that we call diagnosis and decision making checklist, that include: prevention of delay in diagnosis, sharing of information in the department and primary care, appointments in anaesthesia outpatient clinic, radiology and other departments, pathology report, alerts, waiting list target, nutritional status assessment, MDT, preop cross-match, Informed consent, admission to the ward, standardisation of processes, and the moment when these steps are checked.

Results: Following the culture of safety in our department, we show the different step of this process and their impact on early diagnosis, preop stay, cancelled surgeries, complication and mortality index, postop stay, and readmission index.

Conclusions: In the same way that check list is a common and compulsory procedure in the operation theatre, we think that diagnosis and pretreatment check list is a crucial tool that can prevent many errors, complications and mortality. We show the results as a result of this culture of safety implemented in our department that back this assessment.

Authors:

Ernesto Soler-Lluch, LMS, PhD, FEBORL-HNS
Consultant ENT Surgeon
Infanta Cristina University Hospital
Madrid. Spain

Mª Manuela Gil Calero, LMS
Consultant ENT Surgeon
Infanta Cristina University Hospital
Madrid. Spain
Difficult choices in end of life related to head and neck tumors

N.Avalos*(1), P.Paladines(2)

(1)Instituto Chileno de Cabeza y Cuello, Santiago, Chile, (2)Hospital Fuerza Aerea Chile, Santiago, Chile

Head and neck surgery faces frequently the management of aggressive tumors with poor prognosis. These tumors very often compromise vital structures as the upper digestive tract and the airway.

These cases of advanced tumors with grim prognosis and survival rates raise a dilemma regarding management in terms of palliative care, pain treatment, feeding, airway obstruction and visible tumor necrosis.

Dilemmas arise when the palliative support only prolongs suffering or alternative treatment is full of sequels. When faced with a patient with airway obstruction due to an incontrollable tumor growth for example, the decision of a tracheotomy is never easy: is prolonging agony or palliative care?

This is why in our hospital we seek to find the best and most human management choice in patients with advanced and/or terminal head and neck tumors.

When making a choice regarding the best way to treat these cases we believe a full disclosure regarding the pathology, its natural history, the complications expected and probable outcome. This information is vital in the communication between physicians, patients and family. Patients must know the real impact of each decision in his immediate future. Withholding or withdrawing therapeutics measures, double effect principle, and terminal sedation are discussed. Only in this way we will arrive to a more human care for each case. We have several cases to discus in order to make evident theses problems.
Diffuse lipomatosis of the thyroid with amyloid deposition: report of a rare entity

S.Rokhssi*(1), J.Benayad(2), A.Benbouzid(1), L.Essakalli(2), O.Laassikri(1)

(1)University Mohamed V, Rabat, Morocco, (2)university mohammed V, Rabat, Morocco

PURPOSE:

The presence of adipose tissue is commonly seen in the salivary gland, parathyroid, thymus or pancreas but it is unlikely to be seen in the thyroid gland. Diffuse lipomatosis of the thyroid gland is a rare entity. It might be accompanied by amyloid deposition. Only few cases have been reported in literature.

MATERIAL AND METHOD:

A case history and brief literature review concerning amyloid goitre and fatty infiltration of the thyroid are presented, and the relationship between these two phenomena is discussed.

RESULTS

We report a case of 70 year old female who presented goiter with intermittent dysphonia and dysphagia to solid foods for over 6 years. Her medical history included arterial hypertension and chronic renal failure and she was receiving hemodialysis. Thyroid profile showed an hypothyroidism. Serum thyroperoxidase antibody (TPO) and anti thyroglobulin antibodies were negative. She underwent a thyroidectomy. Histopathologic study concluded to the diagnosis of diffuse thyroid lipomatosis and amyloid deposits confirmed by special stains. No complications were observed. The patient has no recurrence to date.

CONCLUSION

Because of the rarity of thyroïd fat-containing lesions, confusion in differential diagnosis may occasionally occur. Therefore, thyroid lipomatosis should be kept in mind.

Together with previous reports of the concurrent deposition of amyloid and fat in patients with renal insufficiency, this case raises questions as to the relationship between these two phenomena.
Digital evaluation of tumor budding in pre-operative biopsies in Oral Squamous Cell Carcinomas.

C. Geneser*(1)

(1) Rigshospitalet, University Hospital Copenhagen, Denmark, , Denmark

BACKGROUND: It is challenging to identify at diagnosis those patients with early oral squamous cell carcinoma (OSCC), who have a poor prognosis and those that have a high risk of harboring occult lymph node metastases. The aim of this study was therefore to evaluate the predictive and prognostic value of tumor budding in OSCC, to be able to offer personalized treatment to this group of patients.

METHODS: We used a semi-automated image-analysis algorithm, Digital Tumor Bud Count (DTBC), to evaluate tumor budding in OSCC. The algorithm has previously on been tested (and these results have been published). The analysis was used on biopsies from patients with early-stage OSCC and major endpoints were overall (OS) and disease free survival (DFS).

RESULTS: Will be presented at the conference. We have promising results all ready, and expect a high DTBC to be an independent predictor of both poor OS and DFS in a multivariate Cox regression model.

CONCLUSION: Will be presented at the conference. After completing the study, we will be able to evaluate the diagnostic accuracy of the histopathological risk factor tumor budding. A novel risk model could be used to identify patients who would benefit from a more aggressive treatment of oral squamous cell carcinoma.
Diode laser for venous malformation treatment

E.Sauvaget*(1), D.Salvan(2), B.Faucon(3), F.Lemarchand-venencie(4), N.Le cler(3), F.Simon(4), A.Bisdorff(4)


Venous malformations of the head and neck areas are congenital malformations that can cause pain, dysphagia, obstructive sleep apnea, aesthetic deformation and rarely bleeding. The treatment is based on 3 modalities: sclerotherapy, surgical excision and laser. Different laser may be used, such as KTP, Yag and the 980-nm diode endovenous laser. The last one is, nowadays in our center, becoming the principal modality of treatment since it is used as a priority for malformations localized medially around the lips, eyes, nose, oral cavity and oropharynx or localized far from the facial nerve and in the superficial plans making them visible.

Patients and methods

We reported our experience of the Diode laser endovenous treatment according to the size and localization of the head and neck venous malformation since 2007 to 2016.

Results

About 120 patients were treated in our multidisciplinary center. Among them 32 were treated for a malformation of the aerodigestive tract invading the tongue and the oropharyngeal area.

One or more sessions were undertaken for each patient depending on their size, symptoms and the patient satisfaction of the size reduction. Treatment was done with a 200- or 400-nm fiber, with a power ranged from 5 to 8 Watts for a total dose of 300 Joules/cm^3. In some cases, with a deep or large ones, sclerotherapy or surgery were associated in the same or different period in order to complete the treatment.

Significant reduction was obtained in all patients. No major complications were noted (no emergency tracheotomy). The main short term complication were pain, bleeding, swelling leading to dysphagia, paresthesia and local infection, that might be easily resolved.

Conclusions

Venous malformation is a very complex and rare disease and the objective is seldom to cure but rather control and improve symptoms. Due to the large variety of presentation and patient expectation, a treatment algorithm is difficult to establish. Our results demonstrate that 980 nm laser treatment is effective in treating venous malformations located in the upper aerodigestive tract or in peri-orificial and superficial locations of the face.
Pembrolizumab is an anti-PD-1 immunotherapy FDA-approved in metastatic melanoma, lung, head and neck cancers, and currently tested in many different types of cancers.  

Here, we describe the case of a 89-year-old man, presenting with a BRAF and C-KIT wild-type inoperable locally advanced palatal mucosal melanoma and a synchronous squamous cell carcinoma of the vocal fold. The patient received Pembrolizumab, with a rapid and complete response of the melanoma and no response of the squamous cell carcinoma. After 6 months of immunotherapy, a laser cordectomy was performed to treat the larynx. After 9 month of follow-up a complete response of the oral melanoma was confirmed by TEP-CT and biopsy. The treatment by Pembrolizumab was stopped.

Amongst the currently described mechanisms of action and resistance to Pembrolizumab that are reviewed, this case supports 3 hypothesis that may explain this dissociated response: i) tumor resistance is induced mainly locally by one specific tumor type; ii) treatment response requires T cell priming in the draining lymph node, which was lacking for the true vocal fold tumor; iii) PD-1 checkpoint pathway is not a mechanism of tumor escape to the host immune system involved in non-invasive carcinomas.  

The observation of treatment responses of two different and synchronous tumors occurring in a single patient and treated by an immunotherapy potentially efficient on both tumors constitutes an interesting model that dispense with inter-individual variations, that may help to increase our knowlegde on predictive factors of treatment response.
DOCI: A novel imaging system capable of rapidly and significantly distinguishing SCCA from surrounding normal tissue

M.St. john*(1)

(1)University of California, Los Angeles, Los Angeles, United States

Educational Objective: At the conclusion of this presentation, the participants should be able to describe and understand a new intraoperative tool: dynamic optical contrast imaging (DOCI) characterized by speed, low cost, and improved sensitivity and specificity, for enhancing intraoperative imaging and margin detection in cancer patients.

Objectives: Head and neck cancers are debilitating diseases where patient prognosis depends heavily on complete tumor resection. Currently, it is the surgeons fingers and eyes that determine the location of tissue margins. An intraoperative instrument that can significantly improve the accuracy of margin detection over current methods will improve outcomes for cancer patients by minimizing removal of normal functional tissue while also ensuring complete tumor removal. The objective herein is to demonstrate the utility of DOCI in reliably and accurately delineating tumor tissue from surrounding normal tissues.

Study Design: Patients with OSCC requiring surgery were identified and consented for involvement in this IRB approved study.

Methods: OSCC specimens and surrounding tissues from the surgical bed were collected; fluorescence decay images were acquired using a wide field DOCI system. Samples (55 patients) were subsequently processed for standard histological assessment by head and neck pathologists. Mean relative fluorescence decay signatures were calculated for tumor, fat, muscle and collagen tissues. Statistical analyses were performed using the Wilcoxon signed rank test.

Results: Qualitative analysis of DOCI images revealed microscopic characterization sufficient for tissue type identification comparable to histology. Quantitative analysis revealed a statistically significant difference (p < 0.05) between tumor and collagen among ten of ten wavelength bands analyzed, between tumor and muscle in ten bands, and between fat and tumor in two bands.

Conclusions: This study demonstrates a novel imaging modality capable of rapidly and significantly distinguishing OSCC from surrounding normal tissue. Such an intraoperative tool would be transformative: allowing for an intraoperative capacity to delineate tumor tissue from non-tumor tissue, thus maximizing the efficacy of tumor resection and minimizing damage to adjacent structures, thus improving patient outcomes.
Eagle’s Syndrome: lights and shadows

V. Calabrese*(1)

(1) ENT Department ASP di Ragusa, Ispica, Italy

According to the first paper on the subject on 1937 by WW Eagle, most instances of elongated or otherwise abnormal styloid processes that have been reported were observed by anatomists rather than by clinicians. It is probable that numerous cases of elongated styloid processes have been observed and treated by operation when necessary, but relatively few have been recorded. The credit for the first authentic report of clinical symptoms with subsequent removal of the styloïd process goes to Weinlecher, for a case observed in 1872. The term Eagle’s syndrome describes a series of symptoms caused by an elongated styloid process and/or ossification/calcification of the stylohyoid ligament. Typically, styloid process neuralgia is a dull nagging pain often localized to the tonsillar fossa and radiating to the ear. After highlighting its often underestimated frequency, summarizing the most frequent symptoms as chronic neck pain, feeling of something stuck in throat, eye pain, ear pain, nose congestion, migraines, burning throat sensation, sharp pain in jaw or cheek or teeth areas, the author presents 33 cases (29 Patients, 4 of which treated bilaterally in two stages) operated on with the same technique (transcervical approach) from January 2012 to January 2016. The current literature on Eagle’s syndrome is reviewed and the concept that even now the disease is not recognized or treated by many otolaryngologists, is stressed. Moreover, focusing on advantages and disadvantages of different surgical approaches, clinical results are reported.
EFFECT OF MUSCULAR FLAP AUGMENTATION ON THE INCIDENCE OF PHARYNGOCUTANEOUS FISTULA AFTER TOTAL LARYNGECTOMY

B. Wahba*(1)

(1) East Kent Hospitals University Foundation Trust, Ashfrod, Kent, United Kingdom

Cancer larynx is one of the most common malignancies in the head and neck region. Total laryngectomy is one of the most accepted treatment for the locally advanced cancer larynx. Pharyngocutaneous fistula (PCF) is the most common postoperative surgical complication after total laryngectomy. It leads to significant increase in patients’ morbidity, postoperative stay, treatment cost, delay in starting the postoperative adjuvant radiotherapy and reduction in the quality of life. Materials and Method: Forty-two patients were randomly divided into two groups. Each group had 21 patients. Group (A) patients were subjected to muscular flap augmentation of the pharyngeal closure after total laryngectomy. Group (B) patients had the standard primary closure of the neopharynx after total laryngectomy without any form of augmentation to the suture line. Both groups had fistula test on two fixed intervals at the 10th and the 30th day postoperatively. Results: The incidence of PCF -either early or late- was equal for both groups. Six patients in each group developed PCF (6/21; 28.6%). In each group, four patients developed early PCF (4/6; 66.7%) while two patients developed late PCF (2/6; 33.3%). Three patients had pectoralis major flap augmentation, one developed early PCF, one developed late PCF and the remaining patient was fistula free. Three patients had strap muscle flap augmentation, one developed early PCF and the remaining two were fistula free. Fifteen patients had sternocleidomastoid flap augmentation, one developed late PCF, two developed early PCF and the remaining 12 patients were fistula free. Conclusion: The use of onlay muscular flaps as a routine step inpatients undergoing total laryngectomy -to further augment the suture line of the neopharynx- did not show any significant reduction in the incidence of post laryngectomy PCF when compared to patients who had the standard primary closure of the suture line of the neopharynx with manual sutures and without any further augmentation. The only significance was the prolongation in the operative time with the muscular flap group when compared to the primary suture group.
Effectiveness of a systematic stay in intensive care unit after a maxillofacial free flap reconstruction

A.Debelmas*(1), S.Lanciaux(2), M.Raux(1), C.Bertolus(1)
(1)Hôpital Pitié Salpêtrière, Paris, France, (2)Hôpital Pitié Salpêtrière, Paris, France

Title
Efficiency on surgical care safety, of a systematic stay in intensive care unit during the immediate post-operative period in patients experiencing maxillo-facial free-flap reconstruction.

Background
Free-flap reconstructions allow for more extensive surgical resections in the head and neck region. However, patients undergoing this kind of surgery are anaesthetized for hours, and often have many comorbidities. Post-operative medical issues are frequent, often involving early pulmonary infections (PPCs). We assumed that increasing the length of immediate post-operative stay in recovery room (RR) and intensive care unit (ICU) would improve the safety of surgical care in these patients.

Our main objective was to assess if a systematic stay of at least 72 hours in intensive care unit post-operatively would decrease the ICU readmission rate for medical issues.

Material and methods
A retrospective case-control study was performed. All patients who underwent a free-flap reconstruction of the head and neck were included. Comings and goings of all patients and the unit they stayed in during their hospitalization were retrieved and analysed using the administrative database of our hospital. The medical background, history and post-operative course of all included patients were collected from the medical files. Patients were distributed in two groups, depending on the duration of immediate post-operative RR/ICU stay: one group included patient who stayed less than 72 hours, the other involved patients who stayed at least 72 hours post-operatively.

The main criterion we studied was the ICU readmission rate for medical issue in both groups.

Results
185 patients operated between January 2012 and July 2015 were included.

10 patients out of 123 who stayed less than 72 hours in RR/ICU and 0 out of 62 in the other group were readmitted in ICU for a medical adverse event, p=0.032. The main causes of readmission were PPCs (9 out of 10), mostly infectious ones (8 out of 9). The median length of stay for patients who stayed more than 72 hours in ICU was statistically higher than the other group (23 days versus 17, p=0.017).

Conclusion
Increasing immediate post-operative stay in ICU for patients undergoing a free-flap reconstruction of the head and neck decreased the ICU readmission rate for medical adverse events, and therefore increased post-surgical care safety. However, this was at a cost of an increased length of stay in hospital. The cost-effectiveness of this measure needs to be optimized.
Elective neck dissection in early stage buccal cancer

A.Chen*(1), M.Chen(2)

(1)Department of Otorhinolaryngology, Head and Neck Surgery, Changhua Christian Hospital, Changhua, Taiwan, Changhua city, China, Republic of (Taiwan), (2)Department of Otorhinolaryngology-Head and Neck Surgery, Changhua Christian Hospital, Changhua city, China, Republic of (Taiwan)

Background

The role of elective neck dissection in early stage, node negative, oral cancer has been widely recognized recently. However, while buccal cancer remains one of the most common oral cancer origins in betel nut chewing countries, benefits of such operation in buccal cancer has less been discussed.

Methods

Between January 2004 and December 2010, a total of 225 patients with stage I to stage II node negative buccal cancer was staged by Magnetic resonance imaging / Computed tomography combined with Positron emission tomography. 170 patients received elective neck dissection during primary surgery, and 55 patients received close follow up after primary tumor excision without neck dissection. Therapeutic neck dissection was arranged if lymph node recurrence was noted during follow up. Concurrent chemoradiotherapy was arranged if major or minor risks were revealed from pathology reports in both groups.

Results

5-year disease free survival rate was significantly higher in the elective neck dissection group than the therapeutic group (81.18% compared with 60.00%, p=0.0003), for hazard ratio of 2.63 and 95% confident interval of 1.36 to 5.07. However, no significant improvement was noted in 5-year overall survival rate (90.00% compared with 81.82%, p=0.114, Hazard ratio 1.86, and 95% CI 0.77 to 4.50).

Conclusion

Among patients with early node negative buccal cancer, elective neck dissection during primary surgery should be encouraged due to promising improvement of 5-year disease free survival rate.
Elongated uvula with a pleomorphic adenoma: a rare cause of progressive odynophagia

J.Pardo jadue*(1), C.Arriagada(1), R.Nuñez(1), P.Ibañez(1), A.Bozan(2)

(1)Hospital de Carabineros de Chile, Santiago, Chile, (2)Alumno de Medicina, Universidad Mayor, Santiago, Chile

Introduction. Uvular enlargement is a rare disease. Their origin may correspond to infectious, traumatic, allergic or secondary lesions to tumors, whether of benign or malignant origin.

Aims. Describe the case of a patient with uvular enlargement, study, management and treatment.

Material and method. We report the clinical case of a female patient of 64 years, with antecedent of a neuroendocrine carcinoma of the breast treated with surgery, radio and chemotherapy. Who consults for a history of 4 weeks of evolution, progressive odynophagia, pharyngeal ardor, pharyngeal globus and nocturnal snoring. It also has a dry mouth and a swallowed voice. At physical examination, an enlarged uvula is observed in size and consistency with no other pathological findings.

The nasofibroscopy confirms the lesion, which reaches the union with the soft palate without compromising the mucosa. Computed tomography of the neck with contrast shows an expansive lesion in the uvula of 2.6 x 1.8 x 1.9 cm, with well-defined edges, which does not compromise soft palate and does not enhance after administration of contrast.

Results, discussion and conclusions. The patient is submitted to a uvulectomy surgery for resection of the lesion and a study of pathological anatomy, which reports lesion compatible with a pleomorphic adenoma of the uvula. The patient evolves in good condition, without velopharyngeal insufficiency or language alterations.
ENT manifestations of malignant hemopathies

I.Zgolli*(1), C.Halouani(2), S.Sameh(3), R.Benmhamed(3), K.Akkari(2)

(1)military hospital in Tunisia, Tunis, Tunisia, (2)military hospital of tunisia, , Tunisia, (3)military hospital of Tunisia, , Tunisia

objectif : The role of the ENT practitioner in the diagnosis of malignant hemopathies in patients presenting for various ENT symptoms

Materials and methods:

patients and methods : We have collected 61 cases of malignant haemopathy who consulted the Tunis military hospital for an ENT symptomatology between the period January 1997 and January 2016 and whose definitive diagnosis was malignant hemopathy.

Results

The average age of our patients was 46.6 years with extremes ranging from 2.5 to 91 years.

A male predominance was noted in our series (56%) with a sex ratio equal to 1.25.

The signs and clinical signs depend on the localization: 49 (81%) patients in our series, consulted for the appearance of a laterocervical swelling and 19% showed an extraganglionary symptomatology (nasosinian, , oral ulceration )

General signs of altered general status were present in 25 patients, fever resistant to symptomatic treatment was present in 11 patients and nocturnal sweats were found in only 7 patients.

Only 49 patients required an exploratory cervicotomy to make the positive diagnosis

The 12 cases of extra-ganglionic hemopathy required surgical exploration.

Anatomopathology and an immunohistochemical study were performed in all patients.

Patients were distributed as follows: 29 cases of hodgkin lymphoma, 17 NHL gg patients, 12 NHL extra gg patients, 2 LLC cases, 1 LAL cases.

Conclusion:

In the presence of ENT manifestations with clinical and paraclinic signs strongly suggestive of a malignant hematological pathology and outside a contributory cytopunction, the ENT practitioner can be used to perform a biopsy excision. The latter can make it possible to establish the diagnosis and to orient the prognosis and the therapeutic decision.
Epidemiology and incidence of cancer of upper aerodigestive tract in the Casablanca region (Morocco)

A.Elbousaadani*(1), N.Zouhair*(2), R.Abada(1), S.Rouadi(1), M.Roubal(1), M.Mahtar(1)

(1)Otho-rhino-Laryngology Unit. University Hospital of Casablanca, morocco., Morocco, (2)Service d’ORL et de Chirurgie Cervico-faciale, Hôpital 20 Août 1953, CHU Ibn Rochd, Casablanca, Morocco

Objective of the study: The upper aerodigestive tract cancers include cancers of the lip, oral cavity, pharynx and larynx. They represent 510,000 new cases per year worldwide. Our objective was to describe the epidemiology of cancer present upper aerodigestive tract in the Casablanca region and to estimate their impact in 2014.

Materials and methods: Our work is a cross-sectional study on the incidence of cancers of the upper aerodigestive tract in 2014, collected in the service of Otorhinolaryngology (ENT) and Neck Surgery.

Result: We noted 214 cases of cancers of the upper aerodigestive tract histologically confirmed. Cancers of the aerodigestive tract is dominated by the nasopharynx, the larynx and pharynx, oral cavity. The average age is 48 years. The sex ratio male/female is 1.3. Alcoholism and smoking and 51% of patients. The mean time from our patients is 6 months. The management radiotherapy is made in all cases of nasopharyngeal carcinoma. The surgery is performed in 90% of cancers of the larynx. The most common histological type, excluded the nasopharynx, squamous cell carcinoma is 94% with varying differentiation. Nasopharyngeal carcinoma is histologically undifferentiated (UCNT) in 95%.

Conclusion: In Morocco, since 2014, the regional incidence of cancers of the upper aerodigestive tract is increasingly estimated through cancer registries that systematically detect almost all new cases.
Evaluation of level I neck nodes involvement in advanced malignancy of the Larynx and the Hypopharynx.

O. Metwaly*(1)

(1) Cairo University Hospitals, Giza, Egypt

Squamous cell carcinoma of the head and neck accounts for approximately 6% of all new cancers diagnosed in the United States yearly. Of these malignancies, 25% arise on the laryngopharyngeal area, with incidence of lymph node metastases varying from 25% to 65% (Ferlito et al., 2008).

It is widely accepted that the presence of positive cervical lymph node metastases is one of the most important prognostic factors in patients with laryngopharyngeal carcinoma (Waldfahrer et al., 2005).

The studies have shown that 20–30% of laryngopharyngeal cancer patients with a clinical N0 neck harbour occult cervical metastasis, however a few researchers advocate a policy of ‘watchful waiting’ in the treatment of laryngeal cancer patients with no clinically apparent neck nodes (i.e. N0) (Pinilla et al., 2003).

The prophylactic dissection of certain neck levels is considered to be time-consuming and associated with particular complications. Neck level I lymph nodes can be divided into level Ia “submental lymph nodes” and level Ib “submandibular lymph nodes” and both are related to important structures such as the submandibular gland, the marginal branch of the facial nerve, the lingual and facial arteries, the lingual and hypoglossal nerves, and the facial vein (Ozer et al., 2010).

Excision of the submandibular gland during neck dissection or having the submandibular gland in radiation field can result in xerostomia, leading to reduced quality of life (Ebrahim et al., 2011).

In a study conducted by Wiegand et al., 2012 showed that Dissection of neck level I is justifiable in laryngeal cancer patients with clinically detectable neck nodes and suspicious lymph nodes. However, in patients without clinically detectable neck nodes, preservation of levels I is oncologically safe, economical and reduces the risk of comorbidity.

The aim of this study was to investigate the prevalence of level I neck lymph node metastases or submandibular gland metastases in advanced laryngeal and/or hypopharyngeal tumors and to assess the post-operative morbidity.

This Study has included 30 Patients who had surgical treatment for advanced laryngeal and/or hypopharyngeal tumors, including neck dissection, at the Department of Otorhinolaryngology, Head and Neck Surgery, Faculty of Medicine, Cairo University.

None of the thirty patients had a positive level I lymph nodes after dissection confirming the result that there is no need for prophylactic level I neck lymph nodes dissection in the absence of clinically palpable suspicious lymph nodes.
HN-Ot-77

**Evaluation of Lymphatic and Vascular Invasion in Relation to Clinicopathological Factors and Treatment Outcome in Oral Cavity Squamous Cell Carcinoma.**

K.Chang*(1), M.Adel(2)

(1)Chang Gung Memorial Hospital, China, Republic of (Taiwan), (2)Division of Surgical Oncology, Al-Azhar Faculty of Medicine, Al-Azhar University Hospitals, Cairo, Egypt

**Purpose of the study**

This study evaluated the associations between lymphatic and vascular invasion of oral cavity squamous cell carcinoma (OSCC) and clinicopathological manifestations, as well as their impact on patient outcomes after treatment.

**Materials and Methods**

In total, 571 patients with primary OSCC who underwent surgery with or without adjuvant therapy were enrolled.

**Results**

Lymphatic and vascular invasion were found in 28 (5%) and 16 (3%) patients, respectively. Significant associations were found between lymphatic and vascular invasion and overall stage (P < 0.001 and P = 0.020, respectively), tumor stage (P = 0.009 and P = 0.025, respectively), nodal metastasis (both P < 0.001), extracapsular spread (both P < 0.001), perineural invasion (both P < 0.001), bone invasion (P = 0.004 and P = 0.001, respectively), depth of invasion (P < 0.001 and P = 0.001, respectively), and pathologic differentiation (P = 0.002 and P < 0.001, respectively). In the analysis of adverse events during follow-up, neither lymphatic nor vascular invasion was statistically associated with local recurrence, neck recurrence, and distant metastasis. Although lymphatic invasion exhibited significant associations with poorer overall survival (P < 0.001), disease-specific survival (P < 0.001), and disease-free survival (P = 0.01), it was not demonstrated to be an independent prognostic factor in all multivariate analyses. Twenty-six (93%) of 28 and 13 (81%) of 16 OSCC patients with lymphatic and vascular invasion received post-operative adjuvant treatments, respectively. In other words, only two cases of OSCC patients with lymphatic invasion and three cases with vascular invasion did not receive any post-operative treatment. Due to these limited numbers, we could not analyze the survival benefit of post-operative treatment in the patients with these two pathological factors.

**Conclusion**

According to our study, both lymphatic and vascular invasion are associated with many clinicopathological manifestations. Besides, the poorer prognosis is related to the lymphatic invasion in the survival analysis. There is still no conclusions whether adjuvant therapy is mandatory upon only lymphatic or vascular invasion respectively due to limited case numbers.
Evaluation of the learning curve in sialendoscopy by the CUSUM method

O.Choussy*(1), J.Rohart(2)

(1)Clinique Mathilde, Rouen, France, (2)CHU de Rouen, Rouen, France

Context: Sialendoscopy is a minimally invasive technique that allows to explore by an endoscopic approach the whole of the salivary tree. This technique has been developed to diagnose and treat obstructive and inflammatory diseases of the salivary glands. The adoption of an innovative technology such as sialendoscopy requires an evaluation of the learning curve. The objective of the study was to evaluate the learning curve of sialendoscopy by the CUSUM method.

METHODS: A retrospective analysis was performed on 140 patients who received dialysis or interventional sialendoscopy by a single operator for obstructive and / or inflammatory symptoms of the salivary glands between 2009 and 2015. The learning curve for sialendoscopy was assessed using the "cumulative sums" method (CUSUM). The primary endpoint was measurement of surgical time. The preoperative, intraoperative and postoperative data were collected and compared with those reported in the literature and according to the learning phases.

RESULTS: One hundred and fifty-three glands were examined (70 parotids, 83 submandibular glands) over the inclusion period. The analysis of the operating time by the CUSUM method made it possible to identify two distinct phases with a maximum point reached from the 73th case. The operative time for the 73 patients in phase I (learning phase) was significantly longer than for the 67 patients in phase II (efficacy phase) (55.9 ± 30.4min vs 37.4 ± 22.4 Min; p <0.001). The overall success rate (including symptomatology) was significantly improved in Phase II compared to Phase I (87.5% vs 62.9%, p = 0.001). The number of sialadenectomy conversions was significantly lower in the efficacy phase than in the learning phase (3.1% versus 12.9%, p = 0.04).

CONCLUSION: This study estimates a learning curve of 73 cases to allow the progressive acquisition of a sialendoscopic know-how allowing to reduce the operating time while improving the success rate. The complication rate and tolerance of this technique remain excellent.
Experience in Sialoendoscopy at the Department of Otolaryngology/Head and Neck Surgery, Clínica Las Condes

L.Cabezas*(1), M.Lopez*(2), G.Gonzalez*(2), F.Cardemil(3), F.Panussis(2)

(1)Clínica Las Condes, Santiago, Chile, (2)Clinica Las Condes, Chile, (3)Cinica Las Condes, Chile

Luis Cabezas, Maite Lopez, Gonzalo Gonzalez, Felipe Cardemil, Felipe Panussis

Department of Otolaryngology/Head and Neck Surgery, Clínica Las Condes

Purpose of the study: Sialoendoscopy is a procedure that can be diagnostic and therapeutic, and can be used for several pathologies of the salivary glands. Endoscopically the salivary ducts are visualized, allowing the surgeon to perform procedures such as extraction of sialolithiasis. The aim of this report is to present the first cases of sialoendoscopy performed at Clínica Las Condes.

Materials and methods: Clinical Series. Clinical records of patients undergoing Sialoendoscopy treated during year 2016 at Clínica Las Condes were reviewed for indications, surgical details, and outcomes.

Results: We perform the procedure in 16 consecutive patients. Most of the patients (12) had an history of sialolithiasis, in which the diagnosis was confirmed through a CT scan. The other 4 had an history of chronic recurrent parotitis or Sjogren’s disease. If the CT scan did not show lithiasis, a ultrasound were performed. The otolaryngology department has its own ultrasound, so we often performed ultrasound to patients when salivary gland disease are suspected. One of the cases was studied with ultrasound showing findings compatible with Sjogren’s syndrome with presence of ductectases and signs of atrophy, especially at the level of the right parotid gland. Sialoendoscopy was performed, showing both Stenon ducts dilated, which were explored endoscopically, washed with abundant serum with corticosteroids, numerous lumps are observed in the intraductal region, especially to the right. Control at 6 months of follow-up, patient without evidence of parotid inflammation. In other cases, CT scan showed lithiasis. In 13 of the cases, a pure endoscopic approach was used, whereas in 2 cases a combined approach was used. Only one case must be converted to a submaxilectomy. In the cases were a pure endoscopic approach was used, lithiasis were taken out using a Dormia basket.

Conclusions: Sialoendoscopy is a tool for diagnosis and treatment in inflammatory and obstructive salivary gland disease. It is a very useful procedure. Results of clinical series must be published and communicated. It would be ideal that every otolaryngology Department has a sialoendoscopy trained team.
Exploratory cervicotomy. Report of a 300 cases series.
Y. Darouassi*(1)
Hopital Militaire Avicenne, Marrakech, Morocco

Youssef DAROUASSI, Amine ENNOUALI, Mohamed MLIHA TOUATI, Brahim BOUAITY, Haddou AMMAR.
ENT department of the military hospital of Marrakech

Purpose of the study

Cervical tumefactions are a frequent reason for consultation, and lymphadenopathies constitute the most common etiology. Clinical and paraclinical assessments allow in most cases to find an etiology. However, some of these swellings are unspecified, so leading to exploratory cervicotomy. The purpose of the study is to report our experience with a series of 300 cases.

Material and methods

This is a retrospective study of a series of 300 cases of isolated cervical swelling treated in the ENT department of the military hospital of Marrakech between 2001 and 2014.

Results

All patients underwent exploratory cervicotomy with pathology analysis. The age of patients varies between 1 and 76 years with a mean age of 32.57 years and a slight male predominance of 52%. The symptom motivating the consultation in 81% of patients was neck swelling. The most frequent location was sub-mandiblar (33.34%). Progressive onset were found in 93.34% of patients. The main etiologies found in our study after pathology examination were of two types: either nodal origin dominated by tuberculosis (53.66%), malignant non-Hodgkin lymphoma (6, 66%), non-specific reaction lymphadenitis (4.66%), Hodgkin's disease (4.33%) and lymph node metastasis (3.33%); either non nodal origin among which lipoma (17.66%), gill cysts (6%), thyroglossal cysts (1.66%) and cystic hygroma (1.66%).

In the light of this results and the literature, we will discuss the value and usefulness of exploratory cervicotomy in the search of etiology of neck swellings when clinical and diagnostic tests are inconclusive, and thus to analyze aspects, epidemiological, clinical and imaging features in different etiologies.

Conclusion

The exploratory cervicotomy remains with pathology, despite its invasive nature, a necessary tool for the diagnosis of certainty of some neck swellings.
External carotid artery ligation for post-tonsillectomy bleeding control - Two case reports and literature review

R.Matos*(1), G.Coutinho(1), R.Vaz(1), E.Cardoso(1), P.Marques(1), M.Santos(1)

(1)Hospital São João, Porto, Portugal, Portugal

Introduction: Bleeding is the post tonsillectomy complication presenting the highest morbidity and mortality rates. Tonsillectomy is associated with an increased risk of arterial injury, either by blunt dissection or penetrating trauma, due to variations in the course of the main arteries. An accurate diagnosis of these anatomical variations is based on angiographic study with the possibility of simultaneous therapeutic embolization. However, there are some cases where bleeding control is only achieved by ligation of external carotid arteries.

Material and Methods: Case report of two cases of post tonsillectomy bleeding controlled by external carotid artery (ECA) ligation and literature review.

Results: Two cases of ECA ligation due to post-tonsillectomy bleeding, one paediatric and one adult.

The first case relates to a five year old male who had recurrent bleeding on the right tonsillar fossa after tonsillectomy that was not controlled surgically by tonsillar fossa closure. The patient was submitted to angiography with subsequent failure of embolization with coils of the right facial and ascending pharyngeal arteries. Bleeding control was achieved by right ECA ligation superiorly to the superior thyroid artery.

The second case is about a forty-three year old male who presented with active bleeding on the left side in the immediate postoperative period. The patient underwent three haemostatic control procedures with bilateral tonsillar fossa closure with recurrence of bleeding on the left side after extubation in all attempts. Oropharyngeal packing was performed and subsequent angiographic study revealed a tortuous left lingual artery which prevented the progression of the microcatheter and its selective embolization. The patient underwent ECA ligation superiorly to the superior thyroid artery with bleeding control.

In both cases, the ECA ligation was carried with nonabsorbable transfixing sutures.

The child presented with unsteadiness and visual complaints immediately after ECA ligation with progressive resolution of his clinical condition. The adult showed no postoperative complications, including recurrence of bleeding, stroke or blindness.

Conclusion: Recurrent and uncontrolled post tonsillectomy bleeding is a complication that requires a detailed angiographic study to exclude trauma of the main arteries that irrigate the tonsillar region, aberrant courses, possible pseudoaneurysms and identification of the active bleeding point. Despite the possibility of bleeding control by means of selective embolization, this is not always feasible due to vascular anatomical variations, emerging acute haemorrhage, aspiration and expansive cervical haematoma. Carotid artery ligation, including ECA, is presented as an alternative to post tonsillectomy bleeding control, with good long-term results.
Extranodal NK/T-cell lymphoma, nasal type: Report of 17 cases


(1)Hopital La Rabta service d'ORL, Tunis, Tunisia, (2)service d'ORL et de chirurgie cervico-faciale de l'Hôpital La Rabta, Tunis, Tunisia, (3)service d'ORL et de chirurgie cervico-faciale de l'hopital de La Rabta, Tunis, Tunisia, (4)service d'ORL et de chirurgie cervico-faciale de La Rabta, Tunis, Tunisia, (5)service d'ORL et de chirurgie cervico-faciale de l'Hopital La Rabta, Tunis, Tunisia

Objective:

To define the epidemiological and clinical features and complementary investigation findings of extranodal NK/T-cell lymphoma, nasal type and to discuss the diagnostic difficulties and the various treatment options.

Patients and methods:

This retrospective study was based on 17 patients with extranodal NK/T-cell lymphoma, nasal type, managed between 1990 and 2015. Results: This series comprised 13 men and four women with a mean age of 53 years (range: 35—81 years). The mean time to first consultation was 6 months. The most common symptoms were nasal obstruction (76%) and purulent nasal discharge (70%), followed by epistaxis (65%). Physical examination demonstrated the presence of a tumour of the nasal cavity in 12 patients. The diagnosis was confirmed by histological examination of a biopsy completed by immunohistochemistry. CT scan of the facial bones was performed in all patients of this series. Orbital extension was observed in four cases, associated with intracranial extension in two cases and osteolysis was observed in 11 patients. Lymphomas were classified as stage IE in 70% of cases and stage IIE in 30% of cases. Only one patient was lost to follow-up during treatment. Four patients died before any treatment. Treatment therefore concerned 12 patients. Stage IE lymphomas were treated by radiotherapy and/or chemotherapy. All stage IIE lymphomas were treated by chemotherapy alone. Stage IE patients had a better prognosis.

Conclusion:

Extranodal NK/T-cell lymphoma, nasal type, is an aggressive form of non-Hodgkin’s lymphoma comprising specific clinicopathological characteristics. The addition of chemotherapy for advanced stages does not appear to improve survival compared radiotherapy alone, which remains the treatment of choice especially for localized stages.
Facial nerve monitoring for preservation of marginal mandibular nerve in Level 1-b neck dissections.

S.Jonnalagadda*(1)

(1)American Oncology Institute/Citizens Hospital, Hyderabad, India

Introduction:-Marginal mandibular nerve is often encountered in level -1b neck dissections and preservation of this nerve is essential in preventing disfiguring complications.Isolated paralysis of the MMN branch of the facial nerve results in a symmetrical smile with elevation of the lower lip. Despite the high incidence of postoperative palsy, old-fashioned techniques of nerve identification remain widespread. We evaluate the utility of using formal facial nerve monitoring in the identification and preservation of MMN in level 1b neck dissections.

Materials and methods:-Retrospective case series.

Results:-Facial nerve monitoring was performed in 9 patients undergoing level 1 b dissection as a part of their neck dissection. 6 patients had selective neck dissection from levels I to III(SOND),2 patients had neck dissections levels I-IV, and one patient had revision isolated level-1 dissection (nidusectomy). Among the 9 patient, one patient had temporary paresis that recovered completely in the second week and one patient had permanent palsy of the MMN. The mean operative time to identify the MMN using nerve monitor was 3 minutes and total duration to dissect and isolate the MMN was 7 minutes. It required an additional 5 minutes to connect the NIM monitor.

Discussion.During the dissection of level 1b during neck dissection MMN is often encountered. Despite the morbidity associated with the palsy of MNN, only traditional methods of nerve identification are often used. We use a two channel NIM 3 Electrodes (Medtronic) placed in the Orbicularis occuli and the orbicular oris. The territory of the nerve is initially identified using 2.0 mA of stimulus to map out the approximate location of the nerve after elevation of playstma. Precise mapping of the course of the nerve is done by stimulating with 1.0 mA of stimulus after a potential candidate is clearly identified. The use of nerve monitor helps to reduce the time required the nerve and also elevate the entire nerve atraumatically away from the dissection site. We had one patient with complete palsy despite using the nerve monitor in a revision case.

Conclusion:-Early identification of the MMN along with the mapping of the entire course to reflect it away from the dissection using facial nerve monitor helps not only in speedy identification of the nerve, but also helps in reducing the incidence of permanent MMN palsy though comparative prospective trials are required not only to demonstrate the benefit but also in the analysis of cost benefit ratio.
Fascia temporalis free flap for crico-tracheal reconstruction: a novel approach
B.Baujat*(1), S.Struk(2), M.Lesnik(2), O.De crouy chanel(2), J.Barbut(3), M.Lefevre(2), S.Périé(1), J.Lacau st guilty(1)
(1)Hopital Tenon / Université Paris VI, Paris, France, (2)Hopital Tenon, Paris, France, (3)Hopital Pitié Salpêtrière, Paris, France

Background: The aim of tracheal reconstruction is to provide an airtight and non-collapsible airway covered with a suitable epithelial lining. To date, no ideal treatment is available for large tracheal defects.

Method: We report 4 cases of one-stage reconstruction for a crico-tracheal defect with a free temporoparietal fascia flap and costal cartilage grafts.

Results: Defects ranged from 6 to 8 cm. The tracheal membranous was not involved. Etiologies were traumatic in 3 cases, post-radiotherapy in one case. All patients had depended on a tracheostomia for at least 4 years at the time of surgery. The anterior part of the cricoid cartilage was involved in 3 cases. Tracheal stenting was performed using a silicone T-tube in 2 cases and an endotracheal silicone stenting in 2 cases. Closure of tracheostomia was achieved for all patients, with a mean follow-up of 19 months to date. The main advantage of this flap compared to the free radial forearm flap is that it supplies a more suitable lining allowing re-epithelialization process: Biopsies showed a colonization of the flaps with respiratory epithelium.

Conclusion: This novel one-stage procedure provides a reliable construct to substitute for large tracheal defects, even in areas previously exposed to surgery or radiotherapy.
Functional changes of submandibular gland by lipid accumulation in post-menopausal female rats

D.Jung*'(1), B.Lee(1), S.Shin(1), J.Lee, S.Wang(1), J.Kim(1)

(1)Department of Otorhinolaryngology-Head and Neck Surgery, Pusan National University School of Medicine and Biomedical Research Institute, Pusan National University, Busan, Korea, South Korea

Background

Estrogen is a sex hormone that has direct and indirect effects on many systems. Menopause is due to deficiencies in estrogenic secretion, which cause the reduction or cessation of ovarian and menstrual function. Estrogen receptors have been detected in oral mucosa and salivary glands. Hence menopause-related hormonal deficiency may affect the oral conditions such as xerostomia. However, the possible histological and molecular changes of submandibular gland due estrogen deficiency have not been studied. Therefore, our objective was to determine the dysfunction of submandibular gland in ovariectomized rats in order to clarify effects of estrogen deficiency. The aim of this study was to evaluate functional changes of submandibular gland by lipid accumulation in postmenopausal female rats.

Methods

48 female Sprague-Dawley rats aged ten weeks were randomly divided into four groups: group I (1 month after sham-operated rats as CON-OVX1), group II (1 month after ovariectomized rats as OVX1), group III (3 month sham-operated rats as CON-OVX3) and group IV (3 month after ovariectomized rats as OVX3). Endogenous serum estrogen levels were examined by rat-specific estradiol Enzyme-linked immunosorbent assay and determined body weight and food intake for post-menopausal obesity. To investigate whether estradiol effect on lipid accumulation and fibrosis production in SMG, hematoxylin-eosin, masson and trichrome and oil red O staining methods were used. Malondealdehyde (MDA) and hydroxyalkens absorbance assay was used to evaluate lipid peroxidation levels and specific fluorescence dye detected DCF2DA and GSH/GSSG assays were used to explore lipid accumulation-related redox imbalance.

Results

Endogenous serum estradiol levels were down regulated by ovariectomized surgery, respectively. Overall weekly food intake and final body weight was greater on OVX group than CON-OVX group. The cytosolic lipid accumulation and redox imbalance-associated lipid peroxidations were increased on submandibular gland in OVX group. Moreover, lipid metabolism-related ACC, PPARs and SREBP-1C mRNA and protein expressions also markedly increased in OVX group compare with CON-OVX group. Eventually, over expressed lipid metabolic genes and lipid peroxidation produced macrophage-related inflammatory cytokines include IL-6 and TNFα and induced SMG dysfunction in postmenopausal rats.

Conclusion

Our finding confirms that lipid accumulation-induced pathophysiological processes that lead to morphological and functional alterations on the cellular level in submandibular glands. The direct relationship of lipid metabolic mechanisms and estrogen signaling pathway associated with menopause need further investigation, however, our study shows that the submandibular gland is an estrogen target organ and ovariectomy model may provide prevention and treatment of xerostomia in postmenopausal women.
Generation of oral mucosal cell sheets

J.Roh*(1), J.Lee(1), H.Jang(1), E.Kim(1), D.Shin(1), J.Lee(1)

(1)Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, South

A considerable defect of mucosal or skin lining may cause pain, infection, or later scarring or adhesion, resulting in poor quality of life. A surgical defect of tissues or lining from surgical extirpation of tumors commonly require skin or free tissue grafts harvested from other anatomical region. Therefore, in vitro engineering of mucosal or skin equivalents is very urgent to fulfill the unmet medical needs. We purposed to develop a novel mucosal or skin equivalents engineered in vitro. An about 5x5 mm-sized oral mucosa or skin were harvested from surgical patients and keratinocytes and fibroblasts were primarily grown in conditions free of animal-origin growth factors or media. After ex-vivo expansion of the cells, 3-D cell sheet were cultured as air-lifting in insert well after seeding keratinocytes on the mixture of an autologous plasma fibrin glue and fibroblasts. The in vitro engineered cell sheet was well established within 2–3 weeks from harvesting. The morphological and immunological characteristics between an engineered cell sheet and human mucosa or skin were comparable. The 3-D cell sheet were flexible, expandable, and easy to handle to transfer or transplant to other regions. An autologous 3-D cell sheet is successfully engineered in vitro from the patient’s own keratinocytes, fibroblasts, and plasma. This might be clinically useful to rapidly heal wounds or ulcers without potentially problematic scarring or adhesion.
GIANT FUNGATING CUTANEOUS MYXOMA OF THE HEAD AND NECK: AN UNUSUAL PRESENTATION

D. Aliyu*(1)

(1) Usmanu Danfodiyo University Teaching Hospital, Sokoto, Sokoto, Nigeria

GIANT FUNGATING CUTANEOUS MYXOMA OF THE HEAD AND NECK: AN UNUSUAL PRESENTATION.


Department of Otorhinolaringology, Usmanu Danfodiyo University Teaching Hospital Sokoto.

Department of Oral and Maxillofacial Surgery, Federal Medical Centre Birnin Kebbi.

Department of Oral and Maxillofacial Surgery, Usmanu Danfodiyo University Teaching Hospital Sokoto.

Department of Plastic and Reconstructive Surgery, Usmanu Danfodiyo University Teaching Hospital Sokoto.

Department of Histopathology, Usmanu Danfodiyo University Teaching Hospital Sokoto.

Purpose of study.

Myxomas are a heterogenous group of soft tissue tumours which have a common histologic appearance of abundant myxoid ground substance. Myxoma is a benign tumour of primitive indifferent mesenchyme, first described by Virchow in 1871 and is extremely rare in the head and neck. Common sites of occurrence are in the skin or subcutaneous tissues, genitourinary tract, the gastrointestinal tract, liver and spleen.

We present a rare case of myxoma of the Head and neck.

Case Report

A case of a 16 years old male student with a 9-year history of recurrent submandibular mass. The mass was painless and progressively increased in size. No intraoral extension.

Examination showed a huge ulcerated fungating submandibular mass about 20 x 16 x 10 cm, mobile, non-tender firm in consistency. Other Ear, Nose Throat and systemic evaluation were unremarkable. He had hematologic investigations and other biochemical tests done which were all within normal limits. He subsequently had excision of the mass under general anaesthesia via an elective tracheostomy with split thickness skin grafting of the exposed strap muscles. Histopathological report revealed cutaneous myxoma.

Conclusion

A case of cutaneous myxoma of the Head and Neck region is presented for its rarity and although is a histologically benign neoplasm, treatment is extremely challenging with high incidence of recurrence.

Key words: Cutaneous myxoma, Head and Neck, Soft tissue tumour, Fungating.
An etymology is a chronological account of the birth and development of a word or word-element, describing its spread from one language to another and its evolving changes in form and meaning. Take the word anatomy. This word of such significance to the surgeon, meaning the study of the structure of living beings, is derived from the Greek word anatome, meaning dissection, which in turn is derived from the elements ana- "up" and temnein "to cut".

To those with both a passion for surgery and an interest in the history of our language, it is known that our skulls only remain atop our necks because of the endurance of a Titan god, that the ear is related to Greek plays via the humble goat, that both men and women conceal a lady’s bosom beneath the hair at the back of their heads and that there are a whole host of other fascinating stories describing how the parts of our bodies found their modern names.

I examine here the derivations of those anatomical terms most familiar to the Head & Neck surgeon, describing various etymological links to seemingly unrelated entities along the way.

As a core surgical trainee in otolaryngology, I have found these short tales invaluable as a mental prompt while studying anatomy. It is my hope that my work will both offer some levity and act as a genuinely useful aide memoire to other trainee surgeons as they strive to commit the intricacies of the human body to memory.

Author is Dr Benjamin Woodward, MBBS MSc. No affiliations.
HEAD AND NECK GLOMUS TUMORS

S. Alicura tokgoz*(1), G. Saylam(2), O. Bayir(1), G. Toptas(1), E. Cadalli tatar(1), C. Saka(1), A. Ozdek(3), M. Korkmaz(4)

(1) Diskapi Yildirim Beyazit Training and Research Hospital, Department of Otorhinolaryngology, Turkey, (2) Diskapi Yildirim Beyazit Training and Research Hospital, Department of Otorhinolaryngology, Turkey, (3) Private ENT Clinic, Turkey, (4) Yildirim Beyazit University, Department of Otorhinolaryngology, Turkey

PURPOSE: The aim of this study was to express the safety of paraganglioma surgery regarding complications, treatment and outcomes of patients with head and neck glomus tumors.

METHODS: Medical records of patients who were operated due to head and neck paraganglioma at a training hospital between 2006 and 2016 were reviewed. We documented the demographic characteristics, types of glomus tumors, clinical features, surgical approach and complications, and follow-up period.

RESULTS: The study group consisted of 44 patients (M/F: 5/39) and ages were between 22 and 79 years (50.50±14.54). The patients were distributed as follows: 19 glomus caroticum (%43.1), 8 glomus jugulare (%18.1), 8 glomus tympanicum (%18.1), 4 glomus vagale (%9), 2 glomus caroticum + glomus vagale (%4.5), 2 bilateral glomus caroticum (%4.5) and 1 thyroidal glomus tumor (%2.2). The most common chief complaint was a painless neck mass (22 out of 44). The other complaints were hearing loss, tinnitus, otorrhea and headache. There were no difference in blood loss and postoperative complication according to performing embolization or not. All glomus caroticum and glomus vagale tumors tumors were resected by cervical approach, radiotherapy was recommended to one patient due to risk of surgery-associated morbidity. Three of glomus jugulare tumors were resected by transmastoid approach while 5 of them were resected by both transmastoid and cervical approach. Seven glomus tympanicum tumors were resected by transmastoid approach and cyberknife was performed to 1 patient. Thyroid paraganglioma was diagnosed incidentally after total thyroidectomy. Postoperatively; we examine vocal cord paralysis and dropped shoulder in 1 patient, only vocal cord paralysis in 2 patient and mild dysphagia in 1 patient operated due to glomus caroticum. We observed vocal cord paralysis in 2 patients, nervus hypoglossus paralysis+marginal mandibular nerve paralysis in 1 patient who were diagnosed glomus vagale; stage 3 facial nerve palsy in 1 patient, stage 4 facial nerve palsy in 1 patient, CSF leak which was keep down third day in 1 patient were observed in glomus jugulare cases. We didn’t see any vascular complications. One of patient with glomus tympanicum was died postoperative 3. month due to a non-surgical cause. Mean follow-up period is 35,75±28,07 month (1-124 m).

CONCLUSIONS: The selection of treatment depends on the size, location and biologic activity of tumor as well as physical condition of patient. Our results show that, glomus tumors could be resected with low mortality and morbidity rates due to developing imaging technics and microsurgical methods.

Key Words: Glomus tumors, head and neck, surgery, complication
Head and neck localizations of the hydatid cyst

H.Ines*(1)

(1)Habib Thameur Hospital, Tunis, Tunisia

Introduction

Hydatidosis is a cosmopolitan anthropozoonose common to humans and many mammals, caused by the development of the larval form of Taenia Echinococcus. Humans are accidentally infected by oral ingestion of tapeworm eggs in contaminated food or water or direct contact with host. The parasite borrows the portal system, arrested in 80% of cases in the liver or lung. Cervico-facial hydatid cyst is a rare entity, found in only 2% of all localizations.

The aim of our work is to study the clinical, paraclinical and therapeutic features of this disease.

Materials and methods

It is a retrospective study recording 10 cases of cervico-facial hydatid cyst over a period of 26 years (1991-2016) in the ENT department of Habib Thameur hospital of Tunis-Tunisia.

Results

The average age of our patients was 35 years with extremes ranging from 4 to 57 years. Of our 10 patients, 9 were women. The rural origin was found in 80% of cases. A history of hydatid cyst of the lung was noted in one patient. The chief complaint was cervico-facial swelling in all cases. The clinical examination showed a painless firm mass, mobile, with no local inflammation. The mass was mainly located in the laterocervical or parotid regions in 3 cases each. All patients had an ultrasonographic examination showing a cyst, which was compartmentalized in 7 cases and calcified in one case. A CT scan was realized in 4 cases, showing a fluid density mass, with net and regular limits. The hydatid serology was positive in 4 cases. All patients were treated surgically by injecting saline serum in the cyst and its total removal. Nine patients had a favorable outcome. One patient had hydatid recurrence in the parotid region with extension to the parapharynx and the infra temporal fossa, requiring surgery via a transmandibular approach.

Conclusion

Cervico-facial hydatid cyst is a rare entity even in endemic countries. It is a benign disease but a potentially serious affection by its complications. It must be considered in any cystic cervical mass especially in the presence of other associated localizations. The best treatment remains prophylactic by breaking the parasite cycle in all levels.


ENT departement, Habib Thameur Hospital, Tunis , Tunisia
Head and neck paraganglioma embolization with Onyx: efficiency and management of pain

E. Bouquillon*(1), E. Babin(1), S. Moreau(1), M. Hitier(1)

(1) CHU CAEN, Caen, France

Introduction: Head and neck paraganglioma are hypervascular tumor which remains challenging to treat. Tumor embolization is a treatment of choice before surgery and product such as Onyx need to be evaluated. We focus on side effects after embolization, efficiency on blood loss and duration of stay.

Methods: We assessed retrospectively fourteen patients with symptomatic jugular or carotid body paragangliomas who performed transfemoral transarterial embolization, under general or local anesthesia, from June 2008 to May 2016. We evaluated Pain with a visual analog scale, analgesic intake and embolization procedure complications, operative blood loss, operative length, angiographic devascularization, operative transfusion requirements, postoperative hospital stay were compared.

Results: The mean patient age was 61.2 years (range 40-76), sex ratio was 1.26 and ASA physical status I-III. Mean procedure time was 75 min (range 40-110) within a period of 2.9 days (1-6) before surgical excision of five tympano-jugular and nine carotid body tumors. No complications are noticed but post embolization pain range from 0/10 to 8/10, managed by antalgic combination (Paracetamol, Tramadol) associated with Profenid. Average operative blood loss was 380cc (<50-1500), transfusion was necessary in only one patient. Mean Operative time was 320 min (130-1090), with a post-operative stay of 9.53 days (3-37), including intensive care unit transfer.

Conclusion: Embolisation with Onyx is efficient for controlling blood loss, but may be very painful after embolization. We recommend monitoring of pain and early treatment with antalgic OMS 1 and 2 associated with AINS.
Head and Neck Primary Mucosal Melanoma: Report of 17 Cases

B. Belhoucha*(1), A. Raji*(2), Y. Rochdi(2)

(1) CHU MED VI MARRAKECH, Morocco, (2) Department of ENT, CHU Med VI, Marrakech, Morocco

Introduction: Mucosal melanoma (MM) is a rare disease, accounting for 1.7% - 3% of all melanomas and 8% of all head and neck melanomas. It’s a rare cancer with a very poor prognosis.

Materials and Methods: We retrospectively reviewed the records of 17 patients with primary mucosal melanomas of the head and neck who were diagnosed between January 2007 and December 2012.

Results: Sinonasal mucosal melanoma was defined as a pathological diagnosis of malignant melanoma arising on the mucosa of the oral cavity, nasal cavity, nasopharynx, or sinuses, according to the final pathological report. In all cases the diagnosis of mucosal melanoma was established after standard microscopic and immunohistochemical examinations (positivity for HMB-45 and S-100 protein) of incisional biopsy specimens.

Our patient population included 9 women and 8 men. The age ranged from 61 to 75 years. The primary site of disease was in the sinonasal cavity for 12 patients (70%) and oral cavity for 5 patients. Treatment modalities for mucosal melanoma include surgical resection with or without neck dissection, immunochemotherapy, and radiation therapy (RT). 15 patients had attempted curative resections. Two patients received palliative radiation therapy as the primary treatment and chemotherapy as the adjuvant treatment.

Overall survival (OS) was defined as the time from surgery/biopsy to death from any cause, with surviving patients censored at date of last follow-up. Surgery with adjuvant medical treatment seems to be effective for local control of the disease. Survival ranged between 5 to >61 months (patient alive at 61 months), In comparison with other studies, our patients, who received a combination of surgery radiotherapy and immunochemotherapy had the longest survival.

Discussion/conclusion: Primary mucosal melanoma is a rare cancer and represents only 1.7% - 3% of all primary melanomas [1]-[3]. Mucosal melanoma must always be considered for multimodality therapy: surgical excision, medical oncology, and radiation therapy. Despite its radioresistant nature of tumor, the role of radiation therapy following surgical intervention has typically been advocated.
Head and neck rhabdomyosarcoma: about 30 adult cases.
P.Nicol*(1)

(1)Institut Gustave Roussy, Villejuif, France

Head and neck rhabdomyosarcoma: about 30 adult cases.

Department of head and neck surgery
Institut Gustave Roussy
Villejuif, France

Introduction
Rhabdomyosarcoma (RMS) is a malignant tumor of striated muscle origin that mainly affects children and adolescent. RMS is rare in adult and represents about 2-5% of the soft tissue malignant tumors. To our knowledge there is no study about head and neck localization in adult. So we present a serie of 30 adult cases of rhabdomyosarcoma. The main aim is to determine the overall survival rate.

Material and methods
Cases were retrieved from the archives of the Cervico Facial Department of Institut Gustave Roussy Cancer Center. The classical clinical data were collected (age, gender, histological type), the data about the treatment were collected and the outcomes were analysed.

Results
30 cases were reviewed 13 female and 17 male from 18 to 63 year old between 1987 and 2016. The two principal histological types are embryonal and alveolar. For 13 cases ethmoid is the first structure involved and almost half of all head and neck RMS had regional extension at the time of diagnosis. The sequence of treatment is often chemotherapy, surgery and radiotherapy or chemotherapy and radiotherapy when the surgical treatment is not possible. The survival rate is 33% (20 deaths) and the median of survival is 10 months.

Conclusion
Despite reported advances in overall and disease-free survival for patients with RMS, population-based analysis shows no substantial improvement during the past 30 years. The prognosis of these patients is largely dependent on extent of disease at diagnosis.
HEAD AND NECK SOFT TISSUE SARCOMA: TREATMENT OUTCOME, PATTERNS OF FAILURE AND PROGNOSTIC FACTORS - CLINICAL EXPERIENCE FROM A REGIONAL CANCER CENTRE IN NORTH INDIA

S. Bhasker*(1), R. Madan(2), R. Kumar(3)

(1) All India Institute of Medical Sciences, New Delhi, India, New delhi, India, (2) Post Graduate Institute of Medical Education and Research, Chandigarh, India, (3) Kidwai memorial Institute of Oncology, Bengaluru, India

Head and neck sarcoma constitutes 1% of all head and neck malignancies. The purpose of this study was to assess the demographic profile, clinical outcome, treatment toxicity and patterns of failure in head and neck sarcoma in the Indian population.

We performed a retrospective analysis of treatment outcome in patients diagnosed with head and neck soft tissue sarcoma undergoing treatment at our institute from 2006 to 2014. A total 28 patients were diagnosed with head and neck soft tissue sarcoma at our centre during this period. Median age of presentation was 40 years. 22 were male and 6 female. The most common presenting symptom was swelling (n=13) followed by orbital symptoms (n=11). Seventy five percent patients presented with tumors more than 5 cm size (n=21). Surgery was planned in 20 patients. Out of these 20 patients, 18 had stage I disease and one each had stage II and Stage IV tumor. R0 resection was possible in 12 (60%) patients (Chondrosarcoma n = 4, Synovial sarcoma n=3, Pleomorphic sarcoma n=3, Fibrosarcoma n=1, Spindle cell sarcoma n=1). However, eight patients underwent R1 resection due to critical tumor location and extent. Adjuvant radiation was used in all 20 patients. The median radiation dose was 55 Gray at 1.8 Gray per fraction over 6 weeks. Chemotherapy was given in 14 patients. The choice of chemotherapeutic regimen depended upon the histological subtype. The median follow up duration was 16.5 months and the median disease free survival was 29.5 months. The estimated 2 and 3 years DFS rates were found to be 74.55 % (95 % CI- 51.7 % - 81.33 %) and 28.40 % (95 % CI- 7.36 % - 54.3 %) respectively. On univariate analysis, use of surgery (p = 0.0286) and attainment of complete response (p = 0.0108) led to significantly superior disease free survival. We did not find any significant association between age at presentation, tumor size, chemotherapy use with disease free survival. Three patients developed recurrence.

Head and neck soft tissue sarcoma are a rare group of malignancies with varied histological subtypes. Surgery remains the primary modality of treatment with radiation playing an adjuvant role in high risk disease. Radiation therapy for local disease control seems to provide satisfactory results in head and neck RMS and should be the considered for such patients along with chemotherapy. If complete resection is not possible, post-operative radiation should be given for local disease control.
Objective:

To evaluate the reliability of endoscopy and computed tomography (CT) in determining the extent of disease at several laryngeal levels with reference to histology and show its impact on the TNM classification.

Methods:

We have proceeded to a retrospective study of patient records treated for laryngeal tumor by total laryngectomy with bilateral lymphadectomy; our study includes 100 patients with squamous cell carcinoma of the larynx, operated between January 2010 and June 2015 otolaryngology-head and neck surgery department at 20 August 1953 Hospital in Casablanca.

Results:

The direct laryngoscopy allowed in 73.19% to evaluate accurately the local extension of all tumors.

It has better sensitivity for exploration the vestibular fold (85.71%) and laryngeal ventricle (89.39%), good sensitivity for the study of: vocals folds (92.2%) and The anterior commissure (80%), an average sensitivity for studying subglottis (54.28%) and low sensitivity to exploring the piriform sinus (26.53%).

The specificity of endoscopy is better for assessing the invasion of the subglottis (100%) and piriform sinus (88.23%).

The scanner allowed in 70.41% to assessing correctly the initial locoregional extension. It has good sensitivity for determining tumor invasion in the paraglottic space (98.8%), pre-epiglottic space, (86.66%), in the glottis: vocal fold (93.61%) Anterior Commissure (87.20%) and the sub glottis (67.12%).

This sensitivity was average for the study of the laryngeal cartilage (58.44% à 100%) and for the study of nodal extension (50%).

The (CT) was less sensitive to determinate the extension to the extralaryngeal soft tissues (39.58%).

The specificity of the (CT) is better in the assessment of cartilage invasion, the lymph node (87.14%) and pre-laryngeal soft tissues (82.69%).

Clinical –CT association allowed in 56% to correctly assessing T stage and in 76% of the cases the N stage.

The main errors were down-staged the T stage in 26% and the N stage in 15%.

Conclusion:

Endoscopy and CT are complementary examinations, the initial balance sheet extension of laryngeal cancer; their combination can significantly increase the reliability of the preoperative TNM staging.
Hodgkin’s and non-Hodgkin’s Lymphoma of the Head and Neck, a Retrospective Review in HUGC Dr. Negrin between 2012-2016

C.Colina et al.(1), M.Valido quintana(2), A.Oviedo santos(1), M.Ojeda rodríguez(3), S.Dominguez sosa(4), D.Diaz rodriguez(1)

(1)HUGC DR. NEGRIN, Las palmas de gc, Spain, (2)HOSPITAL UNIVERSITARIO DE GRAN CANARIA DR. NEGRÍN, Las palmas de gc, Spain, (3)HUGC DR. NEGRÍN, Las palmas de gc, Spain, (4)HUGC Dr. Negrin, Las palmas de gc, Spain

Objectives

Lymphomas are the most common hematologic neoplasms in adults, and are about 5% of all head and neck tumors.

Two subtypes of Lymphoma are distinguished: Hodgkin’s lymphoma (HL) and non-Hodgkin’s lymphoma (NHL), constituting two separate clinical entities. In the ENT area the most common clinical presentation are at the ganglionic and extraganglionic level (Waldeyer’s ring, nasal cavity, thyroid gland or submandibular gland) being referred from other specialties, supposing a diagnostic challenge.

The main objective of this study is to evaluate the clinical, epidemiological, therapeutic and surgical characteristics and their complications, treatment with different modalities and side effects, as well as the mortality of patients diagnosed with head and neck lymphomas at Universitary Hospital of Gran Canaria Dr. Negrin between 2012-2016.

Material and methods

A cross-sectional and retrospective review was made of all patients with head and neck lymphoma diagnosed at the otorhinolaryngology clinic of the Universitary Hospital of Gran Canaria Dr. Negrín (2012-2016). Specially basic epidemiological factors, clinical presentation, lymphoma’s type, histological diagnosis, anatomical location, treatment, relapses and mortality issues.

Results

We included 48 cases of patients with head and neck lymphoma in the study. 5 (10%) with HL and 43 (90%) with NHL. The most common symptom was cervical lymphadenopathy performed in all cases FNA prior to biopsy. Within the involvement of the Waldeyer ring, 34% of patients with NHL, the most frequent is the involvement of the tonsil. B-cell lymphoma was the most common subtype (91%) in Non-Hodgkin’s Lymphoma; being 32% Diffuse Large B-Cell Lymphoma (DLBCL). 5% were Natural Killer (NK) and 2 % T-Cell Lymphoma type.

HCV infection affected our study in 15% of patients with NHL, and more specifically in 26% of patients with DLBCL. NHL had more extranodal involvement and more advanced stages. Survival rates improve in Hodgkin’s type

Conclusion

In our review, lymphomas’ presentation is similar to others studies even nationally and internationally. It is well known, the variability in the lymphomas anatomopathological diagnosis; and consequently the optimization requirement of the treatment proposed.

Cervical mass is the most common clinical presentation in head and neck lymphomas, so it is a diagnostic challenge in the ENT area to develop tools that allow an earlier diagnosis and thus an improvement in the survival rate.
Hypoglossofacial anastomosis for facial palsy treatment: Indications and results

S. Naceur, S. Abada, S. Rouadi, M. Roubal, M. Mahtar

Abstract

Hypoglossofacial anastomosis is a classical surgical procedure for the treatment of facial paralysis when the trunk of the facial nerve cannot be repaired and its peripheral branches are normal.

PATIENTS AND METHODS:

Between 2015 and 2016, 7 patients were able to benefit from an hypoglossofacial anastomosis. The etiology of the paralysis was the surgery of vestibular schwannoma, cholesteoma complications, tumors of the facial nerve and diseases of the brainstem. A specific and premature speech therapy remediation was realized for all patients in order to preserve the tongue function and to upgrade the facial motricity.

RESULTS:

All the 7 patients could be studied. The House Brackmann grading scale was used to appreciate the result. Two patients are grade IV, five are grade V despite the anastomosis works. The main predictive factor for a good result is a small delay between the onset of the paralysis and the surgery for the rehabilitation. The specific physiotherapy upgrades the result with less side effects of the anastomosis.

CONCLUSION:

Hypoglossofacial anastomosis is a simple and reliable surgical procedure for rehabilitation of paralysed face. The quality of the result is linked with an early surgery and a specific physiotherapy.
Impact of Preoperative Body Mass Index on Head and Neck Cancer Patients undergoing Microvascular Reconstruction

K. Cho*(1), Y. Joo(2), M. Kim(2)

(1) DEPARTMENT OF OTOLARYNGOLOGY-H&N SURGERY, THE CATHOLIC UNIVERSITY OF KOREA, UIJEONGBU ST. MARY’S HOSPITAL, , Korea, South, (2) Department of Otolaryngology and H&N Surgery, The Catholic University of Korea, , Korea, South

Objectives: Body mass index (BMI) is a simple index associating individuals weight for height, that is commonly used to classify underweight, overweight and obesity in adults. High BMI is known to have increasing health problems around the world. In contrast, excessive neck fat may have a protective effect against the side effects of radiotherapy. This could lead to better outcome in patients with high BMI. In the present study, we aimed to determine whether preoperative BMI is a prognostic factor for the prediction of postoperative complications and survival of patients undergoing microvascular reconstruction for HNSCC.

Methods: A retrospective review was conducted for 259 patients who underwent microvascular free flap reconstructions after head and neck ablative surgery.

Results: The mean BMI was 22.48 kg/m2. There was no correlation between BMI and flap failure (p=0.739), flap ischemia (p=0.644), pharyngocutaneous fistula (p=0.141), and wound infection (p=0.224). The 5-year DSS rate in our cohort was 63%. In a univariate analysis, the 5-year DSS rate was significantly correlated with preoperative BMI based on Kaplan-Meier survival curves (p=0.028). The 5-year DSS rates in underweight, normal weight, overweight and obese groups were 47%, 55%, 65% and 80%, respectively.

Conclusion: Preoperative BMI was a useful predictor for recurrence and survival in patients undergoing microvascular reconstruction for HNSCC.
Impact of the Neutrophil to Lymphocyte Ratio on Patients undergoing Microvascular Reconstruction for Head and Neck Cancer

K.Cho*(1), Y.Joo(2), M.Kim(2)

(1)DEPARTMENT OF OTOLARYNGOLOGY-H&N SURGERY, THE CATHOLIC UNIVERSITY OF KOREA, UIJEONGBU ST. MARY’S HOSPITAL, , Korea, South, (2)Department of Otolaryngology and H&N Surgery, The Catholic University of Korea, , Korea, South

Background: There has been increasing interest in the use of systemic hematological markers as prognostic factors for patients with malignancies. Neutrophil, lymphocyte, and platelet counts, either alone or expressed as ratios, have been associated with cancer prognosis. It is of great value to screen inexpensive, objective, and easily detected markers to predict the outcome of patients with HNSCC. The purpose of this study was to investigate the prognostic value of the neutrophil to lymphocyte ratio (NLR) in patients undergoing microvascular reconstruction for head and neck squamous cell cancer (HNSCC).

Method: Clinical data from 259 patients with HNSCC were collected retrospectively. White blood cell (WBC) count, neutrophil count, lymphocyte count, platelet count, NLR, platelet to lymphocyte ratio (PLR), and hemoglobin, albumin, and creatinine levels were adopted as potential prognostic biomarkers.

Results: NLR and PLR were associated with cancer recurrence (p = 0.002 and p < 0.001, respectively). Patients with a NLR > 2.15 or a PLR > 126 had significantly decreased 5-year disease specific survival (DSS) based on Kaplan–Meier survival curves (p < 0.001 and p = 0.029, respectively). A Multivariate Cox regression analysis confirmed the significant association between 5-year DSS and the NLR (using 2.15 as the cutoff; hazard ratio, 1.852; 95% confidence interval, 1.237–2.771; p = 0.003).

Conclusion: A mean NLR cutoff value ≥ 2.15 was associated with adverse outcomes in patients undergoing microvascular reconstruction for HNSCC.
A Case Report: Thoracic Empyema as a Direct Extension of Ludwig’s Angina.

M.Youssef*(1)

(1)Kasr alainy , faculty of medicine, Cairo university, Egypt

Case Description: A seventeen-year-old Egyptian male arrived at ER with a 1-week history of left neck pain, and fever. He complained of increasing swelling of the left submandibular region and dysphagia over the past 2 days. His physician had started him on a regimen of cefotaxime I.M twice daily 5 days before. Physical finding: temperature of 38.5°C, a respiratory rate of 24 breaths/mm, a pulse rate of 112 beats/min, and a blood pressure 100/60 mm Hg. There was bilateral (left > right) indurated edema of the submandibular and submental regions. Intraoral examination showed moderate trismus, fetid odor, bilateral sublingual edema (left > right) and an ulceration draining pus. No cardiac murmurs or rubs were evident. Initial laboratory results a white blood cell count (WBC) of 34,400/mm3. Airway films was normal. The computed tomography (CT) scans of neck suggested edema of the submandibular and submental regions. Diagnosis of Ludwig’s angina, was made and underwent external drainage of the neck swelling by transverse incision. Pus samples were sent for culture and antibiotic sensitivity testing. He was on empirical i.v. antibiotics until culture revealed the organism that was pseudomonas sensitive for TIENAM. After one week of treatment, the neck swelling subsides, but he developed chest pain and dyspnea, chest x-ray film was done and revealed LT sided massive opacity involving the whole left hemithorax and thoracocentesis was done in the emergency room by cardiothoracic resident which yielded pus that sent for microscopic examination and culture and sensitivity so it was diagnosed empyema that needs empirical antibiotics and urgent chest tube insertion that revealed 600 c.c of pus and left in the patient for 7 day with daily follow up by chest x/ray till whole chest is clear and the drain removed, the patient was discharged on day 16.

Discussion: Ludwig’s angina most commonly occurs in adults after infection of the second or third mandibular molar teeth and can reach below the mylohyoid ridge, and extend into the submandibular space and readily spread forward to involve the submental region and upward to reach the sublingual spaces. Direct extension to the lateral and retropharyngeal retropharyngeal spaces via the buccopharyngeal fascia and inferiorly along fascial planes to the mediastinum, are possible sequelae and to danger space to posterior mediastinum. This explains the tracking of the infection. Early recognition and treatment of this disease involves a three-way approach: airway management, antibiotics, and good surgical drainage.
A retrospective study of severe deep neck infections. Controversial diagnosis and management.

A.Camaioni*(1), E.Vesperini(2), M.Simone(3), D.Tassone(4), C.Viti(4)

(1)San Giovanni Addolorata Hospital, Rome, Rome, Italy, (2)San Giovanni-Addolorata Hospital, Rome, Roma, Italy, (3)San Giovanni Addolorata Hospital Rome, Rome, Italy, (4)San Giovanni Addolorata Hospital, Rome, Rome, Italy

AIM: We would discuss the imaging manifestations of infectious and inflammatory conditions of the head and neck. Special attention is paid to the sites, routes of spread, and complications of neck infections. Because the clinical signs and symptoms and the complications of these conditions are often determined by the precise anatomic site involved, anatomic considerations are stressed. Peritonsillar, retropharyngeal, and parapharyngeal abscesses are the most common deep cervical fascial space infections. The classic manifestations of these infections, such as high fever, systemic toxicity, and local signs were not present in all cases leading to dilemma in physician's decision making. They progress towards fatality very fast. Prompt recognition, diagnosis and management of such cases and complications are essential to reduce morbidity and mortality. In addition to broad spectrum antibiotic therapy along airway protection, surgical drainage is necessary in nearly all cases.

MATERIALs &METHODs: We retrospectively studied 117 patients who had deep neck infection between June 2010 and June 2016. We conduct a retrospective study of all patient that underwent in the emergency room to surgical management. RESULTs: Lateral pharyngeal space abscess was the most common deep neck infection (45%), followed by submandibular space abscess, Ludwig's angina, and retropharyngeal space abscess (28%, 12%, and 15%, respectively). Forty-five percent of patients with true Ludwig's angina underwent tracheotomy. About this, we would underline two uncommon deep neck abscess that came at our hospital: a man (79 y), with acute dispnea for bilateral vocal folds palsy. The CT scan showed a wide retropharyngeal/prevertebral abscess with osteonecrosis of cervical vertebrae. Tracheotomy was necessary. The other case was a boy (19y) with a severe parapharyngeal abscess that arrived to mediastina from retrosternal space to englobe the right thyroid lobe. CONCLUSION: It was necessary also the sternotomy to complete drenage. We think that neck space infections still continue to be a well prevalent health problem having significant morbidity as well as mortality.
Acute suppurative parotitis associated with lethal vascular complication

C. Pan*(1)

(1) Kaohsiung Armed Forces General Hospital, , China, Republic of (Taiwan)

Chien – Wei Pan1,3, MD; Chien – Han Yuan2,3, MD.

1School of Medicine, Fu-Jen Catholic University, New Taipei, Taiwan.
2School of Medicine, National Defense Medical Center, Taipei, Taiwan.
3Department of Otolaryngology, Kaohsiung Armed Forces General Hospital, Kaohsiung, Taiwan.

Abstract:

Purpose of the study

Vascular complications of deep neck infection have been recognized and may be life threatening. The main vascular complications are vascular compression, pseudoaneurysm, infectious arteritis and rupture of the major artery.

Materials and methods

The authors describe a case of an acute suppurative parotitis in an adult woman complicated by rupture of the external carotid artery. Physical examination found swelling on left cheek, diffuse hypopharyngeal and laryngeal hematomas. Contrast – enhanced computed tomography exhibited heterogeneous left parotid gland and fluid accumulation in extended space of neck. Culture yielded imipenem-resistant Acinetobacter baumannii (IRAB) and Escherichia coli. This rare complication was treated by maintaining airway in combination with antibiotic and anticoagulation therapy.

Results

Despiteactive treatment, she succumbed to the infection 15 days post admission.

Conclusion

This case highlights the importance of thorough examination to detect signs of vascular involvement. Treatment must be aggressive in view of the life-threatening risk of arterial rupture or septic embolism, although rupture of a major artery of the neck secondary to neck abscess carries a mortality of 20 – 40 percent. This is the first reported case of rupture of the external carotid artery complicating acute suppurative parotitis.
Cervical tuberculous lymphadenitis in children: from diagnosis to the management

K. Khamassi*(1)

(1) Charles Nicolle Hospital Tunisia, Tunisia

Purpose of presentation

Resurgence in cervical lymph node tuberculosis in the child population is observed in recent years. The aim of our work was to study the epidemiological, clinical, diagnostic and therapeutic characteristics of tuberculous mycobacterial lymphadenitis of the head and neck in child and assess the prevention strategy of the disease.

Materials and methods:

This was a retrospective study of 41 patients with cervical lymph node tuberculosis diagnosed and treated at the department of the Otorhinolaryngology, Neck Surgery and Pediatrics of Charles Nicolle Hospital in Tunis and at Child hospital in Tunis for a period of eleven years (January 2002 - December 2012).

Results: Our series consisted of 19 boys and 22 girls. The average age was 9.5 years, ranging from 6 months to 17 years. No history of personal tuberculosis was found. The history of ingestion of raw milk was reported in 36.5% of cases. Tuberculous adenitis was unique in 63% of cases, unilateral in 75% of cases and firm in 72% of cases. Lymph nodes were located in the jugular carotid chain (IIA) in 73.2% of cases. The fistula was observed in 7.3% of patients. The tuberculin skin test was positive in 51% of patients and phlyctenular in 24% of patients. The diagnosis was made by histological examination in 80.5% of cases and and by cytology in 19.5%. Nodal necrosis has been objectified in 42% of cases by cervical ultrasound and by ST scan in 19%. The average duration of treatment was 8.4 months. Healing after medical treatment was achieved in 75% of patients while 15% of patients were lost to follow up and 10% had surgical treatment because of resistance to medical treatment or lymph node recurrence with good evolution.

Conclusion: Cervical lymph node tuberculosis in child still constitutes a diagnostic and therapeutic problem. New perspectives are hoped to improve diagnostic means and the therapeutic management of tuberculosis.

H. Jaafoura, A. Ben Yahia, N. Ben Moussa, S. Mannoubi, E. Chebil, I. Riahi, K. Khammassi, R. Lahiani, M. Ben Salah

Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
Cervico-facial cellulitis and NSAIDs

O.Lachhab*(1), I.Ezekari(1), M.Benbouzid(2), N.Nitassi(3), A.Oujilal(4), L.Essakalli(5)

(1)Hospital specialty of Rabat, Morocco, (2)Hospital des spécialités de Rabat, Morocco, (3)Hospital des spécialités de Rabat, Morocco, (4)Hospital des spécialités de Rabat, Morocco, (5)Hospital des spécialités de Rabat, Morocco

Purpose of the study: Cervico-facial cellulitis (CCF) are rare diseases, and today represent one of the most serious ENT emergencies, which very quickly engages the vital prognosis and requires immediate multidisciplinary care. They are increasing in recent years and many patients are treated by anti-inflammatory drugs in pre-hospital. Our objective is to update the epidemiological data of these complications and correlate them with the use of non-steroidal anti-inflammatory drugs.

Materials and methods: We carried out a retrospective analytical study of epidemiological, clinical and paraclinical data from the files of patients hospitalized for cervico-facial cellulitis from 2013 to 2015.

Results: In three years, 140 patients were hospitalized for cervico-facial cellulitis, with a sex ratio of 1.29 (79/61). Diabetes was present in 10% of cases, 7% had dental extraction, 15% of our patients were chronic smoking. 80 patients reported taking NSAIDs (57%) and 44 taking antibiotics. The origin was dental in 63 cases, amygdala: 11, cutaneous: 7, cervical cyst: 6, sinus: 6, parotitis: 4, post-radiotherapy: 2, malignant tumor: 2, osteosynthesis: 1, indeterminat: 37 cases. CRP was elevated in 49 cases. Drainage performed in 57% of cases. The streptococcus was the incriminating germ in 10 cases and the staphylococcus in 5 cases. Most of our patients have been put under the combination of amoxicillin-clavulanic acid and an aminoglycoside, only 08 patients have been put under triple association amoxicillin protected + aminoglycoside + metronidazole with good evolution. According to the statistical data, the patients who took the NSAIDs were predisposed to develop a CCF, compared to those who did not take the NSAIDs: this difference was statistically significant for the majority of clinical and paraclinical symptoms.

Conclusion: At present, the bibliographic data available do not make it possible to establish definitively a causal relationship. In our series we observed an increase in the incidence of cervico-facial cellulitis when taking NSAIDs.

Authors: LACHHAB OMAR, EZEKARI ILHAM, BENAYAD JALILA, NITASSI SOPHIA, EL AYOUBI ALI, BENCHEIKH RAZIKA, BENBOUZID MOHAMMED ANAS, OUJILAL ABDELILAH, ESSAKALLI LEILA.


(1)Queen Elizabeth University Hospital, Glasgow, United Kingdom, (2)U Altmeyer .Department of Microbiology, University Hospital Crosshouse, Kilmarnock, United Kingdom, (3)Department of Microbiology - Queen Elizabeth University Hospital, 1345 Govan Rd, Glasgow G51 4TF., Glasgow, United Kingdom, (4)Department of Microbiology - Queen Elizabeth University Hospital, 1345 Govan Rd, Glasgow, United Kingdom, (5)Department of Otolaryngology – Head and Neck Surgery, Queen Elizabeth University Hospital, 1345 Govan Rd, Glasgow, United Kingdom

C M Douglas, U Altmeyer, LCottom, H Changez, P.Redding, L.J.Clark

C M Douglas, ENT Registrar, L.J.Clark , ENT Consultant, Department of Otolaryngology – Head and Neck Surgery, Queen Elizabeth University Hospital, 1345 Govan Rd, Glasgow G51 4TF.

LCottom, Microbiology Registrar, H Changez, Microbiology Consultant, P,Redding, Microbiology Consultant, Department of Microbiology - Queen Elizabeth University Hospital, 1345 Govan Rd, Glasgow G51 4TF.

U Altmeyer ,Department of Microbiology, University Hospital Crosshouse, Kilmarnock KA2 0BE.

Introduction

Tonsillitis represents a significant burden on the health service. Tonsillitis is a common condition with an incidence in general practice of 100 per 1000 population a year, in the UK. It can be caused by both viral and bacterial infections and distinction between these can be challenging clinically. Recurrent tonsillitis fulfilling the SIGN guidelines is treated with tonsillectomy. The McKinsay report has suggested that £700m could be saved if procedures with “limited clinical benefit” - such as tonsillectomies, were stopped. We carried out a retrospective review of hospital admissions with “sore throat” in the context of number of tonsillectomies being performed.

Methods

ISD Scotland data was requested for rates of tonsillectomy, tonsillitis admission, peri-tonsillar abscess admissions and deep neck space infection (DNSI) admissions in Scotland, between 1993 and 2015.

Results.

Between 1993 and 2015 there has been a 48% decrease in tonsillectomy rates. There has been a corresponding 143% increase in tonsillitis admission rates over this same time period (p=0.006) and a 116% increase in peri-tonsilar abscess admissions (p< 0.001). Between 1996 and 2015 there has been a 306% increase in deep neck space abscesses (p=0.036).

Discussion

The significant decrease in tonsillectomy rates has correlated with a significant rise in “sore throat” admissions to hospital. The most alarming trend is the increase in deep neck space infection rates, a condition associated with significant morbidity and mortality.
Clinical cases peritonsillar abscess after tonsillectomy.

M.Malkova*(1), O.Kolesnikova*(1)

(1) Pavlov First Saint Petersburg State Medical University, Russia

Aim of this research is to determine the reason of relapsing peritonsillar abscesses emergence after 27 years post tonsillectomy.

Materials and methods: diseased P. 50 years old. In 1989 – bilateral tonsillectomy under local anesthesia. In December 2015th, against the background of wellbeing, peritonsillar abscess was diagnosed, dissected under local anesthesia. In April 2016th relapse of peritonsillar abscess, ripped up by itself. Neck MRI determined encapsulated neoplasm with liquid component in the right parapharyngeal zone. Pharyngoscopy: fauces is asymmetric due to bulging of parapharyngeal zone on the left, mucous envelope of the fauces is pink, not swelling, residual lymphoid tissue into palatal recess on the left is not visualized. Because of that, and also due to malaise in the throat during swallowing, fever up to subfebrile, dissection of abscess zone was performed with wide excision of neoplasm walls, taking of histological material.

Results:

According to the data of morphological investigation of surgical material: part of abscess wall; fibrose-muscular fragment with angiomatose and hyperplasia of lymphoid tissue. Post-surgery period proceeded with no peculiarity, on the control neck MRI half a year after the conducted surgical intervention, any pathological changes were not revealed.

Conclusions

Successful treatment in this case included not only drainage of suppurative focus, but also a wide excision of abscess walls. The feature of this clinical situation was also in oncological alertness, because in anamnesis of the patient indicated the status after combined treatment of hip sarcoma, however, by histological conclusion data for hyperplastic neoplasm were not received, because of that we cannot assume metastatic lesion of parapharyngeal zone as an etiological factor of abscess emergence. Pharyngoscopically and intrasurgically residues of lymphoid tissue were not determined, however, histologically they were revealed in the neoplasm wall, suggesting a local primary source of infection.
Content Cervicostomy: treatment of deep cervical severe infections

N. Avalos*(1)

(1) Instituto Chileno de Cabeza y Cuello, Santiago, Chile

Deep cervical infection is a severe disease. For treatment it is require broad-spectrum antibiotics and several surgical debridements to drain abscess and remove all dead tissue.

We report 6 cases of severe deep cervical infection using platisma flap as “cervicostomy” by a Conley incision for quick access to the neck with a politic of everyday surgical debridement until infection control.

Seven cases develop necrotizing fasciitis: 2 spontaneous after severe tonsil infection, 3 after esophagus rupture (1 dilatation, 1 post cancer thyroid surgery), 2 after tooth extraction. Necrotizing fasciitis has a very high mortality inection, with sepsis, gas in the deep neck, and tissue necrosis, even cutaneous and muscle necrosis (venous thrombosis).

Conley’s cervical incision was made raising a wide platisma flap. Only definitive dead skin is removed, as minimum as possible. All cervical spaces are opened and cleaned with saline solution (4 to 10 liters). Debridement is strongly encouraged. The platisma flap is closed with 4 prolene stitches. It is important to avoid tracheostomy, because difficult airway and skin management. For the following debridements we need only to raise again the platisma flap. For mediastinum closure and esophagus closure we used a pectoral flap (3 cases). Mechanical ventilation and critical care unit support are used until infection and sepsis control. One patient needs hyperbaric oxygen at final stage. Two patients received immunoglobulin. All patients survived and are eating and doing normal life.

The advantages of the content cervicostomy are: defining dead tissue early, protection of vital structures (nerves and vessel) avoiding hard drains and blind cleaning, early diagnosis of major lesions (esophagus, pharinx) which needs repair, early isolation of the mediastinum and maximum conservation of the skin for the definitive closure and cosmetic result.
Deep neck infection in malnutritioned patients: comparison of clinical outcomes with well-nutritioned patients

M.Park*(1), S.Nam(2), S.Kim(2)

(1)Department of Otolaryngology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea., Seoul, Korea, South, (2)Department of Otolaryngology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, Seoul, Korea, South

Objective: Deep neck infection (DNI) is rare, but a potentially fatal condition. Patients with poor initial nutritional status and lack in immunity may result in poor recovery including elongated hospital stay and unexpected complications. The aim of this study is to investigate the prognostic value of nutritional status and laboratory finding in the patient of DNI.

Method: A retrospective review of 50 patients who were initially diagnosed with DNI in Asan Medical Center from 2007 to 2014 was conducted. Clinical demographics, initial laboratory markers (serum protein, albumin, leukocyte, lymphocyte, neutrophil count, C-reactive protein) and the length of hospitalization were reviewed.

Results: Total 50 subjects were divided into well-nutritioned group (76%) and malnutritioned groups (24%). There were 18 subjects (36%) who were diagnosed with diabetes mellitus. Mean duration of hospital stay was 15.8±10.7 days, and 10 (20%) subjects underwent intensive care unit stay. Initial mean serum protein, albumin level showed 6.4±0.8 and 3.2±0.6, respectively. CRP and WBC level were 15.9±10.6, and 14762±5871, respectively. Mean BMI was 23. 44±3.71 and lymphocyte count as 1592±910. Elevated CRP had correlation with hospitalization duration (P < 0.05). In comparison with the well-nutritioned group, the malnutritioned group tended to have older mean age (57.2 y versus 46.2 y, P < 0.05), longer duration of hospital stay (19.7 days versus 10.2 days, P < 0.001), more frequent complications (33.9% versus 8.5%, P < 0.0001), and more frequent tracheostomy or intubation (19.6% versus 6.2%, P < 0.05).

Conclusion: Poor initial nutrition status may result in treatment failure, resistance, multiple surgical drainage and complication. We recommend that high-risk groups, such as malnutritioned patients should be more closely monitored throughout their hospitalization.
Deep neck infections- still important diagnostic and therapeutic problem.

I.Olejniczak*(1), K.Bojanowska-poźniak(2), W.Pietruszewksa(2)

(1)Clinical Department of Otolaryngology and Oncological Laryngology, Medical University of Lodz, Poland, Lodz, Poland, (2)Medical University of Lodz, Poland, Lodz, Poland

Introduction: Deep neck infections (DNI) are serious problem because of variable clinical manifestations. This condition affects fascial compartments of the head and neck and organs that they contain. Nowadays the incidence of deep neck infections have decreased because of antibiotics use and improvements in oral hygiene. But it may still lead to many life-threatening complications like sepsis, obstruction of the upper airway or mediastinitis, due to numerous portals of entry and proximity to vital structures. Furthermore, the inappropriate use of antibiotics, steroids, and nonsteroidal anti-inflammatory drugs may mask signs of infection and change the clinical presentation, and also lead to different courses of disease. In the literature, especially in complicated cases, the mortality may range up to 40-50%. The most common causes of deep neck infections these days are dental infections, trauma to the structures of the neck, and pharyngeal-tonsil pathology.

The purpose of the study was to understand the clinical characteristic of patients with deep neck infections and to review the diagnostic and therapeutic management of this condition.

Material and methods: Retrospective analysis of medical documentation of 27 patients with clinical preview of deep neck infection hospitalized in Otolaryngological Department of Medical University of Lodz in last five years was made. The cases of peritonsillar abscess, superficial infections and infections due to external neck injuries were excluded from the review. The diagnosis of deep neck infection was based on historical, physical, and laboratory findings as well as radiographic studies. The following data were recorded: demography, associated systemic diseases, clinical presentation, etiology, site of infection, completed blood count test, imaging, bacteriology, treatment and complications.

In conclusion, DNI are potentially lethal infections. Physicians should be aware that the clinical course of the disease may quickly worsen and lead to the life-threatening complications. Immediate interdisciplinary treatment including surgical incision for drainage and antibiotic therapy is always necessary.
Deep Neck Space Infections: the hidden cost of a serious condition

R.Hurley*(1), C.Douglas(2), J.Montgomery(1), L.Clark(1)

(1)Queen Elizabeth University Hospital, , United Kingdom, (2)Queen Elizabeth University Hospital, Glasgow, United Kingdom

Purpose

Deep neck space infection (DNSI) means infection in the potential spaces and fascial planes of the neck. They are associated with significant morbidity and potential mortality. With improved scanning techniques, widespread use of antibiotics and early surgical intervention we have seen a significant drop in the mortality of these infections. However, recent publications have highlighted an increasing incidence of DNSI in the UK and suggested that this may in part be due to the significant fall in tonsillectomy rates over the past 10 years (1). The purpose of this study was twofold; firstly to assess the demographics of the patients presenting with DNSI, secondly to assess the financial burden of these patients to the NHS.

Methods:

Retrospective data collection of all patients admitted to NHS Greater Glasgow and Clyde with DNSI between January 2012 – August 2016. Their demographics, aetiology, associated diseases, bacteriology, radiology, duration of hospitalization, use of hospital resources was reviewed. Cost of admission and treatment was calculated using data from the Scottish Government’s Information Services Division (ISD), from the local diagnostics division and the British National Formulary (BNF).

Results

Sixty-five patients were found to be admitted with DNSI; of which 64 had available medical records. The median age was 46 (16-86). Thirty-four patients were male (53.1%). Male:female ratio was 1.13:1. The most frequent source of infection was the tonsil, seen in 27 patients (42.2%). Nine (14%) patients were found to have a pre-morbid immunocompromised disease. Four (6.25%) patients had previous tonsillectomy. The most common infective organism was streptococcus milleri. Median length of stay was 4 days (1-116 days). Forty-seven patients (73.4%) required at least one operative intervention, with a median of 1 operation per patient (range 0-10). Median number of doses of intravenous antibiotics given was 20 (range 1-136). The median number of blood tests performed was 14 (range 2-194). The median number of CT scans performed was 1 (range 0-18). The median cost of admission per patient was £3,312.25 (£810.33 - £46,577.00).

Conclusion

This study highlights that these patients are a significant financial burden to the NHS. As the incidence of DNSI continues to rise there will be a subsequent increase in cost to the NHS which must be planned for.

Effect of the tonsillectomy steroid-pulse therapy on IgA nephropathy

H.Tanimizu*(1), H.Sakamoto(2), Y.Yamamoto(2), H.Iguchi(2)

(1)Dept of Otolaryngology Graduate School of Medicine Osaka City University, Kobe, Japan, (2)Dept of Otolaryngology Graduate School of Medicine Osaka City University, Japan

The IgA nephropathy is an autoimmune disease characterized by deposits of IgA in the glomerular mesangium.

It is the most common form of primary glomerulonephritis worldwide

The renal outcome of IgA nephropathy varies among individual patients.

Although 20% of patients remain stable in their renal function, 30–40% develop end-stage renal disease within 20 years from its onset.

Patients with IgA nephropathy often show aggravation of renal injury with macroscopic hematuria after tonsillitis

As treatment, the effectiveness of the tonsillectomy is reported from the 1980s.

However, the effect was insufficient in the serious examples of the pathology change

The 2000s begins, tonsillectomy plus steroid pulse therapy is proposed and spreads rapidly.

Especially, in Japan, tonsillectomy plus steroid pulse therapy has been widely used for IgA nephropathy

With our hospital, kidney internal medicine, we started treatment tonsillectomy plus steroid pulse therapy for IgA nephropathy from 2007.

Between April 2007 and May 2016, 124 patients were treated by tonsillectomy and steroid pulse therapy.

The average age of the patient was 37.4 years,

We performed tonsillectomy under all cases, general anesthesia

The bleeding is an average of 50 ml for an average of one hour 13 minutes for the operative time.

It was two cases to have needed general anesthesia lower hemostasis measures in bleeding, and the back was 1.6%.

We defined complete remission as proteinuria <0.3 g/day and urinary red blood cells <5 counts/HF.

We examine the treatment result in our hospital.
Foreign Body of Submandibular Gland

K. Khamassi*(1)

(1) Charles Nicolle Hospital Tunisia, Tunisia

Purpose of presentation
The foreign bodies of the submandibular chamber are very rare in adults. They must be explored and all suspected areas must be examined carefully for avoiding secondary problems and surgeries in the future.

Materials and methods
The current study is a retrospective study of a patient hospitalized in the department of otolaryngology at the Charles Nicolle hospital.

Results
It is a 46-year-old patient, without antecedents, which had a painful submandibular swelling that had been evolving for 3 weeks exacerbated during mastication. This patient was a farmer who reported during the interview the notion of wheat consumption in the fields. He received antibiotic and anti-inflammatory treatment without any improvement. The examination found a right submandibular swelling of 5 cm in diameter, sensitive, firmly fixed with a slightly inflammatory skin. Wharton channels were free and saliva was clear. The cervical ultrasound demonstrated a 4 cm collection of the right submandibular gland around a 12 mm linear foreign body evoking a spine. The patient received triple antibiotic therapy with partial regression of local inflammatory phenomena then a right submandibulectomy with discovery of the spine in intraglandular. The results were simple.

Conclusion
Foreign bodies in the salivary glands are rare in adults and must be evoked in front of train symptomatology.

Ultrasound or CT helps to support the diagnosis. Early management helps prevent infectious complications.

H. Jaafoura, A. Ben Yahia, N. Ben Moussa, E. Chebil, I. Riahi, S. Mannoubi, K. Khamassi, R. Lahiani, M. Ben Salah

Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
Foreign body removal via modified median glossotomy approach in deep of the tongue

S.Lee*(1), M.Kim(2), H.Shin(3)

(1)CHA University, Bundan CHA Medical Center, Seongnam, Korea, South, (2)CHA University, Bundang Medical Center, Seongnam, Korea, South, (3)National Health Insurance Corporations, Ilsan Hospital, Republic of Korea, Ilsan, Korea, South

Foreign bodies pose a diagnostic challenge to oral surgeons because of the small size of the object, difficult access, and the close anatomic relationship to vital structures. Unusual swallowing physiology sometimes can make happen to foreign body impaction in an unusual site. We report a case who was edentulous status and had foreign body impaction in an unusual site, deep, center of the tongue, and successfully removed via modified median glossotomy approach.

A 57-year-old male patient who complained of throat discomfort and foreign body sensation during swallowing was visited. The symptom was started right after he ate boiled fish soup and the patient suspected fish bone ingestion.

The intraoral examinations revealed no wound in oral cavity or oropharynx but total edentulous state. A CT scan was performed and revealed a radiopaque material in the deep of the posterior tongue. Under general anesthesia, frenotomy was performed. Modified median glossotomy approach via ventral tongue with saving dorsal surface of the tongue was decided. Dissection of midline of the ventral tongue was continued. Firm and fibrous tissue was palpable and small abscess was also noted. After removal of these fibrous tissue, 20x2mm in size, hard, linear foreign material was palpable and removed. After check there was no remnant material, mucosa incision line was repaired with Vicryl 2-0. Complete wound recovery and intact tongue mobility were identified after 1 month follow-up.
Background

Unsupervised and unscientific practices of traditional healers is very common in most African countries; such practices can be life-threatening complication(s).

Aim: to describe the indications, complications, and outcome following traditional healers procedures

Materials and Methods

A retrospective study of patients admitted to the Department of Otorhinolaryngology of the Usman Danfodiyo University Teaching Hospital, Sokoto, Nigeria, following traditional healers procedures from October 2005 to September 2016.

Results

A total of 29 patients were seen (16 males and 13 females). The majority of the patients 20 (69%) were below the age of 10 years (75% of these were below the age of 3 weeks). The age ranged from 1 day to 60 years with the mean age of 10.7 years. Throat conditions 18 (62.1%) especially for a sore throat 10 (55.6%) and family tradition 4 (22.2%) to remove the uvula were the main indications. Traditional uvulectomy 18 (62.1%), especially for neonates 16 (55.1%) and incision and drainage of any neck swellings 6 (20.7%); 4 of these were malignant neck masses, were the main procedures carried out by the traditional healers. Anaemia from hemorrhage 12 (41.4%), septicemia 4 (13.8%), cervical necrotizing fasciitis 3 (10.3%) and acute renal failure 1 (3.4%) from hemorrhagic shock were some of the complications noted. Six (31.6%) of these patients died from the complications especially from the septicemia 3 (15.8%).

Conclusion

Complications from unsupervised and unscientific practices of the traditional healers are common and can be life-threatening.

Keywords: Traditional healers, complications, outcome

Authors and affiliations:

Abdullahi Mohammed and Amutta Stanley Baba
Department of Otorhinology, Usman Danfodiyo University Teaching Hospital, Sokoto, Nigeria

Corresponding author:
DR Abdullahi Mohammed
Department of Otorhinology,
Usman Danfodiyo University Teaching Hospital, Sokoto, Nigeria

Email: mabdullahi7174@gmail.com
Initial Factors Influencing Duration of Hospital Stay in Adult Patients with Peritonsillar Abscess

H.Su*(1), Y.Liu(2), Y.Tsai(2)

(1)Kaohsiung Veterans General Hospital, Kaohsiung city, China, Republic of (Taiwan), (2)Kaohsiung Veterans General Hospital, Taiwan, China, Republic of (Taiwan)

Purpose of the study

The patients with peritonsillar abscess may be admitted to ward because different degree of severity. And the duration of hospital stay varies accordingly. The purpose of the study is to review cases of peritonsillar abscess and investigate the initial clinical factors that may influence the duration of hospitalization. Also to determine the predictive factors of prolonged hospital stay in adult patients with peritonsillar abscess.

Methods

Subjects were adults hospitalized with peritonsillar abscess. We retrospectively reviewed 377 medical records from 1990 to 2013 in a tertiary medical center in southern Taiwan. The association between clinical characteristics and the length of hospital stay was analyzed with independent t test, univariate linear regression and multiple linear regression analysis.

Results

The mean duration of hospitalization was 6.2 ± 6.0 days. With univariate linear regression, a prolonged hospital stay was associated with several variables, including female gender, older ages, non-smoking status, diabetes mellitus, hypertension, band forms in white blood cell counts, and lower hemoglobin levels. With multiple linear regression analysis, four independent predictors of hospital stay were noted: years of age (P < 0.001), history of diabetes mellitus (P < 0.001), ratio of band form WBC (P < 0.001) and hemoglobin levels (P < 0.001). For those patients older than 65 year-old, the group with pus accumulated at the lower portion had prolonged hospital stay (P = 0.017).

Conclusions

In adult patients with peritonsillar abscess, older ages, history of diabetes mellitus, band forms in WBC counts and lower hemoglobin levels were independent predictors of longer hospitalization.
Isolated muscular cervical tuberculosis

G.Kharrat*(1), A.Charfi*(2), K.Charada(2), S.Mansour(2), B.Rabie(2), A.Sethom(2)

(1)Hôpital Md Tahar Mâamouri, Nabeul, Tunisie, Tunisie, (2)Hôpital universitaire Med Tahar Mâamouri, Nabeul, Tunisia

Introduction:
Muscular manifestations are rare in tuberculosis, with an estimated prevalence of between 0.01 and 2%. The existence of isolated muscular tuberculosis, without other localizations of the disease is very rare.

We report the observation of a patient with isolated muscular cervical tuberculosis.

Observation:
It was a 38-year-old patient with no medical history who consulted us for a painful cervical swelling that has evolved for 6 months associated with nocturnal fever.

On examination, she had a tumefaction located at sector III, inflammatory, with two fistulas leaving pus, the rest of the examination was normal.

In biology, she had an intra-dermoreaction with tuberculin was highly positive, predominantly lymphocytic leukocytosis. The bacteriological examination isolated an acido-alcoholo resistant bacillus. The cervical CT scan showed a collection within the sterno-cleido-mastoid muscle and absence of necrotic lymph nodes, thoracic CT was normal. The patient benefited from drainage of the cold abscess with cutaneous and muscular biopsies. Pathology examination showed tuberculoid granulomas. She was placed on combined anti-tuberculosis treatment: HRZE (isoniazid-rifamycin-pyrazinamide-ethambutol) for 2 months relayed by HR for 6 months. The disease progression under treatment was favorable. After stopping treatment, there was no recurrence for 8 months.

Conclusion:
Our observation is original, to our knowledge, the isolated character of cervical muscular tuberculosis has not been described in the literature.
Management of neglected hypo-pharyngeal injuries

M.Amin riad*(1)
(1)ENT Department. Ain Shams University, Cairo, Egypt

Professor Magdy Amin RIAD, Reda Sabra and Ahmed Nabil
Ain Shams University, Cairo Egypt

Background.
Neglected Hypo-pharyngeal injury is a rare, but potentially life threatening complication. There are few reports of delayed pharyngeal injury occurring as a result of street violence. Delay in initiating treatment is the main risk factor of fatal neck space infections, carotid artery blow out or mediastinitis. Computed tomography plays an important role in diagnosis and guiding treatments. The management often entails aggressive surgical debridement and drainage.

Subjects and Methods.
17 patients with delayed and neglected hypopharyngeal injuries were received in the Ain Shams University hospitals between 2011 and 2013, 9 had complications of acute mediastinitis. All patients underwent surgical debridement and drainage. Thirteen underwent primary repair (7 cases with suture, 6 cases with sternomastoid muscle flaps or pectoralis major muscle flap)

Results.
The mean time between injury and initial treatment of patients who developed mediastinitis was 7.72 (1.93) days, compared with 3.92 (1.41) days for those who did not (P < .05). Morbidity and mortality rates were significantly lower in patients who had earlier intervention, cervical muscle flaps or early revesion surgery and reconstruction with pectoralis major flaps.

Discussion.
The treatment options are discussed including timing of the surgical intervention, the type and extent of surgery and repair methods.
MANAGEMENT OF RETROPHARYNGAL ABSCESSES IN THE ORL DEPARTMENT OF ACADEMICS HOSPITAL OF FANN

A. Dieye*(1)

(1) CHNU FANN DAKAR SENEGAL, Dakar, Senegal

Introduction: Retro pharyngeal abscess refers to purulent collection in retro pharyngeal space. This is an ENT emergency.

Retro pharyngeal abscesses occur mostly in children. The diagnosis is easily confirmed in the clinic and the treatment remains essentially surgical. If it is not done in time, the evolution can be tragic because of the complications (spontaneous rupture with tracheo-bronchial aspiration, mediastinitis ...)

Objectives: To evaluate the epidemiological, clinical and therapeutic aspects of retro pharyngeal abscesses in Senegal.

MATERIAL AND METHODS: From January 2013 to November 2016, 14 cases of retro pharyngeal abscess were diagnosed in the ENT department of FANN Academic Hospital.

Results: The mean age at diagnosis was 13 months and the M: F sex ratio was 2.2. Suprathyroidal dyspnea was seen in 57.1%, cervical swelling in 42.8% and dysphagia in 42.8%. Bulging of the posterior wall of the oropharynx was found in 64.2% of cases and cervical swelling was noted in 50% of the series. Six (06) cases had fever. X-ray of the nasopharynx (neck) profile allowed the diagnosis to be made in 42% of the cases. Trans oral incision and drainage and parenteral antibiotic treatment allowed to have a good evolution of which 03 cases were carried out in the course of an endoscopy. The collections were located at the posterior wall of the oropharynx in 13 cases and 1 case in the posterior wall of the hypopharynx. Post operative period were uneventful with an average hospital stay of 7 days.

CONCLUSION: Retro pharyngeal abscess is a common condition, seen rarely in adults, which is of concern to pediatricians and general practitioners specially since diagnosis. Management are usually simple

Key words: Retro pharyngeal abscess - drainage - antibiotic
Neck phlegmon as a result of methimazole-induced agranulocytosis: a case report

I.Olejniczak*(1), K.Bojanowska-poźniak(2), M.Waclawek(2), W.Pietruszewski(2)

(1)Clinical Department of Otolaryngology and Oncological Laryngology, Medical University of Lodz, Poland, Lodz, Poland, (2)Medical University of Lodz, Poland, Lodz, Poland

The incidence of hematological side effect (agranulocytosis) after antithyroid drugs (especially thioamides - including propylthiouracil, methimazole and carbimazole) has been reported to range from 0.17% to 1% and the estimated risk valued 3 per 10,000 patients per year. The initial clinical features of agranulocytosis include fever, sore throat and general malaise. First diagnoses are usually acute pharyngitis or tonsillitis and pneumonia but they may still lead to many life-threatening complications like neck phlegmon, obstruction of the upper airway, mediastinitis or sepsis. In the study we presented a case of the diffused phlegmon of the left neck area and necrosis of the left tonsil as a result of thiamazole induced agranulocytosis. Such a severe and rapid process is very rare in the literature. The diagnosis was based on historical, physical, and laboratory findings as well as radiographic studies. To conclude, agranulocytosis is a condition of high risk of severe infection. Immediate treatment with targeted antibiotic therapy, surgical neck exploration and drainage offer good prognosis however the treatment has long duration and the clinical manifestations of the disease may vary with a possibility of exacerbation and remission. This suggestion raises the important issue of regularly monitoring the white blood cell count and laryngological consultations in patients who are taking antithyroid drugs and presenting the symptoms of fever or sore throat.
NECROTIZING FASCIITIS

E.Paloma*(1), G.Rocio(2), V.Alara(2), S.Blanca(3), G.Raquel(3)

(1)HOSPITAL SIERRALLANA (TORRELAPEGA - CANTABRIA - ESPAÑA), Torrelavega, Spain, (2)Hospital Universitario Marqués de Valdecilla, Santander, Spain, (3)Hospital Sierrallana, Torrelavega, Spain

PURPOSE OF THE STUDY
Performing a bibliographic review and presenting a clinical case

MATERIALS AND METHODS
The clinical case involves a 63-year old patient that arrived into the emergency room showing an inflammation on the right parotid gland. It was suspected that the patient was suffering from severe parotitis and treated with anti-inflammatory drugs. 48 hours later the patient required to be treated suffering from cervical tumefaction. Days before, the patient was treated for a suspected tonsillitis.

RESULTS
A mild inflammation of the right tonsil, cellulitis and signs of hematoma at the right latero cervical section descending towards the thorax was observed.

The cervical computed tomography (TC) showed a thickening of the right sternocleidomastoid muscle and blurry fat layers of the jugular-carotid planes. I

The patient suffering from a severe kidney failure was transferred to the main hospital to be treated for a necrotising fasciitis of the right sternocleidomastoid muscle.

The patient was admitted in the Intensive care unit. The enlargement of the cervical circumference was evident and the skin showed a blackish colouring that extends towards the thorax.

The patient was treated initially with meropenem and linezolid intravenous. A new TC was performed that confirmed a deterioration affecting the superior right hemithorax.

Laboratory findings indicated a kidney failure, incipient liver failure and coagulopathy. An orotracheal intubation was performed followed by a surgical debridement practise by ENT specialist. Soon after, the patient required the intervention of the Thoracic Surgery Department due to a mediastinitis.

During both interventions, a widespread vascular thrombosis was evident. Despite both interventions the fasciitis progressed reaching the inferior limbs. The patient finally passed away due to a septic shock and multi-organ failure. The streptococcus pyogenes was obtained in the cultivation.

CONCLUSION
Necrotizing fasciitis is a deep infection of the subcutaneous tissue that results in progressive destruction of fascia and fat. The process progresses rapidly over several days with changes in skin color from red-purple to patches of blue-grey and, finally, gangrenous. There are two bacteriologic categories of necrotizing fasciitis: type I (polymicrobial infection) and type II (group A or other beta-hemolytic streptococcal infection). Treatment consists in early and agressive surgical exploration and desbridement of necrotic tissue, together with broad spectrum antibiotic therapy and hemodynamic support. Even with optimal therapy, necrotitizing fasciitis is associated with high mortality.
Objective evaluation for improvement of skin lesion in patients with pustulosis palmaris et plantaris (PPP) after tonsillectomy

M.Takahara*(1), Y.Hirata(2), T.Kumai(2), T.Nagato(2), Y.Harabuchi(1)

(1)Department of Otolaryngology-Head and Neck Surgery, Asahikawa Medical University, Asahikawa, Japan,
(2)Department of Otolaryngology-Head and Neck Surgery, Asahikawa Medical University, Japan

Purpose of the study

Pustulosis palmaris et plantaris (PPP) is famous for tonsillar focal disease, and several reports suggested that tonsillectomy was effective for improvement of PPP skin lesion. However, the improvement was usually evaluated by self-assessment and not in an objective way. In this study, we quantitated degree of the skin lesions by PPP Area and Severity index (PPPASI) before and after tonsillectomy, and evaluated the efficacy of tonsillectomy in an objective way.

Materials and methods

Eighty one patients with PPP underwent tonsillectomy in our department were enrolled in this study. The patients consisted of 23 males and 58 females, and the age of the patients ranged from 15 to 72 with median age of 52 years. In 29 patients, pustulotic arthro-osteitis (PAO) was also seen. The skin lesion before and after tonsillectomy was evaluated by PPPASI reported by Bhushan, et al. Briefly, PPPASI was calculated based on percentage of involved area and severity of skin findings such as erythema, pustules and desquamation. In addition, factors correlated with disappearance of the lesion (PPPASI=0) after tonsillectomy were estimated by log-rank tests using Kaplan-Meier method.

Results

PPPASI at 12 months after tonsillectomy (0-10, median value 0) significantly decreased compare to PPPASI before tonsillectomy (0.2-51, median value 7.8). Kaplan-Meier analysis revealed that the patients with PAO were more likely to experience a disappearance of PPP skin lesion.

Conclusion

These results objectively confirmed that tonsillectomy was effective for the PPP patients, especially with PAO. Because PPP patients generally visit department of dermatology, we should share this information with more dermatologists.
PERITONSILLAR ABSCESS IN ADULT NIGERIANS: CLINICAL PROFILE AND MANAGEMENT CHALLENGES.

D. Aliyu*(1)

(1) Usmanu Danfodiyo University Teaching Hospital, Sokoto, Sokoto, Nigeria

PERITONSILLAR ABSCESS IN ADULT NIGERIANS: CLINICAL PROFILE AND MANAGEMENT CHALLENGES.

Aliyu D, Iseh KR, Amutta SB, Abdullahi M.

Department of Otorhinolaryngology Usman Danfodiyo University Teaching Hospital, Sokoto.

Purpose of the study:

Peritonsillar abscess (PTA) is a life threatened complication of acute exudative tonsillitis requiring immediate surgical intervention. We profile the clinical presentation and highlight challenges in management.

Materials and Method:

A retrospective analysis of all patients diagnosed with PTA at the department of otorhinolaryngology of the Usman Danfodiyo University Teaching Hospital Sokoto between May 2013 to April 2016. These patients’ clinical records were retrieved from the health record department and analyzed.

Results:

A total of eighteen patients 13(72.2%) females and 5(27.8%) males with an M: F ratio of 1:2.6 was analyzed. Age range is between 18 years – 58 years with a mean age of 35.4 years. The highest incidence was 66.7% in patients within the age group 21-40 years. Odynophagia and trismus were the commonest presenting features in all the patients. Side of PTA involvement was on the left tonsils 12(66.7%). There was spontaneous rupture in 5(27.8%) while 13(72.2%) of patients had incision and drainage. All patients had broad-spectrum antibiotics. Interval tonsillectomy was carried out on 12(66.7%) of patients while 6(33.3%) of patients did not consent for tonsillectomy and were subsequently lost to follow up. No recurrence of symptoms or mortality recorded.

Conclusion:

PTA is a life threatening otolorhinolaryngological emergency common amongst young female adults. Optimal management is still antibiotics therapy and drainage of abscess in our center.

Key Words: Peritonsillar abscess, complication, odynophagia, antibiotics, tonsillectomy
Pharynx fistula after upper digestive tract instrumentation management

B.Popescu*(1), O.Paun(2), C.Antonie(2), P.Pascu(2), R.Grigore(3), S.Bertesteanu(4)

(1)Carol Davila University of Medicine and Pharmacy, Bucharest, Romania, Coltea Clinical Hospital, Bucharest, Romania, (2)Coltea Clinical Hospital, Bucharest, Romania, (3)Coltea Clinical Hospital, Carol Davila University of Medicine and Pharmacy Bucharest, Bucharest, Romania, (4)Carol Davila University of Medicine and Pharmacy, Coltea Clinical Hospital, Bucharest, Romania

Purpose of study

As much as 15% of the esophagus fistulas appear as a result of blunt trauma. Some of these cases are due to instrumentation for different diagnostic and therapy procedures and may be present in the pharynx. The management of the fistulas is of outmost importance due to the relations of the pharynx with other organs of the neck and due to the relation with the upper mediastinum.

Materials and methods

The authors performed a study of a series of cases of parapharynx space suppurations and cellulitis. The series of cases is the result of post surgery defective healing and as a result of instrumentation after naso-gastric tube placement and transesophageal heart ecography.

Results

The main concern of therapy management for these cases is the immediate diagnosis protocol implementation and establishing the correct surgery action accompanied by broad spectrum antibiotics use until the specific antiobigram is ready. this is why in our department the diagnosis protocol and surgery management accompany the biological screening and the implementation of the nutritional support.

Conclusions

The author try to emphasise the need for an immediate and accurate diagnosis followed by a correct surgical and nutritional management. The upper digestive tract instrumentation by specialists other than E.N.T. specialists should be preceded by an endoscopic examination of the oro and hypopharynx region.
Retropharyngeal abscess induced by a chicken bone: case report

A. Ben youssef*(1), M. Tbini(2), Z. Ayadhi(3)

(1) Menzel Bourguiba Hospital, Bizerte, Tunisia, (2) Menzel Bourguiba Hospital, Jendouba, Tunisia, (3) Menzel Bourguiba Hospital, Tunis, Tunisia

Retropharyngeal abscess is an infrequently encountered disease occasionally seen in children (due to an upper-respiratory infection or pharyngitis) but less common in adults (caused by iatrogenic oropharynx trauma or perforation by a foreign body).

In this study we report the case of a 51-year-old woman with no significant past medical history who referred to our emergency for dysphagia and neck swelling.

Physical examination revealed an elevated temperature (39°C), a neck swelling, and a bulging of the posterior wall of the oropharynx.

Laboratory data revealed an elevated white blood count (WBC) of 14680/μL, C-reactive protein (CRP) of 197.1 mg/L.

Neck radiograph illustrated an air collection at the retropharyngeal region. Neck X-ray computed tomography (CT) scan was performed which showed a retropharyngeal abscess.

The symptoms improved after the administration of intravenous antibiotics and surgical drainage. The patient was discharged on day 10.

The evolution was marked by the clinical and biological improvement with a 12-month follow-up.

Retropharyngeal abscess is uncommon in adults. Foreign bodies can cause retropharyngeal abscess even though removed surgically or coughed up spontaneously. Simple and cheap initial imaging; lateral neck radiograph should be performed allowing us to suspect this condition. Treatment consists of surgical drainage and intravenous antibiotics.

P. Correia-rodrigues*(1)

(1) Centro Hospitalar de Lisboa Norte - Hospital de Santa Maria, Foz do douro, porto, Portugal


Hospital de Santa Maria, Centro Hospitalar de Lisboa Norte, Lisboa, Portugal

Purpose: Infections of the deep neck spaces are a common and often serious finding in the Emergency Department setting of a trauma centre hospital. In adults, they are most frequently odontogenic in origin. Because of their invasiveness potential, infection may spread among fascial and deep neck spaces by paths of communication, reaching distant sites such as the thoracic cavity. Descending necrotizing mediastinitis (DNM) is a potentially life-threatening entity that may occur secondarily to an odontogenic infection that progresses inferiorly into the mediastinum, therefore requiring a multidisciplinary approach. Even with modern antibiotics and state-of-the-art imaging and surgery, the mortality rate remains as high as 40% according to some studies. We report on the successful management of a case of mediastinitis and pericarditis complicating a deep neck abscess with odontogenic etiology in an otherwise healthy 35-year-old male.

Material and Methods: Case report describing the clinical presentation, iconography and imaging studies used in the workup.

Results: The patient presented with a chief complain of a one-week history of constant toothache and odynophagia associated with a cervical submandibular tumefaction and fever. Head, neck and thoracic CT scan revealed submandibular, retropharyngeal and retrolaryngeal abscesses extending diffusely into the mediastinum and inside the pericardial sac. He was admitted to the Intensive Care Unit (ICU) in septic shock, requiring a total of 4 surgeries including a tracheostomy, cervicotomies and thoracotomies in order to explore, clean and drain purulent compartments. Three teeth (3.5, 3.7, 3.8) were also extracted. Since successive polymicrobial aerobic and anaerobic organisms were isolated, various intravenous antibiotic schemes such as amoxicillin/clavulanate, piperacillin/tazobactam, vancomycin and tigecycline were administered. After 48 days admitted in the ICU, he was discharged and remained clinically stable, breathing autonomously and tolerating oral ingestion.

Conclusion: Successful management of this patient required a multidisciplinary approach involving Otolaryngology & Head and Neck surgeons, Cardiothoracic surgeons, Radiologists, Stomatology and ICU practitioners. Intravenous antibiotic therapy, airway management and surgical drainage procedures of the cervical and mediastinal collections were demanding but crucial for the outcome. It is essential that the ENT doctor be aware of this challenging potentially fatal complication of a frequent head and neck infection.
The Application of Ultrasound-guided Pigtail Catheter Drainage for Abscesses in the Head and Neck

J.Hong*(1), Y.Roh(1), B.Joo(1), H.Park(1)

(1)Dong-A University, , Korea, South

Purpose: This study is designed to evaluate the clinical application of ultrasound-guided pigtail catheter drainage in the management of abscess in the head and neck.

Design: Retrospective study

Setting: Dong-A University Medical Center, Busan, Korea

Materials and methods: From February 2009 to July 2016, Forty four patients with an unilocular or a multilocular neck abscess were recruited in the study. We investigated the success rate, etiology of abscess, location and bacterial culture. We also investigated the success rate.

Results: Thirty eight of the Forty four patients (86%) were successfully treated with no complications. Surgical open drainage were required in 6 of the 44 patients (14%). Odontogenic infection (34%) was the most common cause of the abscess. The submandibular space (34%) was the most common site. The most dominant bacteria was Streptococcus viridans (37%).

Conclusions: Ultrasound-guided pigtail catheter drainage in the patients with an unilocular or multilocular neck abscess is a safe and cost effective procedure. Furthermore, there are some advantages compared with conventional open drainage. This study demonstrates that ultrasound-guided pigtail catheter drainage might be most useful in the following conditions.

1. This procedure should be applied in patients with a stable airway.
2. CT findings or Ultrasonographic findings need to identify an uniloculated or a multiloculated abscess in the head and neck.
3. Then if the target cavity is larger than 1.5cm in greatest dimension and (4) the depth of lesions is less than or equal to 4cm in depth, this technique appeared to be a reliable, effective and safe procedure.
Ultrasound examination in differential diagnosis of chronic tonsillitis complications


(1) VC Kvarnsveden, Sweden, (2) Russian, Russia, (3) R, Russia, (4) Ru, Russia, (5) Russian National Research Medical University, Russia

Purpose of the study. One of the most common presentations of chronic tonsillitis is the symptom of enlarged regional lymph nodes. Poorly drained crypts within chronic tonsillitis is accompanied in more than 80% by impede function of the lymphoid tissue and structural changes in the regional lymph nodes. However, plain neck palpation doesn't allow to estimate precisely the condition of the deep lymph nodes. Therefore, we propose ultrasound examination of the regional lymph nodes. Aim of this study is to evaluate diagnostic value of the ultrasound examination.

Materials and methods used. A total of 60 patients with chronic tonsillitis have been examined. Group A consisted of 30 patients with the complication of disease (such as peritonsillar abscess, tonsillogenic complications and recurrent inflamations), and group B of 30 patients with local tonsillar alterations only. Average age was 26 years. Men and women ratio were 1 to 1.5. All patients were examined with an ultrasound system “Toshiba Aplia 500” 5-12 MHz. Neck examination was conducted from the both sides and included localisation of the lymph nodes, quantity, size, structure and shape.

Results. The frequency of multiple lymph nodes in group A was 53.3 ± 9.1%, and 26.7 ± 8.1% (p<0.05) in group B, respectively. Maximal diameter of the enlarged lymph nodes in group A was 22.5-25.0 mm (15.6 ± 1.1 mm), and in group B was 7.8-19.0 mm (12.2 ± 0.7 mm) (p<0.05).

Conclusion. Proposed examination can visualise fast and effectively the regional lymph nodes in patients with different clinical forms of chronic tonsillitis. In patients with chronic tonsillitis with complications multiple enlarged lymph nodes prevailed and on contrary, the uncomplicated disease was characterised with single and small regional lymph nodes.
CO2 Laser in treatment of early larynx cancer: our experience in 15 years and review of literature

A.Camaioni*(1), M.Simone(1), E.Vesperini(1), D.Tassone(1), C.Viti(1)
(1)San Giovanni - Addolorata Hospital of Rome, Roma, Italy

Purpose of the study
We present our institutional results in 15 years of CO2 laser use in early larynx cancer treatment.

We focus also on the literature yet debatable area to try to clarify most important aspects of indications and use of this great technology.

Materials and Methods
We retrospectively analyze 405 cases (332 M: 73 F) of glottic cancer all treated by CO2 laser exeresis from June 1999 to December 2013 at the same institution.

The glottic cancers are 90 Tis, 204 T1a, 86 T1b and 36 T2). The supraglottic are all T1-T2 N0 cases. Agreed with ELS classification we provided 25 type I, 55 type II, 88 type III, 112 type IV, 103 type V and 31 type VI cordectomy procedures.

In the same period we performed also 10 (8 M: 2 F) horizontal endoscopic supraglottic laryngectomy for T1-2 N0 cases with same CO2 laser.

Results
Mean hospital stay was 2,2 days for cordectomies (range 1-3) and 6,5 days for HESL (range 5-12).

About cordectomy, the DSS, DFS and larynx preservation rate at 5 years follow-up (in 348 patients that reach this time) is 96,3%, 91 and 94,8% (weighted average). No great complications, 8 patients (1,9%) needed a surgical revision for medical therapy resistant granulations.

In the HESL group the OS, DFS and larynx preservation at 5 years follow-up is respectively 86%, 96% and 100%. All patients reacquire oral intake within the 18th days. One patient had a surgical revision for hemorrhage in second day post-op.

Conclusions
Our experience confirm one more time the efficacy and safety of CO2 laser procedures for early larynx cancers.

Good oncological and functional results are achieved and larynx preservation rate is very high.

A great unsolved problem, both for surgical as for radiation treatment, is the anterior commissure involvement. It frustrates systematically all the procedures with worse oncological and functional results.

Nowadays there aren't randomized trial that clearly get out winner between surgical and RT procedures in early larynx cancer so the treatment is normally tailored on patient.
Comparative analysis of swallowing function in supraglottic cancer: Transoral surgery or Open conservation surgery?

S.Kim*(1)

(1)Seoul St.Mary's Hospital, Catholic University of Korea, , Korea, South

Introduction: Transoral laser microsurgery (TLM) has become a recognized alternative to external partial laryngectomies for early supraglottic tumors. Cabanillas et al published a significantly good functional impact on swallowing, hospitalization time, feeding tube duration of TLM and many of other authors reported equivalent or better functional outcome of transoral surgery than open conservation surgery. But still many concerns are present about late toxicity of radiation for the function of larynx. So we want to compare the functional outcomes between transoral surgery group and open conservation group considering the effect of radiation toxicity.

Methods: A retrospective review of the medical record of the patients who were diagnosed with squamous cell carcinoma (SCC) of supraglottis underwent surgery as primary treatment at our institution from 1998 to 2013 was done. Among 106 patients, this study was done using the data of patients who followed up at least 2 years (including 18 patients who underwent transoral surgery and 53 patients with open conservation surgery).

Results: Post-operative adjuvant radiotherapy was done in 12 patients of transoral group (66.7%), 29 patients of open surgery group (54.4%) and there was no significant difference between two groups (p-value=0.27). Functional result of transoral group showed superior result in oral feeding start (POD 4.7 vs 23.0), G-tube dependency (5.6% vs 15%) than open conservation surgery group. But 6 patients who underwent radiation after transoral surgery experienced aspiration pneumonia during follow up period, which was much higher rate than open conservation group (85.7% vs 32.1%) with HR (Hazard ratio 5.24, 95% CI 0.135-6.210, p-value=0.01*)

Conclusion: We figure out there is significant impact of post-operative radiation on aspiration pneumonia in transoral surgery group of supraglottic cancer. Proper choice of treatment modality tailored by individuals to reduce adjuvant radiation will be the best way to preserve the function of larynx and quality of life of the patients.
LARYNGEAL SCHWANNOMA: A CASE REPORT

C. Costa*(1), W. Alves(2), L. Velasco(3), A. Valadares(3), M. Marra(3), H. Ramos(2)

(1) Federal University of Goiás - Brazil, Goiânia-go, Brazil, (2) University Federal of Goiás, Goiânia-go, Brazil, (3) University Federal of Goiás, Goiânia, Brazil

Purpose of the study: To report a case of a patient with laryngeal schwannoma seen in our service. The neurogenic tumors of the larynx are rare, with few cases reported in the literature. Particularly, schwannomas are responsible for 0.1% of all benign neoplasms of the larynx. They are tumors of the sheaths of peripheral, autonomic and cranial nerves. Material/Case report: a female patient, 20 y.o, sought medical attention complaining of progressive dyspnea for 1 year, dysphonia, and dysphagia for solids and pharyngeus globus. Rigid laryngoscopy showed supraglottic tumor obstructing approximately 90% of larynx light. She progressed to severe dyspnea, emergency tracheostomy was performed. After infusion of intravenous contrast, nuclear magnetic resonance showed intense heterogeneous enhancement lesion along the posterior wall of the hypopharynx, occupying all its light, with 2.8 cm and 2.2 cm in its largest diameter, suggestive of a neoplastic lesion. Histopathology and immunohistochemistry concluded that the injury was a laryngeal schwannoma. The patient underwent open surgery for resection of laryngeal injury. She had an uncomplicated post-operative recovery. Conclusion: The definitive diagnosis of lesions in the larynx can be difficult and it is often achieved only by pathological examination. The laryngeal schwannoma is a rare diagnosis, and it can reach large proportions and even cause respiratory obstruction.
LARYNX ANTERIOR COMMISSURE – A PROBLEM IN ENDOSCOPIC MANAGEMENT

N.Balica*(1), M.Poenaru(2), H.Stefanescu(2), E.Boia(2), C.Doros(2)

(1)“Victor Babes” University of Medicine and Pharmacy Timisoara, Romania, Timisoara, Romania, (2)“Victor Babeş” University of Medicine and Pharmacy from Timișoara, ENT Department Timișoara, , Romania

Purpose of the study: The CO2 LASER surgery represents a treatment method of laryngeal bicordial and anterior commisure glottic cancer T1b,T2,N0.

Material and Methods used: In the ENT Department Timişoara during a ten years period were analyzed 781 files from patients with laryngeal neoplasm. 127 patients presented the tumor which involved both vocal cords and anterior commissure, stages T1b, T2 and T3. Therapeutic options included: CO2 LASER microsurgical excision, 55 patients (43.30%), frontolateral hemilaryngectomy - 16 patients (12.59%), total laryngectomy – 42 patients (33.07%), radiotherapy – 10 patients (7.87%), 4 patients (3.14%), initially, refused any treatment modality. Endoscopic laser CO2 microsurgery was the primary and solitary management for curative resection of the glottic cancer. All operations were performed under general anesthesia with orotracheal intubations. The mean follow-up was 58 months, range between 36 to 84 months

Results: Suspended microlaryngoscopy with CO2 LASER surgery has been performed in 43 patients staged T1bN0Mx (33.85%) and 12 patients staged T2N0Mx (9.44%). In 5 patients (9.09%) we encountered local recurrences.

Conclusions: The endoscopic CO2 laser surgery is in our view the elective and preferable surgical method in laryngeal glottic cancer stage T1b and T2 for cure, with oncologic and functional results superior to those of conventional surgical procedures.
Long term swallowing outcome after supracricoid partial laryngectomy

D.Di Santo*(1), S.Bondi(1), B.Ramella(1), L.Giordano(1), M.Biafora(1), M.Bussi(1)

(1)Università Vita-Salute, Ospedale San Raffaele, Milano, Italy, Italy

Purpose of the study

Supracricoid partial laryngectomy (Type II Open Partial Horizontal Laryngectomy, according to the nomenclature of the European Laryngological Society) is nowadays a well-established procedure for the treatment of selected cases of laryngeal cancer. Postoperative swallowing rehabilitation may be challenging, and one of the most dreadful surgical complications is aspiration pneumonia, occurring in approximately 8-10% of patients. Nevertheless, it has been noticed that a significantly higher portion of patients may experience silent microinhalation episodes. The purpose of our study was to evaluate the prevalence of microinhalations at long-term follow-up after supracricoid partial laryngectomy and potential pulmonary complications.

Materials and methods used

We selected 39 patients who underwent supracricoid partial laryngectomy with a minimum 3 years follow-up period. All of them had accomplished a satisfying swallowing rehabilitation and were eating and drinking per os without any limitation after surgery. They were evaluated on FEES and with the MDADI questionnaire.

Results

We detected inhalation of small amounts of liquids and/or solids in 9 patients. None of them referred any episode of hospital admission for pulmonary problems or pneumonia over the years of follow-up. Comparing DOSS at discharge with long-term DOSS we found a worse deglutition performance in patients who underwent postoperative radiation therapy and in those with a higher age at surgery (>65 years old). Conservation of both the arytenoids seems to have a protective effect on microinhalations. Patients who underwent type IIb OPHL seem to have a worse deglutition performance both soon after surgery and at long-term evaluation compared to those who underwent type IIa OPHL.

Conclusion

A significant portion of patients who underwent supracricoid partial laryngectomy revealed microinhalation episodes at long-term follow-up. Long-term worsening of deglutition function was found in patients who underwent radiation therapy and in those who were older at time of surgery. Probably, the effects of presbyphagia may affect also patients who underwent partial supracricoid laryngectomy. Anyway, none of our patients reported any pulmonary complication. It will be interesting to understand if the presence of microinhalations could affect long-term survival outcome, with a longer follow-up period.
Management of early malignant lesions of the larynx: is there still a place for open surgery?

B. Mostafa*(1)

(1) Ain-Shams University Faculty of Medicine, Cairo, Egypt

Background: Squamous cell carcinoma is the commonest malignant tumour of the larynx. The traditional treatment options have included radiotherapy and total laryngectomy. Due to the pivotal role of the larynx in respiration, speech and deglutition, conservative approaches to the management of malignant lesions were suggested. These organ-preserving policies aim at preserving most of the laryngeal functions without compromising the oncological outcomes. Such approaches include organ-preserving radio/chemotherapy protocols, endoscopic laser surgery, photodynamic therapy and open conservative surgery. Each of these has their indications, advantages and disadvantages. The modern trend towards organ preservation protocols and endoscopic laser techniques seems to have supplanted open conservative surgery. However, these techniques still have an important role in the management of laryngeal malignancies.

Methods: This is retrospective study on 216 patients followed for a minimum of 2 years and a maximum of 16. All patients underwent partial surgery as first-line treatment: 135 underwent partial vertical laryngectomy, 76 underwent supraglottic hemilaryngectomy and 5 underwent supracricoid subtotal laryngectomy.

Results: Our overall disease-free survival was 92.1%, which compares favourably with most series. Total laryngectomy was performed in 11 patients (in 10 as salvage and in 1 for intractable aspiration) resulting in a laryngeal preservation rate of 94.4%. The decanulation rate was 95% (11 patients in the three types of surgery). There were no major morbidities or surgery-related mortalities. The most significant complication was aspiration (18.9% of patients), but it could be managed conservatively in all but one case.

Conclusion: In this era of organ preservation policies, open conservative surgery offers a viable option with comparable functional and oncological results. It should be considered when logistic, economical or patient factors make other protocols impractical.
Partial Laryngectomy – Out come measures of tumour recurences, voice and swallowing.

M.Amin riad*(1)

(1)ENT Department. Ain Shams University, Cairo, Egypt

Professor Magdy Amin RIAD, Ahmed NABIL, Tahany Rabie, Ahmed Gamal Ain Shams University, Cairo Egypt

Background:
Partial Laryngectomy has a prominent role in the treatment of T2 and T3 Laryngeal carcinoma cases. This is particularly important in Egypt and the Middle East; where results and availability of radiotherapy do not match western world standards. Whereas Partial Laryngectomy outcomes in terms of local tumour control are satisfactory, problems of post-operative laryngeal incompetence, dysphonia and aspiration are often reported.

Subjects and Methods:
This study present our experience with post-operative surgical modulation of voice and swallowing in a cohort of 86 patients with a median follow up period of 82 months. The analysed variables included tumour site, size and TNM grade, type of laryngeal resection, neural and Crico-arytenoid joint preservation, type of reconstruction and type of neck dissection. Patients were assessed by laryngeal endoscopy, video-fluoroscopy and voice recordings and analysis.

Results:
Patients who suffered from persistent voice and swallowing disorders, were managed conservatively by voice and swallowing rehabilitation therapy in the initial period. Surgical modulation of voice and swallowing disorders were employed when conservative management failed. Several surgical techniques including Vocal fold injections, botox injections, Laryngoplasty, Crico-pharyngeus myotomy, arytenoid medialization, cricoid resection were used. The results of the assessment and treatment protocols are presented and discussed.
Salivary gland choristoma in larynx: An extremely rare case

G. Saylam*(1), Ö. Bayır(1), D. İkinci(2), B. Öcal(2), E. Tahir(1), E. Çadallı tatar(2), M. Korkmaz(1)

(1) Ankara Dışkapı Yıldırım Beyazıt Research and Training Hospital ENT Clinic, Ankara, Turkey, (2) Ankara Dışkapı Yıldırım Beyazıt Research and Training Hospital ENT Clinic, , Turkey

Salivary gland choristoma is labeled as the presence of normal salivary gland tissue in ectopic locations. It is seen rarely in head and neck region such as thyroid, lymph nodes, pituitary gland, maxillofacial region etc. However, there are few published laryngeal salivary gland choristoma cases in the literature. Its etiology is unknown. Generally, it is an asymptomatic mass that might be functional. In this poster we would like to present an 64 year old male patient with a complaint of hearing loss. However, during routine ENT examination; we noticed patient’s hoarseness. In his flexible laryngeal endoscopic examination, a left sided submucousal swelling was seen located at left ventricular fold with intact vocal cord mobility. Direct laryngoscopy was performed under general anesthesia and the mass was resected uneventfully. Postoperative histopathological examination was reported as “salivary gland choristoma, all surgical margins are intact”. The patient was discussed at the “Institutional Multidisciplinary Head and Neck Board” and close follow-up was decided. No problem occurred during the 6-month follow-up of the patient. Salivary gland tumors choristoma should be kept in mind by the otolaryngologist and pathologist in differential diagnosis laryngeal masses. Transoral surgical resection may be satisfactory for the treatment of this disease.
Shanghai Experience of Supracricoid Partial Laryngectomy in the Treatment of Glottic and Supraglottic Laryngeal Carcinoma. A Long Term Follow up Study of 191 Patients.

L.Zhou*(1)

(1)Department of Otolaryngology-Head & Neck Surgery, Eye & ENT Hospital, Fudan University, Shanghai, 200031, China., Shanghai, China, People's Republic of

Purpose: To evaluate the long term outcomes of supracricoid partial laryngectomy in the treatment of glottic and supraglottic laryngeal carcinoma. Materials and methods: A series of 191 patients operated on with crico-hyoido-epiglottopexy (CHEP) or crico-hyoidopexy (CHP) between May 2005 and December 2010 were followed up and their oncologic and functional results were retrospectively analyzed. Of 191 patients, 175 were glottic cancer, while 16 were supraglottic cancer. 46 patients were in T1 stage, while 95 in T2 and 50 in T3. Results: The 3 and 5 years overall survival rate (OS) were 88.3 % and 83.2 %. The 3 and 5 years disease free survival (DFS) were 81.0% and 77.2%. The 3 and 5 years OS for CHEP patients were 88.2 % and 85.1 % and the 3 and 5 years DFS were 81.9% and 78.2%. The 3 and 5 years OS for CHP patients were 85.5 % and 77.0 % and the 3 and 5 years DFS were 77.4% and 74.0%. The decannulation rate was 95.8%. All patients could finally take food by mouth without inspiration, and could speak as soon as decannulated. By modifying the operative technique, the cases operated on after 1994 got relatively better results in phonation. Conclusion: Supracricoid partial laryngectomy is not only effective in the treatment of T1, T2 and some T3 glottic and supraglottic laryngeal carcinomas, but also can satisfactorily reserve laryngeal function and improve patient's quality of life.
SUPRACRICOID PARTIAL LARYNGECTOMY WITH CHEP. A SERIE OF 191 PATIENTS WITH GLOTTIC CANCER. IS IT STILL INDICATED?

J.Alkasbi*(1), F.Mouawad(1), B.Rysman(1), A.Thisse(1), G.Mortuaire(1), D.Chevalier(1)

(1)CHRU de Lille, Lille, France

Introduction: Supracricoid laryngectomy with cricohyoidoepiglottopexy was widely performed for the last 45 years. Endoscopic surgery has progressively become the treatment of reference to surgically treat glottic cancers diagnosed at an early stage.

Material and method: We conducted a retrospective study about 191 patients who underwent supracricoid laryngectomy with cricohyoidoepiglottopexy for laryngeal cancer. The following post operative data were studied: time of hospital stay, date of tracheostomy and feeding tube removal, early post operative complications (hematoma, fistula, infection. The oncologic data studied were: the local and neck recurrence rates, distant metastasis and second primary. The global survival rate was estimated by the Kaplan-Meier method.

Results: Postoperative complication rate was 13.40%, 88.85% of the patients had good functional post operative results. The local and neck control rate was 96.8% and 94.8% respectively. The 5 year overall survival rate was 86%. Survival without recurrence was influenced by the occurrence of a second non-ENT cancer and metastasis as well as margins involvement. In this population local recurrence rate was statistically lower in comparison with endoscopic surgery, for cancer involving the ventricle, the arytenoid cartilage and subglottis (p<0.001, <0.001 and 0.01 respectively).

Conclusion: We consider that Supracricoid laryngectomy with cricohyoidoepiglottopexy have still a role in the management of T2 and selected T3 glottic carcinomas.
Supracricoid partial laryngectomy: oncological and functional results

H.Ardhaoui*(1), S.Rouadi(2), R.Abada(2), M.Roubal(2), M.Mahtar(3)

(1)CHU Ibn Rochd - hôpital 20 Aout, Casablanca, Morocco, (2)Hôpital 20 AOUT- CHU Ibn Rochd, Casablanca, Morocco, (3)Hôpital 20 Aout - CHU Ibn Rochd, Casa, Morocco

Purpose of the study: The purpose of this study was to evaluate the oncological and functional results of patients affected by laryngeal squamous cell carcinoma (SCC) and surgically treated by supracricoid partial laryngectomy (SCPL) at the ENT Department of the Ibn Rochd University Hospital of Casablanca.

Materials and Methods: In this prospective study a total of 42 patients (41 males/97,2% and 6 females/2,3%), with mean average age of 58,8 years old have been included. All patients were treated between January 2010 and October 2013 by SCPL, including 3 cricohyoidopexies (CHP) and 39 cricohyoidoepiglottopexies (CHEP). Oncological results were evaluated by overall survival (OS), disease free survival (DFS) and local, regional and distant recurrences rate. Functional results were evaluated by median time needed for successful decannulation and nasogastric tube (NGT) removal. Speech rehabilitation was evaluated by the Moroccan version of the Voice Handicap Index-30 (VHI-30). The shorter follow-up time for our patients was 3 years (from 3 to 7 years).

Results: The overall survival (OS) at 3 years after surgery was 100% and the disease-free survival (DFS) at 3 years was 97,6%. The recurrence rate was 2.4%, with local recurrence only, and no cases of regional or distant metastasis. Synchronous second primary tumors and metachronous second primary cancers (MSPCs) weren't found. Removal of nasogastric feeding tube (NGT) was performed in 100% of the patients and lasted 15 days on average after SCPL (range 7-23), while decannulation was performed with success in 97,6% of patients at the 7th day on average after surgery (range 5-90). According to the VHI, 72.2% of our patients had a mild voice handicap. The Resection of an arytenoid didn't have a significant outcome on speech quality.

Conclusion: Oncological outcomes of our study are consistent with those of the literature, showing that SCPL is an effective and safe procedure in terms of survival rate and disease control. Functional outcomes confirmed that SCPL allows a good organ preservation and recovery of laryngeal functions.
Ten years results after supracricoid partial laryngectomy with cricothyroidoepiglottopexy for T3 glottic carcinoma with a fixed vocal cord.

O.Laccourreye*(1), F.Rubin*(2), A.Villeneuve(3), D.Garcia(4), M.Ménard(5), H.Laccourreye(6)


Ten years results after supracricoid partial laryngectomy with cricothyroidoepiglottopexy for T3 glottic carcinoma with a fixed vocal cord.

Résultats à 10 ans après laryngectomie partielle supracricoidienne avec cricothyroidoépiglottopexie pour cancer glottique T3 à corde vocale fixée.

Purpose: Since its initial description by Piquet's team, the supracricoid partial laryngectomy with cricothyroidoepiglottopexy (SCPL-CHEP) has evolved from an experimental technique to an integral part of the spectrum of partial laryngectomies available for the management of selected glottic squamous cell carcinoma (SCC); more than 110 references now appear in the PubMed data base when these items are used for search. The reported data from our institution as well as others suggested that SCPL-CHEP was a valuable alternative to total laryngectomy when applied for selected glottic SCC classified as T3. However, definite conclusions are limited by the small size of the reported cohorts and the short term (3-5 years) analysis performed. The current analysis was therefore initiated to determine the long-term (>10 years) function and oncologic outcomes for patients with glottic SCC staged as T3 with a fixed vocal cord treated with SCPL-CHEP. Materials and Methods: An inception cohort of 39 patients followed for a minimum duration of 10 years or until death. Platin-based induction chemotherapy, level II-IV ipsilateral neck dissection and post operative radiation therapy were associated in 31, 19 and 2 patients, respectively. Kaplan-Meier analysis of survival and local recurrence is presented with causes of death and overall rates for laryngeal preservation, ultimate local control, permanent tracheotomy, tempory and permanent gastrostomy. Univariate analysis searching for potential variables that increased the risk for local recurrence was performed. Results: The 1-, 5- and 10-year actuarial survival estimate was 97.4%, 76.7%, and 60.5%, respectively. Causes of death were metachronous second primary(5), intercurrent disease(4), distant metastasis(3), nodal recurrence(1), unknown without evidence of disease (2) and SCPL-CHEP related(1). The 1-, 5- and 10-year actuarial local recurrence estimate was 2.6%, 11.2% and 11.2%, respectively. Arytenoid cartilage resection (p = .05) and positive margins (p = .007) were the variables that increased the risk for local recurrence. Salvage treatment resulted in a 100% ultimate local control and 92.5% laryngeal preservation. Incidence for permanent tracheotomy, transient gastrostomy and permanent gastrostomy was 0%, 20% and 2.5%, respectively. Conclusions: SCPL-CHEP for selected patients with T3 glottic SCC with a fixed vocal cord compares favorably with CO2 laser endoscopic resection and chemoradiation.
Transoral laser microsurgery for supraglottic cancer

C.Doros*(1), M.Dobre(1), M.Lagtoubi(1), N.Balica(1)

(1)“Victor Babes” University of Medicine and Pharmacy Timisoara, ENT Department, Timisoara, Romania

Purpose of the study: The aim of the study is to present the efficacy of the transoral laser microsurgery (TLM) in treatment of the supraglottic cancer.

Material and methods: A group study are 42 patients, all males, average 55,8 years, range between 32-74 years with supraglottic carcinoma T1N0 (34 cases) and T2N0 (8 cases). Careful preoperative selection was made using video-endoscopical procedures, CT-scan, MRI and neck ultrasonography. Transoral CO2 laser microsurgery was the primary and solitary management for curative resection of supraglottic cancer performing four types of supraglottic laryngectomies (types I, II, III, IV) depending of the stage of tumor, using a classification proposal accepted by ELS (European Laryngological Society).

Results: Postoperative follow-up was 4,6 years (range:1,5 – 8 years). We obtained the following oncologic results: no evidence of disease (NED) in 85,7% and local recurrence in 14,3% (stage T2N0 of the disease). The salvage treatment consisted in total laryngectomy, neck dissection and radiotherapy. Significant advantages are: minimal postoperative discomfort, no tracheostomy and feeding tube, no complications, rapid healing, short hospitalization and minimizes costs.

Conclusion: Transoral CO2 laser microsurgery can be safely and effectively surgical method for T1, T2 N0 supraglottic cancer with excellent functional and oncologic results.

Key words: transoral laser microsurgery, supraglottic cancer, oncologic results
Transoral Laser Microsurgery for T4a laryngeal cancer – 5 years follow up. A case report

R. Iana*(1)

(1)"Prof. Dr. D. Hociota" Institute of Phonoaudiology and Functional ENT Surgery, Bucharest, Romania

Authors: Ruxandra Oana Iana2, Razvan Hainăroșie1,2, R. Pulpa2, N. Popescu2, V. Zainea1,2, O. Ceachir 1,2 ( deceased )

1. “Carol Davila” University of Medicine and Pharmacy
2. “Prof. Dr. D. Hociota” Institute of Phonoaudiology and Functional ENT Surgery

Purpose of the paper

T4a also known as moderately advanced local disease because the tumour is advancing through the thyroid cartilage and/or is growing into tissues beyond the larynx (such as the tongue muscles, oesophagus, trachea, thyroid gland or neck muscles).

The purpose of this paper is to present the complete management of a highly selected T4a squamous cell carcinoma case, including all surgical procedures, radio, chemotherapy and PEG dependent immunonutritional support with organ preservation.

Material and methods

The introduction of the Transoral Laser Microsurgery for the treatment of benign and early malignant lesions of the larynx has opened the perspective of using this type of CO2 laser surgery for more advanced upper aero-digestive malignant lesions.

The authors would like to share a step by step protocol applied to a very well selected T4a laryngeal cancer case, the strategy had in mind and the 5 years follow up.

Results

Extensive tumoral resection by CO2 laser surgery several combined with radiotherapy of the larynx and neck lymph nodes and chemotherapy, an aggressive follow up and an very compliant patient led to a 5 years disease free interval, organ preservation and increased quality of life.

Additionally the quality of speech is superior in TLM patients when compared to total laryngectomy patients, including those with voice prostheses

Conclusion

The results obtained in this particular case corroborated with data from the literature led to the conclusion that CO2 laser surgery along with radio and chemotherapy can be considered an alternative to classic total laryngectomy in highly selected T4a laryngeal cancer cases, demonstrating good survival rates and organ preservation without compromising the oncological results.
Treatment of supraglottic tumors in early stages: open partial laryngectomy versus transoral laser surgery

N. Pérez Marrero*(1)

(1) Hospital Universitario Príncipe de Asturias, Spain

Squamous cell laryngeal carcinoma represents 2% of malignant tumors worldwide, from which less than a third corresponds to supraglottic tumors. These tumors are potentially more aggressive than glottic tumors. In the early stages, the surgical treatment techniques aim for the laryngeal preservation.

Material and methods

We performed an observational, descriptive and retrospective study including the patients diagnosed with supraglottic malignant tumors treated surgically through partial laryngectomy techniques during the years between 1992 and 2012. We determined the epidemiologic characteristics of the patients and the surgical techniques performed including post-operative complications and the functional and oncologic results after each treatment. We studied a total of 25 patients: T1 = 12 (48%) and T2 = 13 (52%).

Results

92% of the patients were male with an average age of 60 years old (SD = 10.78; IC = 55.77 – 64.23); all of the patients were smokers.

Of the patients diagnosed with T1 tumors 25% were treated by transoral laser surgery (TLS) and the rest (75%) by open partial laryngectomy (OPL). We observed local recurrences 5 years after the initial treatment in 50% of the patients treated by TLS and 0% of the patients treated with OPL. These results show a statistical tendency to a larger proportion of local recurrence in patients treated with TLS. The organ preservation rate in both groups was 100% five years after the treatments.

Functionally, decannulation was possible in 78% of the patients after OPL and 18% presented with mild dysphonia without association of other symptoms.

31% of the patients diagnosed with T2 tumors were treated with TLS and 69% with OPL observing local recurrences after 5 years of 25% and 11% respectively; also the organ preservation rate was 100% for TLS patients and 67% for OPL patients (66% of the total laryngectomy procedures were performed as treatment for functional residual alterations such as laryngeal stenosis and severe oropharyngeal dysphagia). Most of the T2 cases (85%) required cervical dissection and/or adjuvant radiotherapy.

Discussion and conclusions

We observed a slight tendency to lower frequency of local recurrences in T1 patients treated with open OPL. The functional results obtained with TLS are better than those of the OPL patients however the oncologic results of both techniques are comparable in patients with T2 tumors. After the resection of supraglottic tumors the associated mobility is considerable, especially in T2 tumors lowering the possibilities of decannulation and organ preservation.
Visor tracheotomy – Conserving tracheal cartilage and safe?

L. Fiedler*(1), K. Peter(2)

(1) Klinikum Mutterhaus der Borromäerinnen Trier Mitte, Trier, Germany, (2) Mutterhaus der Borromäerinnen Trier Mitte, Trier, Germany

Introduction: For nearly 7 decades, the Björk-flap tracheostomy has been the standard procedure to create a reliable epithelialized tracheostomy in head and neck tumor surgery. Creating the Björk-Flap requires splitting 1-2 tracheal rings causing potential tracheal instability and tissue trauma. The Björk-Flap is a refined technique from the “classic conventional tracheotomy” developed by Chevalier Jackson and advanced by Björk in 1960. As a surgical alternative the visor tracheostomy allows to create an epithelialized tracheostomy without splitting tracheal rings. The aim of this work was to prove the safety of the visor tracheotomy method due to peri- and early postoperative complications.

Material and Methods: Data from surgical protocols and patient charts were evaluated retrospectively to find the negative consequences which occurred in both ways to perform an epithelialized tracheostoma. Complications such as infection, bleeding, granulation, tube dislocation and trachostoma stenosis of 111 tracheostomies with Bjoerk flap method and 45 visor tracheostomies were compared to evaluate the risk profile of the “new” visor tracheotomy method.

Results: The results of our clinical data showed no significant differences due to risk and complications between the two compared techniques (p=0.003). The data proved the safety of this “new method”, especially in early postoperative complication rate.
CEUS as a new diagnostic tool in preoperative detection of parathyroid glands.


(1)Sant’Orsola Malpighi Hospital, ENT Department, Bologna, Italy, (2)Sant’Orsola Malpighi Hospital, Bologna, Italy, (3)Sant’Orsola Malpighi Hospital, ENT department, Bologna, Italy, (4)Sant’Orsola Malpighi Hospital, ENT Dept., Bologna, Italy, (5)Sant’Orsola Malpighi Hospital, internal medicine (sonographer), Bologna, Italy, (6)Sant’Orsola Malpighi Hospital, sonographer, Bologna, Italy, (7)Sant’Orsola Malpighi Hospital, ENT dept., director, Bologna, Italy

Purpose of the study:

Pre-operative detection of parathyroid gland’s adenoma in patients with primary hyperparathyroidism (pHPT) represents a diagnostic challenge. The localization of pathological parathyroid glands might be difficult in some patients depending on size, location, concomitant goiter etc. In this study the contrast-enhanced ultrasonography (CEUS) was applied in pre-operative detection of pathological parathyroid. We compare this new diagnostic tool with classic US.

Material and methods used:

Between 09.2015 and 09.2016, we manage at the ENT Department of the Sant’Orsola Hospital (Bologna), 41 patients with pHPT diagnosed by clinical and laboratory findings. All patients underwent preoperative imaging studies with US B-MODE, CEUS, MIBI/SPECT and in doubt cases with CT. After a satisfactory localization was performed, patients underwent surgery.

The contrast used for CEUS was a 2,4 cc bolus of SonoVue, a suspension of phospholipid-stabilized sulphur-Hexafluoride (SF6) microbubbles, followed by a 5 cc infusion of saline solution. A special 3-9 MHz linear US probe was used for the detections. Each suspected findings was observed for 120 seconds after the contrast infusion. We considered “wash-in” the period from 0 to 30 and “wash out” from 30 to 120 seconds. Every CEUS was performed as a blind study by an expert sonographer, each study was recorded and reviewed to analyze the enhancement’s features using a dedicated software. We considered a centripetal enhancement, earlier and greater than thyroid parenchyma, as a typical behaviour of pathological parathyroid. The sensitivity and specificity of CEUS were compared with US in light of intra-operative findings and histological examination.

Results:

The definitive histological exam showed 54 pathological parathyroid. The US highlighted 38 findings suggestive for abnormal parathyroid gland, but only 29 of them were true positive, while 9 were false positive. After the injection of the contrast only 26 of the findings showed a 'typical' behaviour, between these 21 were true positive and 5 false positive. Using these data we calculated the sensibility and specificity of the two procedures. The US reveal a sensitivity of 54% and a specificity of 92%, whereas the CEUS showed a sensitivity of 39% and a specificity of 95%.

Conclusion:

Our data suggest that CEUS it’s not superior than US in the preoperative detection of pathological parathyroid glands. Actually the US, if performed by expert professional, could be in most of cases sufficient to discover abnormal parathyroids. In our opinion CEUS, thanks to his high specificity, should be reserved only to doubtful cases.
Conservative 3/4 parathyroidectomy versus 7/8 parathyroidectomy: an observational study of 34 end stage renal disease patients

S.Périé*(1), M.Veyrat(2), J.Haymann(3), H.Fessi(4)

(1)Department Otolaryngology Head Neck Surgery, Hospital Tenon, Assistance Publique (APHP), and University Pierre Marie Curie (UPMC), Paris VI, Paris, France, (2)Department Otolaryngology Head Neck Surgery, Hospital Tenon, Assistance Publique Hôpitaux Paris (APHP), Paris, France, (3)Department Renal Functional Explorations, Hospital Tenon, Assistance Publique (APHP), and University Pierre Marie Curie (UPMC), Paris VI, Paris, France, (4)Department Nephrology and Dialysis, Hospital Tenon, Assistance Publique (APHP), Paris, France

Purpose: There is no current guideline concerning surgical technics for secondary hyperparathyroidism (SHPT) in end stage renal disease patients (ESRD). Although both subtotal and total parathyroidectomies provide a low rate of recurrence, these procedures may induce hypoparathyroidism that can be deleterious for bone and cardiovascular system. The aim of our study was to compare 3/4 and 7/8 parathyroidectomy in this population and discusses the potential benefits of a more conservative treatment.

Methods: This prospective observational study included 34 consecutive ESRD patients with SHPT: 19 patients underwent a 3/4 parathyroidectomy (group A*3/4) and 15 patients a 7/8 parathyroidectomy (group B*7/8). Serum 1-84 PTH (before and 6 months after surgery) and duration of hospitalization were compared between the two groups.

Results: Before surgery, PTH levels were similar between the two groups. At month 6 following surgery, PTH levels were significantly higher in group A*3/4 than group B*7/8 (139.7 versus 32.9 pg/mL respectively; p<0.0006), with no PTH values above recommended targets. Hospital stay was shorter in group A*3/4 (4.79 versus 6.80 days respectively p=0.008). Of notice, prevalence of post operative hypoparathyroidism requiring long term calcium and calcitriol treatment was reported in 5% and 26 % of patients in group A*3/4 and B*7/8 respectively (p=0.04).

Conclusions: 3/4 conservative parathyroidectomy seems effective and safe with less reported morbidity than 7/8 parathyroidectomy as assessed by duration of hospitalization and occurrence of chronic hypoparathyroidism following surgery.
Diagnosis and treatment of five cases with parathyroid carcinoma

F.Liu*(1)

(1)Jiangsu Cancer Hospital, Nanjing, China, People's Republic of

Diagnosis and treatment of five cases with parathyroid carcinoma

Objective:
To summarize the experience in diagnosis and treatment of five cases with parathyroid carcinoma (PTC).

Methods:
The clinical data of five cases of PTC were retrospectively analyzed.

Results:
All of the five patients had the symptoms and signs of primary hyperparathyroidism, of whom four cases occurred with hypercalcemia and three cases had a high level of parathyroid hormone (PTH) of more than two folds of the normal upper limit. The five cases were confirmed as PTC by routine histopathology and immunohistochemistry examination. One patient was performed with parathyroidectomy combined with ipsilateral total thyroidectomy and neck dissection in level VI while the other four patients were treated with parathyroidectomy including residual tumor combined with ipsilateral total thyroidectomy and neck dissection in levels of II, III, IV, V and VI. The follow-up study showed that PTC recurred in four cases during 1 to 7 years after the surgery. Two cases diagnosed as multiple bone metastasis and neck lymph node metastasis and one case diagnosed as neck lymph node metastasis was performed with ipsilateral neck dissection again plus postoperative radical therapy while another one case diagnosed with neck lymph node metastasis was performed with ipsilateral neck dissection plus postoperative radical therapy and treated with γ-knife after another metastasis occurred in the following two years.

Conclusions:
It is helpful to use routine blood calcium examination, blood PTH determination, ultrasonography and CT for diagnosing PTC before surgery. The appropriate surgical procedure of PTC is parathyroidectomy combined with ipsilateral total thyroidectomy and neck dissection in levels of II, III, IV, V and VI.

Key words: parathyroid carcinoma, primary hyperparathyroidism, parathyroidectomy
Evaluation of the accuracy of preoperative localization studies for primary hyperparathyroidism

T.Maeda*(1), K.Sugino(1), C.Tomoda(1), W.Kitagawa(1), M.Nagahama(1), K.Ito(1)

(1)Ito hospital, Japan

Background: Primary hyperparathyroidism (pHPT) is the third most common endocrine disorder. Image-guided parathyroidectomy by a direct approach with limited exploration is now the gold standard for the surgical treatment of pHPT. Therefore, accurate preoperative identification of enlarged parathyroid glands is very important. Ultrasonography (USG), 99mTc-sestamibi scintigraphy (MIBI) and computed tomography (CT) have been accepted as the major imaging modalities for localization studies. The aim of this study was to evaluate the diagnostic accuracy of each of these imaging modalities and to analyze the factors influencing preoperative localization.

Methods: The subjects were 681 patients with a single parathyroid gland who underwent parathyroidectomy at our hospital between January 1979 and November 2015.

Results: The overall sensitivities of USG, MIBI and CT scans for pHPT lesions were 86.3%, 89.5% and 93.0%, respectively. The lesions with negative localization on preoperative USG were those surrounding the tracheo-esophageal area (44.1%), near the dorsal part of the thyroid cartilage and in the superior mediastinum (22.0%). Multivariate analysis demonstrated that parathyroid volume and absence of thyroid disease were significant factors affecting the detection rate among preoperative imaging modalities.

Conclusion: Although all the imaging studies are useful in identifying an abnormal parathyroid gland, CT is superior to USG and MIBI. Knowledge of the factors that affect preoperative localization studies would be useful for choosing the appropriate preoperative imaging technique.
F18-choline PET/CT as a second line tracer for parathyroid adenoma detection in primary hyperparathyroidism when ultrasound and MIBI SPECT/CT are negative or inconclusive: the APACH1 study

E.Quak*(1)

(1)Centre Francois Baclesse, Caen, France

Purpose
To evaluate the performance of F18-choline (FCH) PET/CT for parathyroid adenoma detection prior to surgery in patients with primary hyperparathyroidism and negative or inconclusive conventional imaging (cervical ultrasound and Tc99m-sestaMIBI SPECT/CT).

Materials and Methods
Twenty patients were prospectively included and underwent FCH PET/CT. The result was scored positive, inconclusive or negative. The number of uptakes and their site were recorded. The FCH PET/CT result guided the surgical procedure (minimally invasive parathyroidectomy, bilateral cervical exploration, or other in case of multiple or ectopic foci). FCH PET/CT results were compared to the surgical and pathological findings and the follow-up.

Results
Mean calcium and PTH levels prior to surgery were 2.75 ± 0.22 mmol/l and 98.1 ± 38.4 pg/ml. Seventeen (85%) FCH PET/CTs were scored positive, 2 (10%) inconclusive and 1 (5%) negative, showing 22 foci in total (21 habitual and 1 ectopic localization, mean size 13.4 mm (range 6.3-37.0)). FCH PET/CT guided surgery in 19 (95%) patients, allowing for 16 minimally invasive parathyroidectomies, 1 bilateral cervical exploration for multiple bilateral foci and 2 other surgical procedures. The 1 patient with negative FCH-PET/CT underwent bilateral cervical exploration. The per lesion and per patient analyses respectively showed 95.0% (95%CI: 75.1-99.9) and 94.4% (95%CI: 72.7-99.9) sensitivity of FCH-PET/CT for parathyroid adenoma detection, with positive predictive values of 90.5% (95%CI: 89.6-91.3) and 89.5% (95%CI: 88.4-90.5). Mean calcium levels after surgery were 2.39 ± 0.19 mmol/l.

Conclusion
FCH PET/CT can successfully guide parathyroidectomy in the majority of patients with primary hyperparathyroidism and negative or inconclusive conventional imaging results, and should be used as such.

Clinicaltrial: NCT02432599
HUNGRY BONE SYNDROME AFTER PARATIROID SURGERY: OUR EXPERIENCE.

A. Guillén martínez*(1), J. Moraleda deleito(2), I. Mercader coste(3), R. Moreno-arrones tévar(3), N. Fages cárceles(3), M. Andreu gálvez(3)

(1) University General Hospital Santa Lucía, Spain, (2) Lewisham and Greenwich NHS trust, United Kingdom, (3) General University Santa Lucía Hospital, Spain

Purpose of the study:

The purpose of this study is to know the incidence of the hungry bone syndrome (HBS) in our hospital after a parathyroidectomy surgery. Hungry bone syndrome (HBS) is a complication that can occur after parathyroid surgery when correction of primary hyperparathyroidism is associated with rapid bone remineralization, causing severe and prolonged hypocalcemia.

Materials and methods:

We performed a retrospective study of HBS after parathyroid surgery at our hospital during the years 2011-2015. We collected epidemiological and anatomical data such as age, sex, location of the parathyroid gland affected, size and weight of the gland and the definitive diagnosis. The value of parathormone (PTH) is collected preoperatively, intraoperatively after resection, and postoperatively the day after the intervention, one week, three months and six months after the procedure. Also we obtained the value of calcium before surgery, the following day, one week and three months after surgery.

Results:

We selected 36 patients treated, 8 were men (22.2%) and 28 women (77.8%) with a mean age of 63.58 years (range 28-86 years). The most frequently affected gland was the right lower parathyroid in 16 patients (44.4%) followed by the lower left in 9 (25%), the upper left in 6 (16.7%) and the upper right in 5 (13.9%). The most frequent diagnosis was parathyroid adenoma in 32 patients (88.9%), 2 patients (5.6%) were diagnosed with nodular hyperplasia and another 2 (5.6%) patients with parathyroid carcinoma. Two patients had two affected glands, one patient had two adenomas and the other patient had one adenoma and one nodular hyperplasia.

The mean PTH before surgery was 272.39pg/ml, the mean PTH at the time of resection of the gland was 46.16pg/ml, the following day 64.17pg/ml, at 7 days 112.65pg/ml, at 3 months 108.38pg/ml, and at 6 months at 105.42pg/ml. The mean pre-surgical corrected calcium was 10.47mg/dl, the next day 9.62mg/dl, at 7 days 9.18mg/dl, and at 3 months 9.21mg/dl.

Of the 36 patients, 3 (8.4%) had maintained hypocalcemia during the postoperative period.

Conclusion:

Our series had an incidence of HBS lower (8.4%) than described in the literature, however, this figure may be underdiagnosed, since some of our patients receive corrective treatment of hypocalcemia in postoperative follow-up by endocrinology.
Influence of imaging assessment on the success of primary hyperparathyroidism surgery

C.Lambert*(1), S.Estebe(2), V.Parent(2), L.Sylvie(3), N.Carsin nicol(4), F.Jegoux(4)

(1)CHU Rennes, Rennes, France, (2)CHU Rennes, France, (3)CH Saint Brieuc, France, (4)chu rennes, France

Objective: The aim of this study was to evaluate the influence of morphological preoperative assessment on the results of surgery in primary hyperparathyroidism.

Materials and methods: This retrospective study involved 201 patients treated with surgery for primary hyperparathyroidism over a period of 7 years in a single tertiary care institution. The average age was 60.3 years. Thyroid nodules or goiter were associated in 26%. Imaging was based on ultrasound echography (US) for every patient and 80% of cases had a Sesta-MIBI whole body scintigraphy (WBS). Multivariate analysis was realized in order to identify successful surgery's predictive factors. Successful surgery was defined by postoperative normalization of plasma calcium. An anatomopathological analysis was performed for each case.

Results: Sensitivity of US and Sesta-MIBI WBS was respectively 84.4% and 88.2%. Scintigraphy was the best diagnostic tool when the two examinations were performed (p=0.031). Imaging discordance rate was 28.3% including 5.5% due to different localization. However, success rate was 92% and 92.5% respectively in case of positive ultrasound or positive Sesta-MIBI WBS. Negative Sesta-MIBI WBS was correlated with a higher rate of surgical failure (p=0.042). Sesta-MIBI assessment did not significantly change the results in case of positive US while it led to higher rate of success in case of negative US.

Conclusion: Success rate of mini-invasive surgery is related to imaging assessment. A positive US is sufficient in nearly all cases but Sesta-MIBI assessment help in successful surgery improvement in cases of negative US.
Influence of imaging assessment on the success of primary hyperparathyroidism surgery

C.Lambert*(1), S.Estebe(2), V.Parent(2), S.Leblé(3), B.Carsin nicol(2), F.Jegoux(2)

(1)CHU Rennes, Rennes, France, (2)chu rennes, , France, (3)Ch saint Brieuc, , France

Objectif: Le but de cette étude était d'évaluer l'influence des facteurs morphologiques préopératoires sur les résultats de la chirurgie de l'hyperparathyroïdie primaire.

Matériel et méthodes: Cette étude rétrospective, monocentrique, incluait 201 patients traités par chirurgie pour une hyperparathyroïdie primaire sur une période de 7 ans. L’âge moyen était de 60,3 ans. Une pathologie thyroïdienne multi nodulaire était associée dans 26% des cas. Tous les patients inclus ont eu une échographie et 80 % une scintigraphie corps entier au sesta-MIBI. Une analyse multivariée a été effectuée afin d’identifier des facteurs prédictifs du succès de la chirurgie. Cette réussite était déterminée la normalisation de la calcémie postopératoire. Un examen anatomopathologique confirmant un adénome parathyroïdien a été réalisé pour chaque patient.

Résultats: Les sensibilités de l’échographie et de la scintigraphie au Sesta-MIBI étaient respectivement de 84,4% et 88,2%. La scintigraphie était un meilleur outil diagnostic que l’échographie lorsque les deux examens étaient réalisés (p = 0,031). Le taux de discordance entre les deux imageries était de 28,3% dont 5,5% liés à une différence de localisation sur les 2 examens. Néanmoins, le taux de réussite chirurgical était de 92% lorsque l’échographie était positive et 92,5% lors d’une scintigraphie au Sesta-MIBI positive. Une scintigraphie négative était corrélée à un taux d’échec chirurgical plus élevé (p = 0,042). La scintigraphie ne changeait pas significativement les résultats de la chirurgie dans le cas d’une échographie positive ; alors qu’elle était corrélée à un taux de succès plus élevé en cas d’échographie négative.

Conclusion: Le taux de réussite de la chirurgie mini-invasive est lié à l'évaluation par imagerie pré opératoire. Une échographie positive est suffisante dans presque tous les cas mais la scintigraphie Sesta-MIBI améliore le taux de réussite chirurgicale dans les cas où l’échographie est négative.
Intrathyroidal parathyroid carcinoma

S.Mahfoudhi*(1), R.Bechraoui*(2), M.Bahlouli(2), H.Chahed(3), N.Beltaief(3), G.Besbes(3)

(1)Hopital La Rabta service d’ORL, Tunis, Tunisia, (2)service d’ORL et de chirurgie cervico-faciale de l’Hopital La Rabta, Tunis, Tunisia, (3)service d’ORL et de chirurgie cervico-faciale de l’Hopital la Rabta, Tunis, Tunisia

Objective:

Intrathyroidal parathyroid carcinoma is extremely rare clinical entity with potentially multiple diagnostic pitfalls. We report the case of an unusual localisation of parathyroid carcinoma.

Case report:

We report the case of a 39-year-old man presented with classical manifestations of primary hyperparathyroidism, severe hypercalcemia and profoundly increased serum parathyroid hormone level of 1400 pg/ml. Investigations disclosed asymptomatic nephrolithiasis and osteoporosis. Neck examination showed firm and enlarged left thyroid lobe. Neck ultrasonography demonstrated 24 mm nodule in left thyroid lobe. Thyroid scintigraphy showed no fixation. After premedication, the patient underwent surgery. On exploration, an enlarged left lobe of the thyroid was present and no left superior gland was found with exploration. A left thyroid lobectomy was practised that confirmed a parathyroid cancer that was entirely intrathyroidal. A resection of central lymph nodes was performed at the same operative time. Postoperatively, the patient became hypocalcemic. Supplementation with oral calcium and calcitriol was started. His calcium and parathormone levels are within normal ranges 10 months postoperatively.

Conclusion:

We conclude that patients with primary hyperparathyroidism characterized by markedly elevated serum calcium and parathormone, palpable mass, and severe clinical presentation should be suspected of harboring a parathyroid carcinoma. Imaging techniques can help localize disease, but they are not useful in the assessment of malignancy potential.
Marginal decline of intraoperative PTH: analysis of 16 years follow up

M.Enout*(1), O.Cervantes(1), R.Santos(2), M.Neves(2), A.Shimozono(2), J.Santos(2)

(1)Federal University of São Paulo, , Brazil, (2)federal university of sao paulo, , Brazil

Introduction: Primary hyperparathyroidism (PHPT) is a common endocrinopathy and surgery is the gold standard treatment.

A 50% drop in the intraoperative parathyroid hormone (ioPTH) is widely accept as curative with very low recurrence.

Purpose: The objective is to analyze if marginal decreases in the ioPTH, between 50-80%, is associated with higher recurrence rates.


Results: A total of 141 patients with PHPT underwent first-time surgery, mostly female (85%). Patients were distributed in three groups according to the ioPTH decline: ioPTH decrease below 50%; 50-80% decrease and upper 80% ioPTH decrease.

The disease free rate decrease progressively from 97.9% to 90% after 5 years follow. However, patients with marginal decay of ioPTH (50-80%) presented a recurrence of 8.5% on a long term monitoring, which is a significantly higher rate than 2.9% of those with an intraoperative PTH decline above 80%.

The difference in recurrence or persistence of the disease between the groups were all statistically significant with a large effect. Especially between the group with marginal decay and > 80% drop group revealed p = 0.000097.

As same as defined by Halle, Miami, Roma e Viena criteria, we conclude that a decline of 50% or greater from baseline predicts higher cure. Nevertheless, we agree with Siperstein et al that a decline of ioPTH ≥ 80% reduces surgery false positive success and should be the operation target.

Conclusions: Intraoperative PTH marginal decline predicts a higher risk of HPT recurrence than those patients whose ioPTH decay above 80%.

Therefore, we conclude that patients with intraoperative PTH decay between 50-80% should be followed cautiously for an extended period after surgical treatment.
Maxillary brown tumors as a first sign of parathyroid adenoma: A case report

K.Gaied*(1), A.Methnani(2), S.Najjar(1), H.Sallemi(1), K.Khamassi(2), M.Ben salah(1)

(1)Charles Nicole hospital, , Tunisia, (2)Charles Nicole Hospital, , Tunisia

INTRODUCTION

Brown tumor is an unusual bone change created by primary hyperparathyroidism affected less than 2% of primary hyperparathyroidism patients. Brown tumors have no neoplastic behavior but are a reparative cellular response. We present the case of an elderly woman with a maxillary swelling that was found to be the first clinical manifestation of primary hyperparathyroidism.

METHODS

We summarize the clinical presentation in a patient who consulted for facial asymmetry due to maxillary swelling. The biopsy confirmed that this was a brown tumor. She underwent a complete tumor resection. Blood tests demonstrated elevated calcium and parathyroid hormone. A review of literature regarding this topic is also presented.

RESULTS

A 67-year-old Tunisian woman was referred to the Department of Otolaryngology of Charles Nicolle Hospital, complaining of facial pain and deformity began 4 months ago. On physical examination, the patient appeared well. A facial asymmetry was found due to swelling of left maxilla. The lesion had 4 cm in major axis, fixed, painless and covered with healthy skin. CT scan of the maxillofacial region revealed an osteolytic, bone-expanding lesion depending on frontal process of the left maxillary sinus (20 × 18 × 16 mm). Under general anesthesia, an excision biopsy was performed using the Caldwell-Luc approach. The histological section were compatible with a giant cell lesion, a brown tumor among the possible causes. Blood tests after histology demonstrated elevated calcium (2.6 mmol/L) and parathyroid hormone (PTH) concentrations (645 pg/mL). In ultrasonography, a 11 × 14 × 27 mm mixed hypo echo mass lesion was seen in posterior aspect of left thyroid lobe compatible with probable vascular parathyroid mass. After diagnosis of parathyroid mass, surgical excision was performed. Pathological and surgical findings were compatible and consistent with parathyroid hyperplasia. Postoperatively the patient became hypocalcemic and we began oral calcium replacement therapy, the parathyroid hormone level was normal. The patient was free of symptoms and living well after two years of follow-up.

Conclusion

The incidence of hyperparathyroidism with advanced bone lesions is rare. Due to recent improvements in analytical techniques, the diagnosis usually occurs when the disease is in an asymptomatic phase.
Maxillofacial Brown tumors in secondary hyperparathyroidism: 6 casereports

A.Harratti*(1)

(1)CHU Mohemed VI, Marrakech, Morocco

INTRODUCTION: Brown tumors are unusual but they represent a serious complication of secondary hyperparathyroidism. They may cause pathological fracture.

We report 6 cases of maxillofacial brown tumors associated with secondary hyperparathyroidism.

PATIENTS & METHODS: We conducted a retrospective study over a period of 10 years (2005-2015), including 6 patients on chronic hemodialysis who underwent subtotal parathyroidectomy for secondary hyperparathyroidism complicated with brown tumors. We analyzed their clinical, biological and morphological data and treatment options.

RESULTS: Our study included 4 men and 2 women; their mean age was 30.83 years. The mean duration of dialysis was 5.33 years. Brown tumors localisations were in maxillary and Mandibular bones in 4 patients, in orbital arcade in one case and in multifocal sites in one case. The mean serum calcium and phosphorus were 98.66 mg/L and 64.66 mg/l respectively, the mean serum alkaline phosphatase and parathormon were 2076.66 UI/mL and 2816.16 pg/mL respectively.

On ultrasound and MIBI scintigraphy, the parathyroid glands were hyperplastic. The X-ray and the CT scanning of the neck showed tumoral lytic lesions. All patients underwent subtotal parathyroidectomy. Two patients underwent tumorectomy. The clinical evolution was good in 5 cases, with stabilization and regression of the lesions. One patient had a septic choc secondary to pneumonia and died despite treatment.

CONCLUSION: Brown tumors result of excess osteoclast activity and consist of collections of osteoclasts associated to fibrous tissue, poorly mineralized woven bone and cellular regeneration resulting in a multinucleated cell granuloma. It is more common after a long period of hemodialysis and among young women.

A total or subtotal parathyroidectomy is usually done in order to decrease serum rate of PTH and control secondary hyperparathyroidism, thus allowing regression of the lesions. A tumorectomy can be necessary in some cases.
Outcomes of head and neck surgery with hypnosis

M. Jaouen*(1)

(1) CHU RENNES Pontchaillou, France

M. JAOUEN ; V. GERARD ; V. PARENT ; C. CHAIZE ; O. DE CROUY ; F. JEGOUX

PURPOSE:

Outcomes of head and neck surgery with hypnosis.

METHODS:

A retrospective study included patients that underwent surgery with hypnosis from 2014 to 2017 in a tertiary care Hospital. A questionnaire was filled by each participant immediately following surgery. Global satisfaction index, type of surgery, duration of surgery, Fentanyl dosage, pre-operative information, patient comfort during the process, patient expectation and whether patient will wish to have hypnosis further surgery were evaluated.

RESULTS:

Thirty-three patients were included in the study. The median global satisfaction index was 8/10. Seven patients estimated that surgery was uncomfortable yet they thought it was bearable. The incidence of hypnosis failure was 3%. Five patients estimated they were not sufficiently informed before the intervention. There was a correlation between satisfaction index level and initial information. The patients who thought they were well informed (n = 24) were more satisfied by the hypnosis (GIS = 8.4) than the patients who thought they were insufficiently informed (n=5) (GIS = 7.1). 94% of operated-patients would recommend surgery with hypnosis for someone else and 73% for themselves.

CONCLUSION:

Head and neck surgery is feasible with hypnosis with a high rate of satisfaction. This study suggests that the satisfaction rate depends on the quality of information before hypnosis.
Parathyroid adenoma: A Hidden culprit
R. Arora*(1)

(1) All India Institute of Medical Sciences, Raipur (Chhattisgarh) India, Raipur, India

Introduction: Parathyroid gland is very important endocrine gland for renal and musculoskeletal metabolism. Parathyroid hormone functions to regulate calcium levels via its actions on three target organs, the bone, kidney, and gut. Parathyroid gland adenoma is most common cause of primary hyperparathyroidism. Primary hyperparathyroidism is usually presents with characteristic features of kidney stones, abdominal groans, painful bones, psychic moans and fatigue overtones but rarely seen now a days.

Case studies: In our study we have three cases with variable presentation which were misleading the diagnosis and treatment. During detailed investigations they were found to be having primary hyperparathyroidism and that primary hyperparathyroidism is due to parathyroid adenoma. All three patients improved after neck exploration and removal of parathyroid adenoma.

Discussion: Primary hyperparathyroidism is an important cause of hypercalcemia due to over production of parathyroid hormone. Most affected persons are asymptomatic (detected on routine laboratory testing). When symptomatic: skeletal system, kidneys, nervous system, GI tract are affected. A high level of suspicion is required in patients presenting with Hypercalcemia, Raised levels alkaline phosphatase, Raised intact parathyroid hormone (PTH).

Conclusion: Primary hyperparathyroidism, with its varied manifestations and indolent course, is a condition well known to pose a diagnostic dilemma to the clinician. Nuclear imaging scintigraphy accurately localizes the tumor. Surgery is treatment of choice with gratifying results.
Objectives: To report the case of the patient with a case of non-functioning parathyroid cyst and to emphasize the importance of this infrequent differential diagnosis in the list of expansive neck disorders and cervico-thoracic transition.

Methodology: The information contained in this study was obtained through the analysis of medical records and literature review.

Results: In November 2015, a 32-year-old male patient sought our outpatient clinic complaining of sudden bulging of the cervical region three days ago. He denied fever, phlogistic signs, odynophagia, dysphagia or dysphonia. Physical examination revealed bulging in the right anterior cervical region, mobile at swallowing, fibroelastic consistency and painless, without palpable lymph nodes. Contrast CT of the neck showed hypodense formation, with regular contours and well defined limits, measuring 5.8 x 5.0 cm, located in the path of the pharyngothic duct to the right. A 20 ml puncture of the translucent-looking liquid which showed an intact PTH level of 224.9 pg / ml was performed and the serum hormone value was 54.65 pg / ml. The value of serum ionized calcium was 1.3 mmol / l. In addition, parathyroid scintigraphy demonstrated absence of hypercapting areas in the gland and extensive hypocapant area related to the right thyroid lobe, confirming the hypothesis of non-functioning parathyroid cyst. A In June 2016 the excision of the intact cyst was performed via anterior cervicotomy. The patient presented excellent postoperative evolution and no other laboratory findings were of great importance. On anatomo-pathological examination: Thick fibrous wall parathyroid cyst and inner lining of cuboidal cells of the main cell type.

Conclusion: Due to the rarity of this type of involvement, there are few studies in the literature that concern the epidemiology and the probability of malignant degeneration of the parathyroid cysts. Its etiology is not yet fully understood, difficult to diagnose and should be remembered as differential diagnosis of expansive neck injuries, so that its correct location identified by imaging methods and the "rock water" aspect of the cystic fluid are the main characteristics that corroborate for the correct diagnosis of this affection.
Parathyroid cyst associated with primary hyperparathyroidism: report of 3 cases and literature review.

M. Neves*(1)

(1) Federal University of São Paulo - medical school, São Paulo, Brazil

Background: Parathyroid cyst is a very rare condition and they have been described as either functional causing hyperparathyroidism or non-functional. When the Parathyroid cyst is associated with primary hyperparathyroidism it became even a more rare event, since less then 30% of them are functional. The literature reports about 100 cases of patients that had these two pathologies.

Method: Between 1985 to 2015 we performed around 300 surgeries for primary hyperparathyroidism and only 3 of these patients had an cystic lesion on the parathyroid gland. All of these 3 patients had the diagnosis of hyperparathyroidism preformed before surgery. Since all patients presented with quite large cystic lesions, all of them had CT scan, ultrassond and MIBI performed. One patient had an hypercalcemia crisis prior to treatment. Fine needle aspiration were performed in two patients and both had remarkable high levels of PTH. Interestingly the MIBI in all tree patients were considered negative and all of them had a wel localyzed region of absent uptake. Surgery was indicated for all patients once the enlarged cyst was constricting surrounding cervical structures and for the treatment of the hyperparathyroidism.

Since they are so rare, the parathyroid cystic lesions can be easily misdiagnosed as others more common cervical cystic lesions, such as thyroid or timic lesions. Surgeons must be aware of these condition to make the correct diagnosis prior to surgery.
preoperative localization of parathyroide adenoma with ultrasound combined with fine needle aspiration

B.Farizon*(1), J.Prades(2), P.Juttet(3), M.Gavid(3)

(1)Hôpital Nord - CHU de Saint-Etienne, Saint-etienne, France, (2)HOPITAL NORD, St etienne, France, (3)Hôpital Nord - CHU Saint-Etienne, Saint-etienne, France

OBJECTIVE: To achieve an ultrasound-guided cytopathy associated with a parathyroid hormone (PTH) quantification in parathyroid adenomas responsible for primary hyperparathyroidism, in order to optimize the scheduled parathyroidectomy.

MATERIALS AND METHODS: This is a prospective study of 50 patients with sporadic primary hyperparathyroidism. The patients had a cervical echography before surgery. The ultrasound targeting and 27G needle puncture allowed us to perform cytological analysis and a PTH dosing, using the needle rinsing liquid. The PTH dosing was done using electrochemoluminescence. To confirm the sole responsibility of the one parathyroid adenoma, a quick PTH quantification test was done during the surgery to check the quick decreasing of PTH just after the removal of the adenoma.

Results: Cytological analysis shows parathyroid cells in 10 specimens. The sensitivity is 41.5% for this test. The level of PTH in the rinsing liquid is more than twice the blood level in almost half of cases, correspond to a test sensitivity of 44%. The positive predictive value of the PTH dosing is 100% in the needle rinsing liquid.

CONCLUSIONS: Puncture of a juxta thyroid "nodule" with elevated PTH asserts a pathological parathyroid gland in all cases. There is not any test giving a predictive positive value of 100%. This topographical certainty allows optimized surgery by endoscopic way. This same puncture method is useful for ectopic adenoma in order to assert the location of the adenoma.
INTRODUCTION

The third endocrinopathy in frequency is the Primary hyperparathyroidism. Histologically we can differentiate three patterns of autonomic glandular growth: Adenoma, Hyperplasia, Carcinoma. When it comes to adenoma, the majority of patients are usually asymptomatic, the most common expression of hyperfunction is a greater or lesser degree of hypercalcemia.

While young men are at increased risk of developing nephrolithiasis, postmenopausal women are at increased risk for bone loss. Even though the clinic can range from osteopenia and osteoporosis, to arterial hypertension, electrocardiographic alterations, asthenia, anorexia and ophthalmological alterations, and analytical alterations such as hypercalcemia, increase of alkaline phosphatase and parathyroid hormone levels, and decrease of phosphorus. Cases of Parathyroid Adenoma rupture are described, mostly of the Intracapsular type, which usually goes unnoticed or misdiagnosed, and a significantly smaller number of cases of extracapsular rupture.

The extracapsular rupture, spontaneous cervical hematoma may behave as an initial manifestation of parathyroid adenoma, as an extremely rare complication. Less than 50 cases have been described to date.

PURPOSE

Describe two cases of primary hyperparathyroidism which appeared as spontaneous neck and retropharyngeal hematoma, recorded this year in our hospital. Both female. Who presented an acute swelling and mass in the neck, pain, and progressively ecchymosis, with no associated trauma, in these particular cases without symptoms from the compression of adjacent structures. Laryngoscopy showed hematoma at the level of the arytenoid and epiglottis. Laboratory tests revealed elevated serum calcium level, and elevated serum parathyroid hormone level of 241pg / ml, and 136pg / ml respectively.

MATERIAL AND METHODS USED

Differential diagnosis was made with infections, iatrogenic with drugs or interventional procedures, thyroid gland lesions, aortic dissection, or complication of a mediastinal lesion.

Imaging tests, both computed tomography (CT) and magnetic resonance imaging (MRI), were useful to guide diagnosis, allowed identifying the anatomical structures and the extent of the bleeding.

Hypercalcemia was medical treated, with adequate evolution. In the next month, surgery was performed and the parathyroid adenoma was removed.

RESULTS

The patient made full recovery with normalization of their calcium, phosphate, and parathyroid hormone levels within 3 days after surgery.

CONCLUSION
Although very uncommon, the spontaneous neck and retropharyngeal hematoma as initial manifestation of parathyroid adenoma, must be included in differential diagnosis of spontaneous neck hematoma. In some cases, patients can have an adequate response to medical treatment, and undergo surgical treatment once clinical conditions stabilize, with a complete recovery within few days after surgery.
A Clinical, Morphological and Genetic Overview of Homologous Tumors of the Salivary gland, Lacrimal gland and Breast with an Emphasis on microRNA Expressional Profile and Targeted Treatment

S. Andreasen*(1), S. Heegaard(2), I. Wessel(2), P. Homøe(1)

(1) Zealand University Hospital, Koege, Denmark, (2) Rigshospitalet, Copenhagen, Denmark

Purpose: An inverse relationship in incidence exists between homologous tumors of the salivary gland, lacrimal gland and breast. In particular, adenoid cystic carcinoma (ACC) and pleomorphic adenoma (PA) are frequent in the salivary - and lacrimal gland, but are rare in the breast. Conversely, ductal carcinoma is frequent in the breast but is rare in the salivary gland (i.e. salivary duct carcinoma) and extremely rare in the lacrimal gland.

Clinically, ACC of the salivary - and lacrimal gland is a high-grade carcinoma with frequent recurrence and tumor-related mortality, whereas ACC of the breast is an indolent disease with only case reports of metastatic behavior. Recent studies have not been able to identify the cause for this difference in clinical behavior.

The benign nature of PA is complicated by its tendency to recur after surgical excision and by an ability to undergo malignant transformation to carcinoma ex pleomorphic adenoma (ca-ex-PA). The biology behind this malignant transformation is poorly understood.

Materials and methods: ACCs, ductal carcinomas, PAs and ca-ex-PAs of the lacrimal – and salivary gland along with ductal carcinoma and ACC of the breast were retrieved and subjected to microRNA expressional profiling along with break apart FISH and next generation sequencing of nuclear DNA.

Results: MicroRNA expression profile separated ACCs according to site of origin, and carried prognostic information for recurrence-free survival of salivary gland ACCs. Also, a progressional dysregulation of microRNAs from PA to ca-ex-PA was found in salivary – as well as lacrimal glands. FISH identified abnormalities of the MYB, MYBL1 and NFIB genes in ACC and of HER2 and PTEN in ductal carcinomas of all three sites. PA had rearranged PLAG1 genes and accumulation of mutations was found in ca-ex-PA as compared to PA.

Conclusion: We present data on microRNA expressional profiling and mutational status of these different tumor types in three different exocrine glands. In addition to elaborating on the mutational landscape of these tumors, we identify several microRNAs as prognosticators of salivary gland ACC.

Simon Andreasen, MD, PhD Fellow 1,2
Steffen Heegaard, Professor, DMSc 3,4
Irene Wessel, Associate professor, MD, PhD 2
Preben Homøe, Professor, DMSc, PhD 1

1 Department of Otorhinolaryngology and Maxillofacial Surgery, Zealand University Hospital, Koege, Denmark
2 Dept. of Otorhinolaryngology Head & Neck Surgery and Audiology, Copenhagen University Hospital Rigshospital, Copenhagen, Denmark
3 Dept. of Ophthalmology, Rigshospitalet-Glostrup, Copenhagen, Denmark
4 Dept. of Pathology, Copenhagen University Hospital Rigshospital, Copenhagen, Denmark
A rare case of malignant ectomesenchymoma in pediatric patient: caser report and review of literature

A.Camaioni*(1), M.Simone(2), E.Vesperini(1), D.Tassone(1), C.Viti(1)

(1)San Giovanni - Addolorata Hospital of Rome, Roma, Italy, (2)San Giovanni - Addolorata of Rome, Roma, Italy

Purpose of the study

Malignant ectomesenchymoma is a rare and aggressive soft tissue tumor with copresent malignant mesenchymal and neural elements (normally rhabdomiosarcoma and ganglion cells).

Generally diagnosed in first 3 years of life, it could be arise in several sites: pelvis, retroperineum, perineum, central nervous system and extremities as in head and neck often involving orbit.

We report a rare case of parapharyngeal malignant ectomesenchymoma in a 4-year-old child and review the literature to discuss the diagnosis and treatment aspect of disease.

Materials and methods

We submit a case-report of a little patient presented to our department with a retromandibular swelling arise approximately 2 months before. Contrasted MRI and TC imaging show a parapharyngeal disomogenous mass involving deep parotid lobe and pterigomaxillary space.

We purpose an eco-guided FNAC on mass but the sudden growing and appearance of facial, hypoglossal and glossopharyngeal nerve deficit force us to quick surgery with frozen section histology.

After surgery the initial diagnosis was for rhabdomyosarcoma but it was modified in malignant ectomesenchymoma after a specimens review.

So the little patient was transferred to the Oncology department of the Pediatric Hospital of Rome where she underwent an IVADO chemotherapy protocol and radiotherapy.

Results

Patient stops IVADO protocol before ending due to appearance of suspected ifosfamide induced encephalopathy. The day after she presented fever and positive blood culture for Gram- bacteria so started an wide spectrum antibiotics with resolution.

She finished without great complication radiotherapy.

At moment she is alive and free from disease (follow-up of 7 years).

Conclusions

Due of rarity, lacking literature on treatment modalities and biological behavior are disposable.

Treatment of choice is considered complete surgical excision and chemotherapy.

In our case, as in many of head and neck district, the anatomic difficult and important functions force us to provide a wide excisional biopsy (with as small as possible remains) followed by radio-chemotherapy.
We focus also on difficult in correct histologic diagnosis, especially in case of incisional biopsy, because the mass has great rhabdomyosarcomatous part and could be easily mixed up.
Adenoid Cystic Carcinoma (ACC) is a relatively uncommon malignancy of the head and neck, accounting for 1-2% of all head and neck cancers. It makes up approximately 10% of all salivary neoplasms. Adenoid Cystic Carcinoma (ACC) is a salivary gland malignancy with unpredictable growth and poorly understood prognostic factors. The natural history of this disease is characterized by an indolent but persistent growth rate, low likelihood of regional lymph node metastasis, high rate of distant dissemination, and eventual death. In an effort to better characterize ACC, studies have attempted to identify the relationships between clinicopathological predictors including stage, clinical presentation, and treatment modality and locoregional control, distant metastases, and survival.

The objectives of our study are to report on our experience in the management of ACC with the intent of further elucidating the relevant clinicopathological prognostic factors and the role of adjuvant radiotherapy.

Methods: Retrospective study of 70 patients with ACC, with evaluation of impact of clinicopathological predictors on loco-regional control, distant metastases, and survival.

Results: 5, 10, and 15-year overall survival was 80%, 61%, and 29%. Thirty-two percent of patients experienced disease recurrence, of which 73% experienced distant metastasis. Older age, higher stage, skull base involvement, positive margins, and metastatic disease, but not local recurrence, predicted a lower survival. Higher stage, skull base disease, and bone invasion were associated with a lower disease free survival. Higher T-stage and perineural disease were associated with distant failure, whereas skull base and bone invasion predicted higher local recurrence. Adjuvant radiotherapy did not yield any recurrence or survival benefit.

Conclusions: Disease stage, positive margins, skull base involvement, perineural invasion, and bony disease are identified as prognostic factors in ACC.
ANALYSIS OF PROGNOSTIC FACTORS OF PAROTID METASTASIS OF CUTANEOUS SQUAMOUS CELL CARCINOMA OF THE FACE: RETROSPECTIVE STUDY OF 35 CASES

C.Bobin*(1), G.Michel(2), B.Dréno(2), E.Rio(3), O.Malard(2), F.Espitalier(1)

(1)CHU de Nantes, Nantes, France, (2)CHU Nantes, Nantes, France, (3)institut de cancérologie de l'ouest, Saint herblain, France

Introduction: Cutaneous squamous cell carcinoma (CSCC) develops on the head and neck in 80% of cases. Parotid metastases (PM) are rare, but their treatment including surgery and radiotherapy is hard and their prognosis is poor.

Material and methods: The cases of parotidectomies for PM of a CSCC of the head between 2005 and 2015 were retrospectively studied. Epidemiological, clinical, oncological and therapeutic data were evaluated. The main objective was to identify prognostic factors for PM of CSCC of the head. The global and specific survivals were calculated using the Kaplan-Meier method. The test log-rank and Cox regression were used to search for prognostic factors of the PM.

Results: Thirty-five patients, 30 men and 5 women, of average age 70, met the inclusion criteria, including 4 immunocompromised patients (11.4%). The two primary sites were the outer ear (31.6%) and temple (31.6%). 32.4% of the lesions had unhealthy margins. The period for appearance of PM averaged 13 months, with a median of 8 months, of average size 31.1mm. 42.9% of PM were associated to one or more metastatic cervical lymph nodes. Thirty patients received adjuvant radiotherapy. Overall survival at 1 year, 2 years and 5 years was respectively 59.4%; 39.3% and 26.9%. Specific survival at 1 year, 2 years and 5 years was respectively of 71.9%; 64.3% and 57.7%. The independent prognostic factors of PM in multivariate analysis were immunosuppression, age at treatment, unhealthy skin tumor margins, the macroscopic invasion of the facial nerve and the presence of one or more metastatic cervical lymph nodes. The early onset of PM in less than 13 months was correlated with immunosuppression and age above 77 years.

Conclusion: This study confirms the association of many independent prognostic factors in lymph node metastatic, linked to the population, the initial cutaneous tumor and the PM. Obtaining a complete resection of the initial cutaneous tumor is an absolute rule in order to reduce the risk of local or regional recurrence. The echography of the lymph nodes, parotid and cervical drainage, in the monitoring of CSCCs at risk, would allow an early diagnosis of these metastases, especially during the first two years of follow-up.
Case Report: An unusual case of a discharging ear

E. Mathew*(1)

(1) Colchester Hospital University Foundation Trust, United Kingdom

Background: Cancers of the head and neck can have unusual presentations. It is important the clinician considers malignancy in any longstanding and unresolved symptoms. Malignancy in the ear and parotid, may present as an unresolved infection or on-going otorrhoea or otalgia.

Case report: A seventy one year old non-diabetic female presented with a five month history of constant watery discharge from her left ear. It had initially been treated as otitis externa. The ear canal was completely obliterated by granulation and malignant looking tissue and the tympanic membrane could not be visualised. Biopsy of the ear showed squamous cell carcinoma. Subsequent CT showed soft tissue thinking in the left external auditory canal with involvement of the posterior aspect of the parotid gland. She underwent wide local excision to the ear canal, left parotidectomy and left neck dissection. The patient is currently undergoing radiotherapy.

Discussion: This case demonstrates an unusual presentation of head and neck cancer. It shows the importance of taking biopsy and performing imaging. It is a reminder that the clinician should consider malignancy in cases that do not appear to be resolving. Local infiltration of surrounding tissues must be considered and can give rise to unusual presenting symptoms.
Comparison of curative surgery and carbon ion radiotherapy as an initial treatment for patients with carcinoma of the parotid gland

M. Sakurai*(1)

(1) Department of Otolaryngology-Head and Neck Surgery, Gunma University Graduate School of Medicine, Japan

Purpose

Carcinomas arising from parotid gland are relatively rare, and known to show diverse histological subtypes. The mainstay of treatment for carcinoma of parotid gland is surgical removal, often in conjunction with postoperative radiation therapy when the tumor has high grade malignancy or positive surgical margins.

Carbon ion radiotherapy (C-ion RT) offers more precise dose localization in the target lesion and greater biological effect for malignant tumors than conventional X-ray therapy. Here, we evaluated the efficacy of C-ion RT against carcinomas of the parotid gland and compared to curative surgery in terms of survivals, aiming to find more suitable application of these modalities for the tumor.

Patients and Methods

Clinical data from patients with carcinomas of the parotid gland from September 2011 to August 2016 in Gunma University Hospital were retrospectively analyzed. The irradiation schedule of C-ion RT typically used was 64 Gy (RBE) in 16 fractions for 4 weeks. Overall survival (OS) and disease-free survival (DFS) were examined between surgery and C-ion RT groups.

Results

This study enrolled 33 patients with carcinoma of the parotid gland ranging in age from 26 to 87 years (median 65 yr; 15 women and 18 men). The patients were followed-up for a median time of 25.2 (0.4-63.0) months. Three histological types, mucoepidermoid carcinoma, adenoid cystic carcinoma, and epithelial-myoeipithelial carcinoma were predominant in these patients (each included 5 cases). Eleven patients with 2 early stage (18%) and 9 advanced stage (82%) were treated with C-ion RT, whereas 22 patients with 9 early stage (41%) and 13 advanced stage (59%) were applied to surgery. Patients treated with surgery had significantly longer DFS than those with C-ion RT (p<0.05). The 2-year DFS rates were 92% and 75% for surgery and C-ion RT groups, respectively. Meanwhile, there was no significant difference in the OS between the two groups (p=0.61). The 2-year OS rate was 92% in the surgery group versus 100% in the C-ion RT groups.

Conclusion

Our results revealed that C-ion RT achieved good OS equaling to surgery even in cases of advanced diseases. Thus, C-ion RT would be one of promising treatment modalities in patients with locally advanced and/or inoperable diseases.
CYSTIC LYMPHANGIOMA OF THE PAROTID: ABOUT 2 CASES
K.Khamassi*(1)

(1)Charles Nicolle Hospital Tunisia, , Tunisia

Purpose of presentation

Cystic lymphangioma is a benign tumor from a dysembryoplasia involving the lymphatic system. Rare in adults, it usually occurs before the age of two years. Its primitive seat at the level of the parotid is rarely reported in the literature.

Materials and methods

The current study is a retrospective study of two patient hospitalized in the department of otolaryngology at the Charles Nicolle hospital.

Results

Observation 1 –
It is a 39-year-old woman who consulted for a left latero-cervical swelling that has evolved for 1 year. Examination: swelling of the left parotid region, firm, mobile, painless, well limited, 5 cm long. The ultrasound shows a cystic formation, compartmentalized, superficial, at the inferior pole of the parotid. MRI showed a cystic lymphangioma of the lower pole of the left parotid. The patient had partial exofacial parotidectomy. The following operations are simple. The histopathological examination confirmed the presence of a cystic lymphangioma.

Observation 2 –
It is a 6-year-old child, with no significant antecedents, who presented for a right parotidienne mass evolving for 2 months and having gradually increased in volume. The examination found a right parotid swelling of 4 cm long axis, well limited, homogeneous, depressible, soft, mobile, painless, and covered with healthy skin. The ultrasound was in favor of an oval adenomegaly of 43 x 20 mm, with a heterogeneous hypoechoic aspect, containing liquid ranges. CT concluded at a lower right parotid formation of cystic appearance. MRI showed an appearance of cystic lymphangioma of the lower pole of the parotid with intracystic hemorrhage. The patient had partial exofacial parotidectomy. Histopathological examination confirmed the presence of cystic lymphangioma. No recurrence was noted after a 3-year follow-up.

Conclusion

Cystic lymphangioma of the parotid is a rare disease. Although benign, it can be potentially serious by its extensive and infiltrating tendency of neighboring tissues and by its acute complications such as surinfections, inflammatory and haemorrhagic flares. MR, with its high specificity, represents the reference examination. Conservative surgery is the most frequently recommended approach. The injection of sclerosing agents can be proposed in extended or inoperable forms.

H.Jaafoura, A.Benyahia , E.Chebil, N.BenMoussa , I.Riahi, S.Mannoubi, K.Khamassi, R.Lahiani, M.BenSalah
Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
EFFECTIVENESS OF FNAB IN PAROTID GLAND TUMORS: OUR EXPERIENCE

M.Ruben*(1), A.Guillen martinez(2), J.Moraleda deleito(3), I.Mercader coste(2), N.Fages cárceles(2), I.Muñoz garcía(2)

(1) SANTA LUCIA HOSPITAL, Cartagena, Spain, (2) HOSPITAL SANTA LUCIA, Cartagena, Spain, (3) LEWISHAM AND GREENWICH NHS TRUST, London, United Kingdom

Purpose of the study

To evaluate the usefulness of fine needle aspiration biopsy (FNAB) in the study of parotid gland tumour malignancy in order to plan the most suitable treatment in each case.

Materials and methods

A retrospective study has made on 88 patients operated of parotidectomy from January 2014 to January 2016 with previous FNAB in our hospital. We evaluated the correlation between the FNAB and the histopathological findings of the surgical piece of parotid gland tumors, as well as the epidemiological information of these patients.

Results

We had operated 88 patients of parotidectomy in those years. 53 men (60.2%) and 35 women (39.8%). It was detected 8 malignant tumors (9.1%) and 80 benign tumors (90.9%). The most frequent benign tumor was lymphomatous papillary cystadenoma and it was detected in 34 patients (38.6%), followed of mixed tumor in 27 patients (30.6%). The most frequent malignant tumor was mucoepidermoid tumor, that was detected in 4 patients. The sensibility of FNAB in the detection of malignancy was 87.5% and the specificity was of 97.5%, with positive predictive value (PPV) of 77.7% and negative predictive value (NPV) of 98.7%. The rate of negative falses was 12.5% and the rate of positive falses was of 2.5%.

Discussion

Parotid gland is one of the usual targets of FNAB. The indications of this diagnostic method are not shared by all the authors due to the good result that is obtained from the junction of the clinical aspects and the radiological methods applied to the evaluation of parotid tumors. According to the reviews, the capacity of parotid FNAB to differentiate neoplastic and inflammatory pathology is high with a range between 85 to 95%.

Conclusion

The sensitivity and specificity of FNAB is 87.5% and 97.5% respectively, PPV and NPV is 77.7% and 98.7% respectively. Benign neoplasms were the most frequent (90.9%). The most frequently diagnosed neoplasms were Warthin’s tumor and pleomorphic adenoma. The cases diagnosed as malignant tumors were one Warthin’s tumor and one benign myoepithelial tumor classified as mucoepidermoid and epidermoid respectively with FNAB.
Epithelial myoepithelial carcinoma of parotide gland; rare tumor, what treatment? about one case

I.Boumendil*(1), R.Bencheikh(2), L.Essakalli(2)

(1)université mohamed V Rabat- Maroc, , Morocco, (2)mohamed V university, Rabat, Morocco

Epithelial myoepithelial carcinoma (EMC) is a rare malignant tumor of salivary gland most usually located in parotid gland. Little is known about the clinical behaviors and the prognosis of epithelial myoepithelial carcinoma, and there is no consensus for its treatment modalities.

Materials and methods: We report a case of epithelial myoepithelial carcinoma of parotid gland admitted and treated in our oto-rhino-laryngology department.

Observation: It’s about a 76-year-old patient who presented 2 years history of a painless mass of 6cm in the left parotid gland, without facial weakness or cervical lymphadenopathy. A left exofacial parotidectomy was performed, associated to adjuvant radiotherapy.

Discussion and Conclusion: Epithelial myoepithelial carcinoma is a rare malignant tumor accounting about 1% for all salivary gland tumors. It arises most commonly in the parotid gland, but it has also been described in the submandibular gland, minor salivary gland and palate. Adequate resection with negative soft-tissue margins is the minimum recommended and necessary therapy. Lymph node dissection should be considered in case of lymph node positivity along with chemotherapy and radiotherapy. Epithelial myoepithelial carcinoma is considered to be a low grade malignant tumor, but clinician should be aware of the potential of local recurrence and possibility of metastases with this pathology.
Extended Cervico-mastoid versus Cervicomastoidfacial incision for parotid surgery: comparative study

S.Kumar*(1), H.Prakash singh(2), V.Verma(3), A.Mishra(3), S.Agarwal(3)

(1)KING GEORGE'S MEDICAL UNIVERSITY, LUCKNOW, Lucknow, India, (2)king george's medical university, lucknow, , India, (3)KING GEORGE'S MEDICAL UNIVERSITY, Lucknow, India

Abstract:

Purpose of the study-
The purpose of this study was to compare the functional and cosmetic outcome of parotid surgery using extended Cervico-mastoid incision with conventional cervicomastoidfacial incision (modified Blair’s incision) with or without sternocleidomastoid obliteration.

Material and method-
In this study patients with benign parotid tumors who underwent parotidectomy in ENT & head neck surgery department in last 2 yrs. were undertaken. The patients underwent parotidectomy via a conventional cervicomastoidfacial (modified Blair’s incision) and extended Cervico-mastoid incision with or without sternocleidomastoid obliteration. All the patients were followed for at least 6 months following their parotid surgery. Information on the basis of symptoms, patient satisfaction, subjective Frey’s syndrome, retromandibular and pre-auricular depression and scar was studied on a 0-5 visual analogue scale (VAS), where 0 indicates normal appearance, symmetrical to the opposite side and 5 severe asymmetry, with deep pre-auricular and retromandibular groove with obvious scar. Outcome data were analyzed for both types of incisions.

Results-
Total 39 parotid surgeries for benign tumors performed in ENT department. Of these 39 cases, 18 (46%) were operated via cervicomastoidfacial incision without sternocleidomastoid flap reconstruction, 11 (28%) via extended Cervico-mastoid incision with sternocleidomastoid flap reconstruction and 10 cases (26%) were operated via cervicomastoidfacial incision with sternocleidomastoid flap reconstruction. On the basis of visual analogue scale satisfaction level in patients operated via cervicomastoidfacial incision without sternocleidomastoid flap reconstruction was less in comparison to patients operated via extended Cervico-mastoid incision with sternocleidomastoid flap reconstruction.

Conclusion-
The cervicomastoidfacial incision (modified Blair’s incision) is frequently used for parotid surgery which offers excellent surgical exposure to the parotid gland, but leaves a visible scar particularly in the pre-auricular area. Alternatively, for benign parotid tumors, a more cosmetic extended Cervico-mastoid incision can be considered which leaves no visible facial scar. In addition obliteration of parotid defect using sternocleidomastoid muscle flap gives excellent cosmetic as well as functional outcome in terms of distressing Frey’s syndrome.

Authors & Affiliations:
Dr. Sunil Kumar*, Dr. H.P.Singh*, Dr. Veerendra Verma#, Dr. Anupam Mishra#, Dr. S.P. Agarwal@

*Associate Professor, # Professor, @ Professor& Head
Dep of ENT & Head Neck Surgery,
King George’s Medical University, Lucknow, UP, INDIA.
EXTENDED PAROTIDECTOMIES WITH EAR INVOLVEMENT- MANAGEMENT OF THE POSTOPERATIVE DEFECTS AND COMPLICATIONS

V.Costan*(1), O.Boisteanu(1), D.Sulea(2), E.Popescu(1)
(1)St. Spiridon Hospital, Iasi, Romania, (2)Sp. Sf. Spiridon, Iasi, Romania

Purpose of the study
To emphasize the particularities encountered in the reconstruction of large defects following parotidectomy extended to the external ear.

Materials and methods used
We reviewed 14 patients that underwent surgery for parotid malignancies involving the pinna at the same time with the skin of the parotid region (12), the mandibular ramus (2) and the temporal bone in (6) cases. The plasty was performed by the use of a musculocutaneous latissimus dorsi flap (3), radial free flap (2), pectoralis major flap (3), platysma myocutaneous flap (6).

Results
Adequate closure of the postoperative defect was achieved in all cases. In one patient the initial latissimus dorsi flap was lost and subsequent reconstruction was performed by the use of a pectoralis major flap. Facial asymmetry due to missing soft tissues and the presence of complete or partial facial paralysis was present in all cases. Asymmetry was more important in the cases of platysma flap plasty due to the decreased thickness of the flap. The initial volume of the muscular flaps decreased in time. Additional procedures for improving appearance were performed in 8 cases and consisted in flap remodelling, lipostructure and procedures addressing the sequelae of facial nerve paralysis. Postoperatively a vertiginous syndrome developed in 11 patients and resolved spontaneously in no more than two weeks with the help of medical treatment. Neither of the patients requested the reconstruction of the external ear.

Conclusion
Even without the reconstruction of the external ear, achieving good facial symmetry is a goal for all patients. Musculocutaneous flaps are the best option for large defects involving several tissue layers in this area. The pectoralis major raises concerns of necrosis of the tip of the flap and additional drawbacks related to the presence of the pedicle and subsequent fibrosis with limited mobility of the head. The platysma flap offers easy skin closure but it does not achieve the adequate filling of the defect. This disadvantage can be partially resolved by the help of local pedicled muscular flaps, although there is always a decrease of the muscle volume in time, especially after radiotherapy. This shrinking is an advantage in the case of the heavy latissimus flap that can accentuate the features of facial paralysis by additional pull on the tissues. As a particularity in this region, vestibular disorders can develop postoperatively due to complete coverage of the ear canal.
Facial nerve reconstruction with proximal intrapetrous and distal multifascial cable grafting during radical parotidectomy: a reliable technique

E. De monès del pujol*(1)

(1)GROUPE HOSPITALIER PELLEGRIN, Bordeaux, France

Authors: de Monès E1, Castetbon V1, Fonmarty D1, Sayeux J1, Bonnard D1, Darrouzet V1
1Otorhinolaryngology Department, Bordeaux University Hospital, F-33000 Bordeaux, France

Introduction: Radical parotidectomy with facial nerve resection is the standard surgical treatment for high-grade tumors of the parotid gland with facial nerve involvement. Functional restoration of the facial expression is mandatory after facial nerve resection. Immediate multifascicular reconstruction with cable grafting may necessitate proximal suture into the mastoid for free margins with increased morbidity and surgical time.

Objectives: The aim of this study was to assess the morbidity and the functional results of this procedure in a single institution to evaluate if it was worthy to propose it to every future patient.

Materials and methods: A retrospective study was conducted including every patient with radical parotidectomy and multifascicular facial cable grafting. Clinical, surgical and histological parameters were collected. Facial nerve function was evaluated according House-Brackmann grading scale for patients with minimum 12 months follow-up and before local recurrence if appropriate.

Results: Ten patients (6 F/4M; mean 62.5 years old) were included. (3 salvage surgery after surgery and radiotherapy/7 primary with adjuvant radiotherapy). A free margin resection for high-grade malignant tumor (mean 30mm (19-45)) was performed with a multifascicular immediate cable grafting (2 to 4 distal branches) using sural (9 patients) or great auricular (1 patient) nerve with stiches, fibrin glue and aponevrotic wrapping. A proximal facial suture into the mastoid had been performed for 7 patients. Mean follow-up was 30 months (range: 11-100). One patient had local recurrence at 67 months. House-Brackmann score was evaluated for 9 patients: grade III (3 patients), grade IV (2 patients); grade V (3 patients) and grade VI (1 patient). Only one patient with grade VI necessitated adjuvant passive orbito-facial surgical procedures. No late side effect was noticed at the donor site. There were no evident clinical or surgical predictive parameters for good results (grade ≤ IV).

Conclusions: These encouraging results may lead to a systematic facial reconstruction even in case of proximal invasion to the trunk, except for fragile patients or short term bad oncological prognosis. Patients should be informed of unpredictable results.
FACIAL NERVE RETROGRADE DISSECTION DURING PAROTIDECTOMY WITH INTRAOPERATIVE NERVE MONITORING (NIM).

F.Carta*(1), R.Puxeddu*(2), N.Chuchueva(3), D.Quartu(2), A.Olla(2)

(1)Università degli Studi di Cagliari, Cagliari, Italy, (2)University of Cagliari, Cagliari, Italy, (3)I.M. Sechenov First Moscow State Medical University, Moscow, Russia

Introduction

Classical approach to the facial nerve during parotidectomy is anterograde, from the main trunk of the nerve to the peripheral branches, but retrograde dissection can be necessary in case of difficult identification of the main trunk. The Authors report their experience with retrograde dissection of the facial nerve during parotidectomy.

Methods

From November 2010 to September 2015, 3/198 parotidectomies were performed with retrograde dissection of the facial nerve. The procedures were performed coupling the intraoperative microscope (Microscope ZEISS S7 - focal length 250 mm) with the intraoperative nerve monitoring (Medtronic NIM Response® 3.0 - 4 channels). The retrograde dissection started always from the identification of the frontalis ramus being the most superficial and in close proximity of the superficial temporal vessels. Typical parameters of the intraoperative nerve monitoring used at our institution were: stimulus intensity of 0.5-0.7mA, duration of the stimulus of 100 microseconds, rate of the stimuli of 4 bursts/second and event threshold of 100 μV.

Results

3 patients (2 females and 1 male, mean age of 57 years, range of 44-79 years) underwent retrograde dissection of the facial nerve during the parotidectomy for voluminous tumor arising from the superficial lobe of the gland. In all cases histology allowed the diagnosis of pleomorphic adenoma completely removed. No spillage of the tumor was experienced or postoperative facial palsy.

Conclusions

Intraoperative nerve monitoring allowed for the easy and fast identification of the frontalis branch of the facial nerve during parotidectomy. The absence of postoperative facial weakness with the complete removal of the tumor leaving intact the capsule, confirm the importance and efficacy of the NIM during retrograde dissection of the facial nerve parotidectomy.
**Fine needle aspiration cytology for parotid lesions, can we avoid surgery?**

Y. Shkedy*(1), U. Alkan(1), A. Mizrahi(1), T. Shpitzer(1), G. Bachar(1)

(1) Rabin Medical Center, Israel

**Objective:**

Salivary gland neoplasms are rare tumors, with most arising in the parotid gland. Fine-needle aspiration cytology (FNAC) is a common method for pre-operative evaluation of parotid masses, although its usefulness is controversial. This study was designed to evaluate the accuracy of FNAC in a large cohort of patients, with emphasis on diagnosis of benign tumors and especially Warthin tumor which can be managed conservatively.

**Methods:**

This was a retrospective case series with chart review in a tertiary medical center. From 1991 to 2014, all patients 18 or older with both pre-operative FNAC and post-operative pathology report were included. Patients with a history of head and neck malignancy, sialoadenitis or had undergone prior oncological treatment were excluded. The patients’ FNA diagnosis was compared to final pathology and accuracy was assessed for different diagnoses.

**Results:**

470 patients were available for analysis. Overall accuracy was 82.6%. Positive predictive value (PPV) varied between 88.6-94.3% for pleomorphic adenoma and 77.1-100% for Warthin tumor, with values varying depending on different patient characteristics (e.g. age, smoking status). For pathologically proven malignant tumors, the FNAC diagnosis was benign or non-diagnostic in 26% of cases.

**Conclusion:**

FNAC has limited utility in confirming a benign diagnosis of a parotid mass for most patients, although for some sub-populations the PPV may be high enough to defer surgery.

Yotam Shkedy MD(1), Uri Alkan MD (1), Aviram Mizrahi MD (1), Tzippy Shochat MSC (2), Orr Dimitstein MD (3), Sara Morgenstern MD (4), Thomas Shpitzer MD (1) and Gideon Bachar MD (1)

Departments of (1) Otorhinolaryngology-Head and Neck Surgery, (2) Medical Statistics and (4) Pathology & Cytology, Rabin Medical Center, Petach Tikva; affiliated with Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

(3) Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel
FREE FAT GRAFTING IN THE MANAGEMENT OF POST-PAROTIDECTOMY FREY'S SYNDROME. A NEW APPLICATION FOR THIS TECHNIQUE.

S.Healy*(1)

(1)Royal Gwent Hospital, , United Kingdom

Purpose of the study: Parotid surgery for both benign and malignant disease is a common surgical procedure in ENT Departments. Risks associated with this operation include facial nerve injury, Frey's syndrome and cosmetic deformity, particularly in surgery for malignant disease. Each of these can be severely disabling and disfiguring for patients, who may have to live with these consequences for many years. Free fat grafting is an established technique in the field of Plastic surgery, where it is an established method of reconstruction in breast surgery for breast cancer. We assess the available literature for its use in parotid surgery, with particular reference to the prevention of Frey's syndrome, and its potential for improving cosmetic outcome in patients post-parotidectomy surgery.

Method: Literature review of evidence for free fat grafting to establish a standard of practice. Involvement of the Plastic Surgery team in Morriston Hospital, Swansea to perform the technique of free fat grafting in suitable patients undergoing parotid surgery under the two Head and Neck Surgeons within the ENT Department. Evaluation of the acceptability of the technique and outcome to both Surgeons and Patients, and its effectiveness in preventing symptoms of Frey's syndrome.

Results: There were no publications or recommendations identified on the subject of free fat grafting in parotid surgery. However, the evidence for its use following breast surgery indicates that this is a safe and effective technique. The use of free fat grafting in patients, which describes a novel application of the procedure in this group of patients is discussed and its potential for wider use is reviewed.

Conclusion: This study highlights an established technique, currently not adopted in ENT Departments, which appears to offer significant potential benefits to patients undergoing parotid surgery. Further development and utilisation of free fat grafting, particularly in Head and Neck and Reconstructive Surgery is likely to be an exciting area for the future. As long term survival figures improve, and patient expectations increase, further consideration of post-operative and cosmetic outcomes will only become more relevant in the treatment and management of head and neck disease.

Authors:

Sarah Healy Miss1, Em Combellack Miss2, Conor Marnane Mr2, Layson Pope Mr2, 1Royal Gwent Hospital, Newport, Wales., 2Morriston Hospital, Swansea, Wales.
Giant pleomorphic adenoma in a patient with HIV

A.Rameau*(1)

(1)UC Davis, , United States

Objective
To report the case of a giant pleomorphic adenoma of the parotid gland in a young adult with HIV on highly active antiretroviral therapy, in Zimbabwe.

Methods
Case report and review of the literature

Results
Pleomorphic adenomas are the most common tumors of the salivary glands, most frequently involving the parotid gland. If left untreated, these tumors can reach colossal sizes through slow and continuous growth. We review of the case of a 28-years-old male presenting with an 8 years history of enlarging painless left neck mass, previously diagnosed as pleomorphic adenoma through incisional biopsy. Clinical examination revealed a giant multi-nodular mass of the left neck, with no airway compromise or facial nerve deficit. The patient underwent total parotidectomy, with preservation of the facial nerve. Intra-operatively, a well-circumscribed tumor arising from the superficial lobe of the left parotid gland, with extension into the parapharyngeal space, was noted. Grossly, the tumor measured 20x15x13cm and weighted 3.1 kg. The post-operative period was uneventful. Final pathology confirmed the diagnosis of pleomorphic adenoma.

Conclusion
Giant pleomorphic adenomas of the parotid are seldom reported, especially in young male adults. It is unclear if our patient’s HIV status contributed to the extent of his disease. This case highlights that delayed treatment may allow for massive growth of pleomorphic adenomas, posing possible life threats and rendering surgical intervention more complex. The presentation of the case also underscores the plight of many patients in developing nations lacking access to specialized surgical care.
HYDATID DISEASE OF THE PAROTID GLAND

H.Jaafoura*(1)

(1)Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia, Tunis, Tunisia

INTRODUCTION

Hydatid disease most commonly involves the liver and lungs. Primary hydatid cyst of the parotid gland is still an exceptional localization.

The aim of our work is to study the epidemiological, clinical and therapeutic features of the hydatid cyst of the parotid gland.

MATERIALS AND METHODS

It is a retrospective study of a case of hydatid cyst of the parotid gland in the Charles Nicolle Hospital of Tunisia in 2016.

RESULTS

A 51-year-old man was referred to our hospital complaining of slowly progressive swelling in the left parotid region for the past 2 years. Physical examination revealed a cystic swelling, 3 cm x 2 cm-in size, in the parotid region. It was non-tender and mobile. No symptom of facial nerve involvement was recorded. On ultrasonography and Magnetic Resonance Imaging a cystic mass was reported. Fine-needle aspiration cytology revealed a few benign epithelial cells in thin clear fluid aspirate. The mass was surgically excised. The diagnosis was confirmed on macroscopic examination. The postoperative course was uneventful. There was no other organ involvement by the disease process.

CONCLUSION

Although the liver and lungs are the primary sites of infection, hydatid disease is also reported from various sites of body. The parotid gland is a rare site of this disease. It deserves to be evoked in any cystic swelling of this gland, especially in endemic countries.

H.Jaafoura, S.Mannoubi, A.Kesantini, S.Najjar, I.Riahi, K.Khamassi, R.Lahiani, M.BenSalah
Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
Incidental focal FDG uptake in the parotid glands on PET/CT in patients with head and neck malignancy
K.Kwon*(1), S.Kim(2)
(1)Dept. of Otorhinolaryngology, Kangdong Sacred Heart hospital Hallym University, Seoul, Korea, South,
(2)Department of Otolaryngology-Head and Neck Surgery, VHS Medical Center, Seoul, Korea, South

Objectives : To evaluate the prevalence and clinical significance of focal parotid lesions identified by 18F- FDG PET/CT in patients with nonparotid head and neck malignancies.

Methods : From 3,638 PET/CT examinations using 18F-FDG conducted on 1,342 patients with nonparotid head and neck malignancies, we retrospectively identified patients showing incidental focal FDG uptake in the parotid glands. The diagnosis of parotid lesions was confirmed histopathologically or on imaging follow-up. Patient demographics, clinical features, maximum standardized uptake value (SUVmax) on PET images, size and attenuation on corresponding contrast-enhanced CT images were assessed and correlated with the final diagnosis.

Results : The prevalence of incidental focal parotid FDG uptake on PET/CTwas 2.1 % (95 % CI 1.4 – 3.0 %). Among 21 patients with focal parotid lesions confirmed histologically or on imaging follow-up, 7 (33.3 %) had malignant lesions (all metastases) and 14 (66.7 %) had benign lesions (four pleomorphic adenomas, two Warthin’s tumours, one benign lymph node, one granulomatous lesion, six lesions without histopathological confirmation). There were no significant differences in age, sex, SUVmax or CT findings between patients with benign and those with malignant lesions.

Conclusion : Focal parotid FDG uptake on PET/CT in patients with head and neck malignancy warrants further investigations to ensure adequate therapy for incidental parotid lesions.
Malakoplakia is a rare chronic inflammatory disorder that predominantly affects the genitourinary tract.

We present the second ever case of malakoplakia involving the parotid gland in the world literature. We discuss the pathophysiology and review the management of such cases in the Head and Neck region.

Total of 49 cases reported in world literature. 18 cases (36.73%) were in the skin and soft tissue; 8 cases (16.32%) involved tongue; 5 cases (10.2%) in nose and sinuses; 5 cases (10.2%) involved middle ear and temporal bone; thyroid 4 cases (8.16%); larynx and trachea 5 cases (10.2%); 2 cases (4.08%) involving the tonsil. Salivary gland involvement 2 cases (4.08%).

Malakoplakia has been mainly described in immunocompromised patients or with chronic associated conditions. The pathogenesis is unclear, but is strongly agreed Gram negative bacteria play an important role.

The mainstay of treatment is surgical excision where feasible, with or without antibiotic treatment.

In this study there is no evidence of concomitant malakoplakia involving other system. Prognosis is very good and long term follow up is not necessary.

We conclude malakoplakia should be considered in the differential diagnosis in patients with head and neck masses. Clinically as they mimic aggressive malignant process, histological diagnosis is essential to differentiate this benign inflammatory disorder.
Mammary Analogue Secretory Carcinoma of the salivary gland: A new tumor entity

L.Ferraria*(1), J.Nogueira(1), A.Duarte(2), C.André(1), M.Rosa(1), L.Antunes(1)
(1)Hospital Garcia de Orta, Portugal, (2)Centro Hospitalar Barreiro Montijo, Portugal

Introduction: Mammary analogue secretory carcinoma (MASC) is a rare malignant salivary gland neoplasm that shares morphologic and immunohistochemical features with the secretory carcinoma of the breast. MASC was first described in 2010.

Purpose of the study: To report our first case of MASC in a Portuguese hospital occurring in the parotid gland in an 82-year-old male patient. To highlight the clinical, histologic, immunophenotypic and molecular features of MASC, and draw attention to the main differential diagnoses of this newly recognized tumor. To discuss the difficulties in diagnosis and subsequent treatment of this tumor.

Case report: A 82-year-old male patient presented with a mass of approximately 6 × 4 cm on the left pre-auricular region. Physical examination revealed a firm, fixed and non-tender mass. The computed tomography of the head and neck showed an ovoid lesion on the left parotid gland. Total parotidectomy with identification and preservation of the facial nerve was performed. The immunophenotype was positive for epithelial membrane antigen (EMA), CK7, vimentin, S-100 protein, mammoglobin and GCDFP15. Diagnosis was confirmed by the tumor’s morphological characteristics allied to the immunohistochemical, which presents a good correlation with the ETV6-NTRK3 gene translocation. Adjuvant radiotherapy was needed.

Conclusion: The presence of t(12;15) (p13;q25) translocation resulting in the ETV6-NTRK3 gene fusion or positive immunohistochemical studies for mammoglobin and S100 protein, are necessary to confirm the diagnosis of MASC. Although still under debate, treatment should mimic the management of other low-grade malignant salivary gland neoplasms. The inhibition of ETV6-NTRK3 gene fusion could be used as treatment in the future.

This is the first case of mammary analogue secretory carcinoma described in Portugal and the oldest patient reported in the literature. An accumulation of similar case studies is mandatory in order to clarify biological behaviors and establish the appropriate treatment.
Management of the neck in parotid glands malignant tumours

R. Battista (1)

(1) San Raffaele Hospital, Milan, Italy

Malignant neoplasms of the salivary glands are relatively rare, accounting for approximately 3-10% of all head and neck malignancies. In general, salivary gland tumors are a morphologically and clinically diverse group of neoplasms, which may present considerable diagnostic and management challenges to the pathologist or surgeon. Because of the histomorphological diversity and variable clinical course of salivary gland carcinomas, there remains a dilemma on how the neck should be addressed, treated or not treated when the clinical and presurgical imaging does not identify the presence of nodal involvement by cancer (cN0). In fact, cervical nodal metastasis is a major factor in therapy and prognosis of parotid cancer. The risk of occult nodal disease is widely varied in the literature (12-45%). Our aim is to examine the indication for elective neck dissection (END) in N0 patients. We present a 7-years' experience at San Raffaele Hospital, Head and Neck division. We review 21 parotid malignant tumours treated with END (levels Ib-IV). We conclude that knowledge about tumour staging and histologic grading is necessary for prognostic predictions, patient counselling, and treatment planning.

Piccioni LO, Toma R, Battista RA, Bussi M; San Raffaele Hospital, Head and Neck Unit, "Vita-Salute" San Raffaele University, Milan, Italy
Microsurgery techniques in parotid surgery: approach to avoid facial palsy

N.Avalos*(1), P.Paladines(2), I.Paul(2), M.Faraggi(1)

(1)Instituto Chileno de Cabeza y Cuello, Santiago, Chile, (2)Hospital Fuerza Aerea, Santiago, Chile

Parotid surgery is a frequent and demanding procedure and its main risk is the integrity of the facial nerve. The difficulty of maneuvering increases with the great variety of tumors that the surgeon may find, and with frozen biopsy we must decide if a total parotidectomy is required.

On the other hand, the anatomy of the facial nerve may be quite different, extending very small branches that can easily be injured, and even a facial nerve schwannoma may cause a resection of a portion of the nerve.

We reviewed our cases of parotid surgery in the last 3 years to assess the need of the use of microsurgery techniques (dissection and nerve repair, with the use of the microscope and microsurgery instruments).

Within this period, we operated 60 parotid tumors, out of which 2 (3.3%) required the repair of at least 1 facial branch, 1 (1.6%) required repair of nerve trunk, 2 (3.3%) early reoperations due a postoperative biopsy and 5 totalizations including a ten-year old child (8.3%), 4 (6.6%) required microsurgery due to difficult anatomy of facial nerve.

Conclusion: In a total of 14 patients (23.3%) microsurgery technique were used during parotid surgery, many of them not predictable, thus, we estimate that the surgeon who faces a parotid tumor has to be trained in microsurgery and primary repair of the facial nerve.
Mucoepidermoid carcinoma of salivary glands: a REFCOR study of 292 cases

L.Dahan*(1), N.Fakhry*(2), B.Baujat(3), S.Vergez(4), E.Uro-coste(4), F.Janot(5)

(1)CHU Conception, Marseille, France, (2)APHP, Paris, France, (3)CHU Tenon, Paris, France, (4)Institut Universitaire du Cancer, Toulouse, France, (5)Institut Gustave Roussy, Villejuif, France

Purpose: To describe the clinical, histological and therapeutic characteristics of a multicenter series of mucoepidermoid carcinoma (MEC) patients, and to determine prognostic factors for disease-free survival (DFS) and overall survival (OS).

Materials and methods: 292 patients with mucoepidermoid carcinoma were prospectively included in the Réseau d’Expertise Français sur les Cancers ORL Rares (REFCOR, French Network of Rare Head and Neck Tumors) database between 2009 and 2015. OS and DFS were determined by Kaplan-Meier analysis. The search for parameters that could influence long-term oncologic outcomes was carried out by univariate and multivariate analysis using log-rank test and Cox regression.

Results: The primary site was the parotid gland in 166 cases (57%), minor salivary glands in 102 cases (35%), submandibular gland in 20 cases (7%) and sublingual gland in 4 cases (1%).

Tumor was classified as low grade in 175 cases (60%), intermediate in 39 (13%) and high grade in 78 (27%). The tumor was stage I in 30% of cases, stage II in 23%, stage III in 15% and IV in 32%. Two hundred and seventy three patients (93%) were managed by surgery and 123 patients (42%) underwent postoperative treatment which included postoperative radiotherapy in 92 cases, postoperative chemo-radiotherapy in 29 cases and chemotherapy in 2 cases.

Median follow-up was 26 months. The 5-year OS and DFS rates were respectively 83% and 69%. In multivariate analysis, older patient age (p=0.004), diabetes (p= 0.02) and advanced stage (p= 0.03) were found to have a significant negative impact on OS. Diabetes (p= 0.001), alcohol consumption (p=0.003) and advanced stage (p=0.001) were found to have a significant negative impact on DFS. High grade, compared with low grade had a negative impact both on OS (p=0.05) and DFS (0.02) while intermediate grade was not found to be significant. The surgical treatment had a positive impact on both OS (p=0.00005) and DFS (p=0.0005) and chemotherapy was associated with a poorer prognostic for OS (p=0.01). Postoperative radiotherapy had no impact in multivariate analysis.

Conclusion: The present results confirm that the reference attitude, for MEC of salivary glands, is radical surgical resection. Adjuvant radiation therapy did not emerge as a prognostic factor. Patient’s general conditions and tumor stage are important factors affecting outcome.
Multifocal tumors of the parotid gland

A.Yokoyama*(1), I.Hiroshi(2), M.Yagi(2), T.Fujisawa(2), K.Suzuki(2), T.Sakagami(1)

(1)Department of Otolaryngology, Saiseikai Noe Hospital, , Japan, (2)Kansai Medical University Otolaryngology, Head and Neck Surgery, , Japan

Introduction:

Parotid gland tumors are usually solitary while multiple tumors occurring simultaneously in an individual are uncommon. Warthin's tumors are known to occasionally occur at multiple sites. However, the occurrence of parotid tumors of different histologic types in the same patient is rare. In this study, 26 cases of a simultaneously occurring bilateral tumor growing in the parotid gland are described.

Methods:

Overall, 428 parotidectomies were performed between 2006 to 2016. The clinical records, imaging studies (MRI, CT, and/or ultrasonography) and histopathology were reviewed.

Results:

26 (6.1 %) cases had multiple lesions in the parotid gland. Fifteen patients were male and 11 were female. The median age was 66 (range 47-83) years. Histologically, Warthin's tumor was the most common type (18 cases), followed by Warthin's tumor and the other morphological type (4 cases; pleomorphic adenoma, lymhhepithelial cyst, carcinoma ex pleomorphic adeoma). In 2 cases with Malignant lymphoma were synchronous with One case was bilateral basal cell adenoma, and one case was multifocal basal cell adenocarcinoma.

Conclusions:

Although ipsilateral and/or bilateral parotid gland tumors of different histologic types are rare and make up less than 0.3% of all parotid neoplasms, careful attention to preoperative diagnosis is needed for the multifocal parotid tumors.

Authors and their affiliations:

Ayaka Yokoyama, Masao Yagi, Kensuke Suzuki, Takuo Fujisawa, Tomofumi Sakagami, Hiroshi Iwai
Myoepithelioma in parotid gland

H.Inada*(1)

(1)Department of Otolaryngology,Second Hospital,Fujita Health University School of Medicine, Nagoya, Japan

Myoepithelioma is the subtype of pleomorphic adenoma. It is composed of only neoplastic myoepithelial cells, which is classified by the WHO’s classification of salivary gland tumor for the first time in 1991.

This tumor account for only around 1% as regards the salivary gland tumor.

Also, most of the myoepithelioma are often mistaken for pleomorphic adenoma. Therefore pathological diagnosis, especially immunohistological staining holds great significance.

A 28-year-old man complaining of right parotid lump for 4 years, which had been gradually increased, and visited our hospital in November 2015.

The patient had no past medical history.

The right parotid lump had a round shape and 20mm in diameter, which was elastic hard and movable.

He had no history of other medical problems including facial nerve paralysis, or evident lymph node swelling.

From a clinical perspective, we suspected the tumor was pleomorphic adenoma.

Then, we underwent contrast-enhanced CT and fine needle aspiration(FNA).

Contrast-enhanced CT showed suspicious of pleomorphic adenoma.

However, result of FNA was ‘Atypical/indetermina’.

After that, we underwent the operation of superficial parotidectomy and submitted the tumor to pathological diagnosis.

In this operation, facial nerve was preserved.

Immunohistologically, myoepithelial cells were immunoreactive for S-100 protein, α-SMA, p63, EMA, calponin, Ki67.

Then, we could confirm the diagnosis of myoepithelioma.

I will report a case of myoepithelioma based on imaging findings, intraoperative finding and pathological findings.
Myxoid Liposarcoma of the parotid gland: a case report and literature review

H.Jaafoura*(1)

(1)Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia, Tunis, Tunisia

Purpose of the study:
Although liposarcoma is the second most common soft-tissue sarcoma in adults, it is exceedingly rare in the oral and salivary gland region (OSG). Only few cases of liposarcoma of the parotid gland have been reported in the literature. The study objective is to describe the clinical, histologic and radiologic features of parotid gland liposarcoma.

Material and Methods:
It's a retrospective study of one case of Liposarcoma of the parotid gland in a 54-year-old man who was treated in our departement; clinical and radiologic presentation were described, also therapeutic management.

Results:
We report a new case of primary liposarcoma of the parotid gland in a 54-year-old man, with no medical history, who presented with a left parotid location mass, appeared two months earlier and gradually increasing in size without other associated signs. The examination showed a swelling of the left parotid region, 3 cm in size, firm consistency, not very mobile, without inflammatory signs. There was no facial paralysis. Examination of the oral cavity and oropharynx was normal. No cervical adenopathy. Ultrasound showed a well-circumscribed heterogeneous, hypoechoic, postero-inferior left parotid formation. Magnetic Resonance Imaging showed a heterogeneous parotid gland mass with low signal on T1 imaging, bright signal on T2, enhanced after injection of gadolinium. Chest-X-Ray was normal. Partial parotidectomy was performed. The final pathologic examination established the diagnosis of a dedifferentiated myxoid liposarcoma of high grade of malignancy. There were no metastases. A complement of left total parotidectomy with sacrifice of the facial nerve, associated with a selective neck dissection, were performed, with adjuvant radiotherapy. The progression was favorable with complete remission on a 2-year follow-up. The patient retained a complete and definitive left facial paralysis.

Conclusion:
Primary liposarcoma of the salivary glands are rare tumors. Imaging, particularly MRI, offer best evaluation of the loco-regional extension in preoperative. Fine-needle aspiration cytology can guide diagnosis. Treatment is not well codified. The prognosis depends mainly on diagnosis date, tumor stage and the quality of therapeutic management.

H.Jaafoura, S.Najjar, A.Methneni , I.Riahi, S.Mannoubi, K.Khamassi, R.Lahiani, M.BenSalah
Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia
Parotid gland surgery for benign tumours. Can the volume resected and the size of the lesion influence post-surgical complications?

C.Chiesa estomba*(1), J.Sistiaga suarez(1), J.González garcía(1), E.Larruscain sarasola(1), I.Thomas arrizabalaga(1), X.Altuna mariezcurrena(1)

(1)Hospital Universitario Donostia, San sebastian, Spain

Purpose of the study: Different types of complications are described after parotid gland resection, usually these complications are related to facial nerve injury, disruption of sensory or autonomic innervation, sialocele or salivary fistula, among others.

Materials and Methods used: A 5 year retrospective analysis was conducted to try to determine the rate of post-surgical complications after parotidectomy for benign parotid tumours and to try tried to determine if the volume resected and the size of the tumoral mass can may influence the appearance of complications.

Results: 49 patients could be included, Of these, 27 (55,1%) were men and 22 (44,9%) were women. The age average was 57 years (SD: 13,49 = Min. 24/Max. 82). 9 patients (18.4%) were diabetic and 14 (28.6%) hypertensive. Mean follow-up was 11 months (Min: 6 / Max: 24) and 4 (8,1%). The most common type of lesion was pleomorphic adenoma in 24 (49%) cases. 21 (42,8%) patients reported a complication related to surgical procedure. The most common complication was marginal mandibular nerve paresis reported in 5 (10.2%) patients, and facial nerve palsy in 5 (10,2%) patients, 2 (4,1%) patients suffered a sialocele formation and 2 patients suffered a salivary fistula 2 (4,1%), other 2 (4,1%) patients presented a surgical site seroma and other 2 (4,1%) patients reported a surgical site infection, 1 (2%) patient respectively presented an hematoma, a surgical wound dehiscence and facial pain after surgery. The average volume of the surgical specimen was 39.7 cc (range, 1.77cc to 220.89cc), we didn´t find a statistical correlation between the volume resected and the rate of complication (p: 0,402) or facial nerve injury (p: 0,662). According to size, median width of lesion was 2,22 cm (Min: 0,5/Max: 4,8 ± 1,03) and median length was 1,82 cm (Min: 0,5/Max: 4 ± 0,81). We didn´t find a statistical correlation between tumoral width and the rate of complication (p: 0,650)or facial nerve injury (p: 0,523), and we didn´t find a statistical correlation between tumoral length and the rate of complication (p: 0,720) or facial nerve injury (p: 0,536).

Conclusion: These results highlight the need of carefully dissection during gland surgery and the importance of post-operative wound care.
Parotid gland tumors in the child: a 20-year experience from a centre in Morocco.

I.Omar*(1), R.Sami(2), A.R.larbi(3), R.Mohamedi(4), M.Mohamed(5)

(1)ENT-Neck and Face Surgery, Hospital August 20, 1953, University Hospital IBN ROCHD, Casablanca, Casablanca, Morocco, (2)ENT departement university hospital Ibn rochd, Casablanca, Morocco, (3)ENT departement, university hospital Ibn Rochd, Casablanca, Morocco, (4)ENT departement,university hospital Ibn Rochd Casablanca, Casablanca, Morocco, (5)ENT departement,university hospital Ibn Rochd, Casablanca, Morocco

Purpose of the study: To analyze clinical presentations, treatment modalities, and evolution of pediatric cases of parotid gland tumors in the child.

Materials and methods: We included in this retrospective study all patients aged 18 years and younger with a parotid tumor evaluated and treated at the ENT-Neck and Face Surgery, Hospital August 20, 1953, University Hospital IBN ROCHD, Casablanca, between January 1, 1997 and December 31, 2016. Medical histories were reviewed for patient age and sex, presenting signs and symptoms, location of the lesion, treatment, complications, recurrence, follow-up, tissue specimens and outcome.

Results: Fifty-nine (30 boys and 29 girls) were identified. Mean age was 10.8, the most common presenting sign was an obvious mass (100% of patients), only 1 patient had facial nerve weakness at presentation. The right parotid gland was involved in 27 patients, the left in 32 patients. The most common location was preauricular area. At least 1 surgical procedure was performed in 57 patients, the most common was superficial parotidectomy with facial nerve preservation, followed by total parotidectomy. The most common immediate postoperative complication was temporary facial nerve weakness. Other long-term complications after parotid surgery included evidence of Frey syndrome in 23 patients, this was reported most often by patient aged 10 through 18 years. Of 59 patients, 11 (18.64%) had malignant parotid neoplasms, they are especially marked by muco-epidermoid tumors and Acinic cell carcinoma. Forty-five (81.36%) patients had benign masses, these are dominated by pleomorphic adenoma and vascular tumors.

Conclusion: Although pediatric parotid tumors in children are uncommon, they can represent a variety of pathological diagnoses, including malignancy. We advocate prompt evaluation and treatment of these tumors, and suggest guidelines for their management.
Primary lymphoma of the major salivary glands comprises approximately 5% of extranodal lymphomas and approximately 2% of all salivary gland tumours. Among these, primary parotid lymphoma is an unusual entity. Presentation is indistinguishable from other swellings of the parotid gland; therefore, it is important to consider lymphoma in the differential diagnosis when examining parotid mass. Parotid lymphomas are most likely to be B-cell non-Hodgkin lymphoma. They occur either as a de novo process, unrelated to other diseases, or as a secondary process, related to lymphoepithelial sialadenitis. On the other hand, Hodgkin’s lymphoma occurred in the parotid gland probably just represents disease involvement of intraparotid lymph nodes.

We present a review of our experience at San Raffaele Hospital, Head and Neck division. Over a period of 6 years, a total of 274 patients underwent surgical treatment for parotid mass. A total of 14 patients (5%) were diagnosed of parotid lymphoma, 9 of them were primary lymphomas while 5 resulted in lymphoma of periparotideal lymph-node. Fine needle aspiration biopsy was non-diagnostic. Definite diagnosis depends on sufficient tissue material of parotidectomy specimen. Parotid surgery is positively recommended both in order to treat the tumour and to ensure histological diagnosis. Radiotherapy and chemotherapy should be considered in association with surgery in disseminated forms or after removal.

Piccioni LO, Toma R, Battista RA, Bussi M; San Raffaele Hospital, Milan, Italy
Precision Gene Expression Profiling and Mutational Analysis of Salivary Gland Lesion Fine Needle Aspirate Biopsies

G. Mulholland*(1)
(1) University of Alberta, Edmonton, Canada

Purpose of the Study: Fine needle aspirate biopsies (FNABs) of salivary gland tumors (SGTs) have high diagnostic specificity but relatively low sensitivity. The recent discovery of biomarkers associated with distinct SGTs provides the opportunity to enhance pre-operative diagnostics. We aimed to utilize novel, highly sensitive technology termed droplet digital PCR (ddPCR) to identify diagnostic gene expression signatures from SGT FNAB samples.

Materials and Methods: FNABs were pre-operatively collected from patients with SGTs and processed for ddPCR analysis. Gene expression levels were measured relative to internal control (EEF2) for EGFR, p53, Ki67, c-KIT, CCND1, MDM2, AR and fusion genes CRTC1–MAML2, MYB–NFIB, EWSR1–POU5F1, PLAG1-fusions and HMGA2-fusions. Expression profiles were correlated to post-surgical pathologic diagnosis.

Results: FNAB samples from 46 patients with SGTs were collected for ddPCR analysis. Standard clinical FNA cytology from these patients included 8 cancerous/suspected cancer (17.4 %), 23 benign (50.0 %) and 15 non-diagnostic (32.6%) results. Compared to other methods of biomarker analysis gene expression data was reliably obtained with small amounts (≤ 1 ng) of nucleic acid. Fusion gene products and distinct gene expression profiles were predictive of final surgical pathology.

Conclusions: The detection of biomarkers of SGTs by ddPCR is a powerful diagnostic tool. The detection of altered gene expression and signature fusion-gene products associated with SGTs may be useful for pre-surgical planning.

Authors:
1. Graeme B. Mulholland, MD
2. Morris Kostiuk, PhD
3. Daniel A. O’Connell, MD, MSc, FRCSC
4. Hadi Seikaly, MD, MAL, FRCSC
5. David W.J. Cote, MD, MPH, CCFP, FRCSC
6. Jeffrey Harris, MD, MHA, FRCSC
7. Vincent L. Biron, MD, PhD, FRCSC

All authors are affiliated with the University of Alberta.
Prediction of outcome by lymph node ratio in patients with parotid gland cancer

M.Meyer*(1), D.Beutner*(2), M.Kreppel(3), J.Meinrath(4), K.Hüttenbrink(1), R.Büttner(4)

(1)Department of Otorhinolaryngology, Head and Neck Surgery, University of Cologne, Germany, Cologne, Germany, (2)Cologne, Germany, (3)Department for Oral and Maxillofacial Plastic Surgery, University Hospital of Cologne, Germany, Cologne, Germany, (4)Department of Pathology, University of Cologne, Germany, Cologne, Germany

Purpose of the study

Lymph node ratio has been shown to be an independent predictor of recurrence risk and survival in different entities of carcinoma. The validation of LNR as a potential predictor in parotid gland cancer was the aim of the study.

Materials and Methods

In this retrospective chart review 128 patients with parotid gland cancer having been treated by primary surgery were included. 64 % (n=82) were additionally treated with adjuvant radiotherapy 36 % without (n=46). Five-year overall survival rates were determined using the Kaplan-Meier method. The ratio of the number of positive-to-total number of lymph nodes and tumor-node-metastasis (TNM) staging variables were subjected to multivariate analysis.

Results

Lymph node ratio was found to be significantly associated with overall survival rate (p<0.05. By univariate analysis, pathological TNM-stage, UICC-stage grouping and extracapsular spread were found to be significant predictors of overall survival (p<0.001). By multivariate analysis Lymph node ratio remained the only independent predictor of overall survival (p=0.043).

Conclusion

After surgery for parotid gland cancer evaluation of the neck using Lymph node ratio was found to reliably stratify the overall survival rate. Lymph node ratio has the potential to identify patients with poor outcome in need of more aggressive adjuvant treatment.
PRESENTATION AND SURGICAL MANAGEMENT OF PAROTID MASSES AT A TERTIARY CARE HOSPITAL.

R. Dhanani*(1)

(1) Aga Khan University Hospital, Karachi, Pakistan

Objective:
To analyze the clinical presentation, histopathology, complications and outcomes of parotidectomy.

Material and methods:
Retrospective chart review was performed of 193 patients who underwent parotidectomy from January 2005 to December 2015 at the Aga Khan University Hospital, Karachi. Data collected included age, gender, comorbid, signs and symptom, perioperative facial nerve function, details of surgery, FNA, histopathology and complications.

Results:
Out of 193 patients undergoing parotidectomy, 110(57%) were males and 83 (43%) were females, mean age being 48.21 and 43.76 years respectively. Mean duration of symptoms was 41.33 months and most common symptom was pre-auricular swelling present in all patients followed by pain present in 29 patients (15%) and facial nerve weakness in 6 patients (3.1%). FNAC was performed preoperatively and results were compared with final histopathology which showed sensitivity of 96.3%, specificity of 57.14% and diagnostic accuracy of 91.93%. 158 patients (81.86%) underwent superficial parotidectomy while 35 patients (18.14%) underwent total parotidectomy. The final histological diagnosis showed benign lesion in 147 (76.2%) patients and 46 patients (23.8%) had malignant lesions. 23 (11.9%) patients had transient nerve paralysis while 11 (5.7%) had complete facial nerve paralysis after surgery and majority of them were seen after total parotidectomy 6 (3.1%) patients developed post-operative hematoma and 2 (1%) developed frey's syndrome. 33 (71.73%) patients were sent for adjuvant radiation therapy out of 46 patients with malignancy and 9 (19.6%) patients with malignancy developed recurrence.

Conclusion:
Parotidectomies are performed for almost all parotid masses and are usually associated with good postoperative outcomes. Malignancies of the parotid are rare with most of the masses benign in nature. FNA can prove to be a valuable tool for preoperative counseling of the nature of the disease and prognosis. With modern day procedures facial nerve can be saved in most of the surgical interventions.
Prevalence, Patterns and Predictors of Lymph Node Metastasis in Parotid Malignancies

P.Chaturvedi*(1), A.Garg(1), S.Chakrabarti(1), D.Nair(1), P.Pai(1), A.Deshmukh(1), G.Pantvaidya(1), D.Chaukar(1), A.D`cruz(1)

(1)Tata Memorial Hospital Mumbai, India

Purpose: This study aims to analyze the prevalence, patterns and predictors of nodal metastases in parotid malignancy.

Methods: A retrospective study of 215 patients, of whom 86 patients underwent neck dissection (24 selective neck dissection (SND) levels II-IV, 62 modified neck dissection (MND) levels I-V) and 129 had level II sampling only. Data Analysis was done using SPSS 20 for windows.

Results: While 35.8% patient had clinically palpable nodes, only 27.4% had pathologically proven metastases. Level II was most commonly (88.4%) involved by metastases followed by levels III, I, IV, and V. Occult metastases were seen in 11.6% patients and majority of these were in level II (83.3%). Skip metastases (involvement of level IV/V in the absence of level II) were seen in 9.3%. The factors that predicted nodal metastases were – age, clinical facial nerve involvement, clinical T size and lympho vascular emboli. Clinical T size was the only significant factor predicting occult metastases.

Conclusion: Nodal metastases are not infrequent in parotid malignancy. MND I-V is advised for patients with palpable nodes. SND I-III is advised in those with non-palpable nodes having T3/T4 tumors and/or high grade histology. Age, facial nerve involvement and clinical T size may help clinician decide the necessity of neck dissection.
Primary malignant salivary gland neoplasms: prognostic factors
R.Robles*(1)
(1)Centro Hospitalar de Vila Nova de Gaia/Espinho, Vila nova de famalicão, Portugal

Introduction: Salivary glands malignancies are rare, and account for approximately 3-10% of all head and neck tumors. They represent a heterogeneous group, as they have one of the most complex histologic features of tumors in this region, and their epidemiology isn’t yet well understood.

Therapeutic recommendations of the most infrequent subtypes are usually based on reviews or small trials, which led to some controversy about the optimal management. In spite of these considerations, surgical resection is the main treatment option.

The aim of this study is to evaluate prognostic factors that might affect survival in patients with primary malignant salivary gland tumors.

Material/Methods: A retrospective study was conducted including all primary malignant salivary gland tumors treated at the Portuguese Institute of Oncology - Porto Centre, from January 1, 1995, to December 31, 2013.

Results: A total of 149 patients were enrolled in the study, all of them globally treated in our hospital. Parotid gland tumors were the most frequent, followed by submandibular and minor salivary glands. The most frequent histologic subtype was the mucoepidermoid carcinoma, followed by the adenoid cystic carcinoma. In the majority of patients, surgery was the treatment of choice, associated in with neck dissection in approximately half of cases.

According to our results, main relevant factors are age, TNM stage, histological subtype and grade. Statistical analysis were made to associate these factors with global and disease free survival.

Discussion/Conclusion: Malignant salivary gland tumors represent a wide variety of histological subtypes with different prognostic implications.

In most rare subtypes, different therapeutic strategies are needed. Surgery is the main option, and some controversies exist about the management of the neck. To achieve optimal treatment results, a rigorous histologic study is necessary, because some of the most treatment decisions are made upon the information gathered from the anatomic specimens.

Robles, Raquel*. Nobrega Pinto, Ana**. Fernandes, João***. Jácome, Manuel****. Monteiro, Eurico***.

*Otorhinolaryngology & Head and Neck Department - Centro Hospitalar Vila Nova de Gaia/Espinho, Portugal
**Otorhinolaryngology & Head and Neck Department - Centro Hospitalar do Porto, Portugal
***Otorhinolaryngology & Head and Neck Department - Instituto Português de Oncologia Francisco Gentil do Porto, Portugal
****Pathology Department - Instituto Português de Oncologia Francisco Gentil do Porto
Quantitative perfusion-analysis of parotid gland tumors with contrast-enhanced ultrasound with an emphasis on the early wash in phase

J. Küstermeyer*(1), C. Deichmüller(1), M. Albers(1), H. Welkoborsky(1)

(1) Department of Otorhinolaryngology, Head and Neck Surgery, KRH Nordstadt Clinic, Hannover, Germany

Purpose of the study

Ultrasound is widely accepted as the standard imaging technique for investigation of salivary gland tumors. It is an important tool in the surgeon’s hand particularly for planning a surgical treatment. The use of contrast-enhanced ultrasound (CEUS) allows analysing perfusion patterns of salivary gland tumours in detail. However, application of CEUS for the differentiation between benign and malignant lesions is controversially discussed. The purpose of the present study was to investigate and compare perfusion characteristics between different tumour entities with an emphasis on the early wash-in phase of the contrast agent, and to discuss its potential benefit for tumour diagnosis.

Materials and methods

40 patients who underwent surgery for a benign or malignant tumour or for an inflammatory disease of the parotid gland were examined by B-Mode-, Colour-coded Doppler- and Contrast-Enhanced ultrasound. The diameter, echogenicity, demarcation and perfusion parameters of the lesions were measured. Perfusion was quantitatively analysed by using time-intensity-curves. Therefore the change of intensity (Δi) and the time to peak (Δt), starting from the initial wash-in of the contrast enhancer, were measured. The diagnoses were confirmed by histopathologic examination.

Results

The comparison of the diameter, echogenicity and demarcation showed no significant differences between the diagnostic groups. The Colour-coded Doppler examination revealed significant differences (p<0.05) of the vascularization between benign and malignant tumours and between inflammatory reactions and malignant tumours. The CEUS parameter change of intensity (Δi) showed significant differences between benign and malignant tumours, as well as between inflammatory processes and malignant tumours. Furthermore the Δi of pleomorphic adenoma and Warthin’s tumours respectively were significantly different.

Conclusion

The use of CEUS seems to help in the differential diagnosis of salivary gland tumours and for differentiation between benign and malignant conditions. Analysing the Δi could be an additional parameter to improve the validity of CEUS in interpreting tumour dignity. However, CEUS should only be used additionally to conventional ultrasound techniques and not as a single examination. Further characterization of other perfusion parameters is necessary to improve its predictive accuracy.
RADIO-HISTOLOGICAL CORRELATION OF PAROTID TUMORS

O. Lachhab*(1), R. Hejjouji(1), I. Ezekari(2), S. Nitassi(2), A. Oujilal(3), L. Essakalli(2)

(1) Hospital specialty of Rabat, Morocco, (2) Hopital des specialités de rabat, Morocco, (3) Hopital des spécialité de rabat, Morocco

PURPOSE OF THE STUDY: The Parotid tumors represent less than 3% of all cervical tumors. They are benign in 80% of cases. The objective of this study is to evaluate the contribution of 3 imaging methods: ultrasound, CT and MRI in the differentiation between malignant and benign tumor of the parotid.

MATERIALS AND METHODS: This is a retrospective study of 49 cases of parotid tumors collected over 3 years from 2014 to 2016. Each of the radiological criteria used to determine the nature of the tumor was analyzed and correlated with the histology data. For the analytical study, the chi-two test was used and the p-value was calculated (significant if p<0.05) and then the sensitivity, specificity and diagnostic efficiency were calculated for each modality.

RESULTS: The average age of our patients was 44 years with extremes between 9 and 80 years. The sex ratio is a 0.58 with a clear female predominance (18H / 31F). The pattern of consultation was parotid swelling in all cases, right in 30 cases and left in 19 cases, with cervical adenopathies in 4 cases. The average time for consultation was 59 months. The consistency was hard in 14 cases, closed in 33 cases and soft in 02 cases. The limits were clear in 35 cases and blurred in 14 cases. The mass was mobile in 26 cases and fixed in 12 cases. Pain was present in 11 cases. 02 patients showed skin infiltration and 03 facial paralysis. Adenopathies were present in 9 cases. The definitive histology was benign in 39 patients and malignant in 10 cases. On ultrasound, fuzzy boundaries and irregular contours predict malignancy. At CT, the criteria that lead to malignancy are: blurred boundary, area of necrosis, and extension to neighboring tissues. At MRI, irregular contours, capsular effraction, extension to neighboring tissues and presence of adenopathies are the criteria that lead to malignancy. Radiation-histological correlation showed a sensitivity of 66%, 42% and 88%, and a specificity of 90%, 82% and 82% for ultrasound, CT and MRI, respectively.

CONCLUSION: Preoperative knowledge of the nature of the tumor guides the surgeon in his surgical decision. Therefore, imaging has become a real diagnostic tool for surgeons, and MRI represents the exam of choice, especially with the emergence of new dynamic techniques.

AUTHORS: LACHHAB OMAR, HEJJOUJI REDA, EZEKARI ILHAM, AZZAM IMANE, NITASSI SOPHIA, EL AYOUBI ALI, BENCHEIKH RAZIKA, BENBOUZID MOHAMMED ANAS, OUJILAL ABDELILAH, ESSAKALLI LEILA.
Salivary duct carcinoma: a prospective multicenter study of 61 cases of the REFCOR
A.Villepelet*(1)

(1) Service d'ORL et chirurgie cervico-faciale, Hôpital Tenon, Paris, France

Purpose of the study: Salivary duct carcinoma is a rare and very aggressive salivary gland malignancy, which resembles high-grade breast ductal carcinoma.

Objectives: To describe the clinical, histological and therapeutic characteristics of a prospective multicenter series of 61 salivary duct carcinoma patients, and to determine any prognostic factors for overall survival, disease-free survival and metastasis-free survival.

Materials and methods: 61 patients were included in the Réseau d’Expertise Français des Cancers ORL Rares (REFCOR) between 2009 and 2016. The REFCORpath advised a second histological examination, especially for the grading. The paraffin-embedded tumor samples were examined immunohistochemically.

Results: The mean age of the cohort was 66.5 years and 74% were men. The primary site was the parotid gland in 51 cases (90%), the submandibular gland in 3 cases (5%) and the minor salivary gland in 3 cases (5%). The tumor was stage IV in 57% of the cases at diagnosis. 65% of the patients had cervical lymph node involvement and 10% had metastases at diagnosis. The tumors showed androgen receptor (89%) and HER2/neu (36%). 48/51 patients underwent surgery and 41/51 patients underwent postoperative radiation therapy. 5-year overall survival was 68.5%. 5-year disease-free survival was 25%. Tumoral stage 3-4 was associated with reduced disease-free survival and metastasis-free survival (respectively hazard ratio [HR]=4.3; p=0.038 and HR=4.4; p=0.036). There was a trend for an association between positivity of HER2/neu and reduced disease-free survival (HR=3.46; p=0.06).

Conclusion: The prognosis of salivary duct carcinoma is poor. The determination of androgen receptor and HER2/neu is essential, as anti-androgen deprivation or Trastuzumab based therapy may benefit some salivary duct carcinoma patients.

Authors and affiliations: A.Villepelet 1, M. Lefèvre 2, the REFCOR members 3, B.Baujat 1,4

1-Service d’ORL et de Chirurgie Cervicofaciale, Hôpital Tenon, Assistance Publique-Hôpitaux de Paris et Université Pierre et Marie Curie, Paris VI, 4 rue de la Chine 75020 Paris, France
2-Service d’Anatomie Pathologique, Hôpital Tenon, Assistance Publique-Hôpitaux de Paris et Université Pierre et Marie Curie, Paris VI, 4 rue de la Chine 75020 Paris, France
3-Réseau d’Expertise Français des Cancers ORL Rares: (REFCOR, French Rare Head and Neck Cancer Expert Network)
4-Faculté de Médecine Pierre et Marie Curie, Paris, 91-105 Bd de l'Hôpital, 75634 Paris
Salivary ductal carcinoma of parotid gland : case report

A.Yacine*(1), M.Hachemi*(2), F.Handis(2)

(1)FACULTE DE MEDECINE D'ALGER, Alger, Algeria, (2)service ORL CHU BAB EL OUED, Alger, Algeria

les auteurs rapportent un cas de carcinome canalaire de la parotide gauche chez un patient âgé de 62 ans évoluant sur quelques mois avec infiltration masseterine et de certaines branches du nerf facial. Le patient a bénéficié d'une parotidectomie totale gauche avec dissection du nerf facial et sacrifice de la branche naso-labiale associé à un curage ganglionnaire des zones II à IV. L'examen anatomo-pathologique a conclu à un carcinome canalaire parotidien de forme comédo-nécrosante infiltrant le muscle strié classé pT3 N1b Mx, avec emboles vasculaires et adénopathies 0.5 à 2 cm infiltrés par la tumeur. À l'immunohistochimie les HER2 et CK5/6 étaient positifs. L'évolution s'est faite vers la récidive dans les 6 mois avec décès dans l'année. Le carcinome canalaire des glandes salivaires atteint surtout la parotide, c'est une tumeur agressive avec tendance à la récidives locales et métastase très élevés, le traitement doit être radical, fondé sur la parotidectomie totale, sacrifice du facial, curage ganglionnaire homolatéral et radiothérapie post opératoire. Reconnu par l'OMS en 1991 parmi les tumeurs malignes des glandes salivaires qui atteint surtout le sexe masculin avec un âge moyen entre 55 et 65 ans, statistiquement il est considéré comme rare. Les plus grandes séries dans la littératures ne que comportent 15 à 26 cas.
Salivary gland tumors in children - Incidence and survival - a nationwide cohort study in Denmark

C.Geneser*(1)

(1)Rigshospitalet, University Hospital Copenhagen, Denmark, , Denmark

Introduction

The incidence of pediatric head and neck cancer continues to rise. Tumors located in the salivary glands account for a small number of the total incidents. Although a rare type of cancer, it is important to study. This is due to the fact that these cancers are known to have quite a high risk of local relapse. This study will also look at the secondary primary tumors and death among this patient group. The study is also conducted to enable doctors to recognize the clinical picture when the patients present in the clinical setting, since only a few cases are seen each year in Denmark.

Methods and materials

The data was extracted from the nationwide Danish Cancer Registry, looking at the time span between 1 January 1977 and 31 December 2014. By individual-level linkage we identified all individuals aged 0-24 years (at the time of diagnosis) with head and neck salivary gland tumors (location in parotid glands, submandibular glands, lingual glands and glandulae salivaria minores). 59 cases were included. Through the Danish National Pathology Registry the data for each case was verified. The extracted data was on tumor-location, histology, gender, age at diagnosis, TNM-stage, vital status, timing of biopsy-verified progression, and treatment. Survival and progression rates were estimated by Kaplan-Meier plots. The Statistical software R and the Epitools package was used. Incidence rate were examined by calculating the average annual percentage change with 95% confidence interval (CI) for age at diagnosis. Joinpoint software was used for this part of the analysis.

Results

We have observed a significantly rise in the incidence, with a 1,68% average annual percentage change during the time period. The following results will be ready to presentation at the conference: median age at diagnosis, median follow-up, median time to progression, overall survival, disease-free survival. Preliminary results point towards a poor long-term outcome for this group of patients and a high risk of both relapse and secondary primary tumors.

Discussion

Children with salivary gland tumors represents a challenging group of patients. Although a rare type of cancer, it is important that further studies are conducted to ensure the best understanding and treatment of this disease.
Signs presumptive of malignancy of parotid tumors.

Youssef DAROUASSI, Amine ENNOUALI, Mohamed MLIHA TOUATI, Brahim BOUAITY, Haddou AMMAR.

Ear, nose and throat department of the military hospital of Marrakech

Aim of the study:

Tumors of the parotid gland are various and pose a diagnostic and therapeutic problem. A good analysis of predictive factors of malignancy is necessary for better treatment planning. The purpose of this study was to investigate the predictive factors of malignancy in parotid tumors.

Material and methods:

This is a retrospective study of 76 cases of parotid tumors treated in the ear, nose and throat department of the military hospital of Marrakech between January 2000 and December 2012.

Results:

There was 40 women and 36 men. The average age was 44 years for benign tumors whereas it was 50 years for malignant tumors. The average delay of consultation was 24 months for benign tumors and 16 months for malignant tumors. The swelling of the parotid region was the sign leading to seek medical attention in all patients. The malignancy is suspected clinically in case of pain; facial paralysis; fixity compared to superficial or deep plan and the presence of lymphadenopathies. MRI has become the test of choice in exploring the parotid tumor masses suggesting diagnosis of malignancy or benignity. The fine needle aspiration has no value except if it is positive. Parotidectomy with frozen section pathological examination remains the key positive diagnosis. Parotid benign tumors are the most common entity (80%) and pleomorphic adenoma remains the predominant histologic type (61%). As for malignant tumors, they are mainly dominated by muco epidermoid carcinomas (6.5%). Surgical treatment is often associated with neck dissection and radiotherapy for malignant tumors. Facial paralysis is the most common complication of parotid surgery.

Conclusion:

Tumors of the parotid gland pose many diagnostic and therapeutic problems. A good analysis of predictors of malignancy of parotid tumors leads to better planning of the treatment strategy.
Objective: Evaluate the difference of the incidence in clinical Frey syndrome in studies comparing classical parotidectomy and parotidectomy during which a SMAS flap elevation and suturing was performed.

Study Design: Meta-analysis of controlled studies with and without SMAS flap.

Methods: Database search with the following key word combination: "Frey syndrome" and "SMAS". Inclusion criteria: parotidectomy, SMAS flap and control groups, lack of additional Frey prevention techniques, minimal follow up of one year. No limitation on the extent of parotidectomy or the pathology of the underlying disease. The outcome was the presence of clinical Frey syndrome.

Results: Eleven studies, mostly retrospective and not randomized. A decrease in clinical Frey syndrome incidence was observed in nine studies, while two found an increased incidence. The differences were statistically significant in three studies, not significant in five, and three publications did not perform any statistical evaluation. According to the fixed-effect model SMAS technique is associated with a decrease of clinical Frey syndrome with an OR of 0.42 (CI 0.32-0.56). With the random-effect model the difference remains significant (p=0.006) with an OR of 0.25 (CI 0.09-0.66). The heterogeneity index $I^2$ is very high (85%).

Conclusion: The use of SMAS flap and suturing is associated with a decreased incidence of Frey syndrome.
Surgical decisions based on an FNA in the absence of a systematic frozen section for a parotid gland tumor is not prejudicial for the patient.

J. Sichel*(1)

(1) Shaare Zedek Medical Center, Jerusalem, Israel

Introduction: Due to a shortage of pathologist in our institution, frozen sections in parotidectomy cases are performed only in selective cases. However we systematically request a Fine Needle Aspiration Cytology (FNAC) prior to surgery. Most are performed outside the hospital. The objective of the present study was to evaluate if this standard of care was or was not prejudicial for the patients.

Methods: A retrospective study was conducted. Files of all patients who had undergone parotidectomy for a primary tumor of the parotid gland between 2005 and 2015 in Shaare Zedek Medical Center were reviewed. The results of the FNAC, final pathology and frozen sections when performed were compared. Further evaluation was performed in cases where a discrepancy was observed in order to identify any potential damage to the patients.

Results: A parotidectomy for a primary tumor was performed in 226 patients during this period. Final pathology revealed 188 (83%) benign tumors (BT) and 28 (12%) malignant tumors (MT) and in 10 cases (4%), no obvious tumor was seen (in these cases, the surgical indication was for suspicion of tumor). FNAC predicted 177 BT (177 true negative and 5 false negative) and 28 MT (20 true positive and 8 false positive). In 16 cases, FNAC did not make a precise diagnosis (among which were 13 BT and 3 MT). FNAC showed a sensitivity of 80% and a specificity of 95% with a positive predictive value of 72 % and a negative predictive value of 98%. The 3 false negative and the 8 false positive cases were reviewed and no obvious unnecessary damage to the patient was observed.

Conclusion: Making a surgical decision based on an FNAC in the case of a parotid tumor is acceptable. A systematic frozen section is not mandatory but must be made available for specific cases.
The role of preoperative evaluation and facial nerve monitoring in medicolegal outcomes following parotid gland surgery.

C.Joseph*(1)

(1)Sandton Head and Neck Forum, Johannesburg, South Georgia & South Sandwich Islands

Purpose of study:
Evaluate the use of preoperative imaging and FNAB (Fine Needle Aspiration Biopsy) with intraoperative nerve monitoring in reducing potential litigation in parotid gland surgery.

Materials and Methods:
A retrospective study of 157 patients undergoing parotidectomy was undertaken.

2 groups were identified namely one with intraoperative facial nerve monitoring (88 patients) and the second without (69 patients). FNAB results were available for analysis in 127 patients.

Pathology and complications were assessed to determine whether FNAB and imaging with or without facial nerve monitoring could impact on the reported causes of litigation in parotid gland surgery, namely unnecessary procedures (errors in diagnosis) and improper surgical performance.

Results:
Pathology consisted of malignant lesions in 40%, benign tumours in 53% and inflammatory lesions and cysts in 7%.

The surgical complication rates were:
Haematoma 2.3%, Frey's Syndrome 4%.

Post operative facial nerve weakness 16.8% (superficial parotidectomy) to 45% (deep lobe surgery). All recovered within 4 months. There was no significant difference between the monitor and non monitor group.

11 patients presented preoperatively with partial (7 patients) and total (4 patients) paralysis.

11.6% of patients had undergone previous surgery and/or radiotherapy in the non monitor group and 33.3% in the monitor group.

FNAB differentiated benign and malignant tumours in all cases except 7 (6 incorrectly diagnosed as malignant on FNAB and 1 incorrectly diagnosed benign).

Conclusion:
Errors in diagnosis and resultant unnecessary procedures are reported as a major cause of litigation in addition to improper surgical performance and nerve damage.

Preoperative evaluation with accurate FNAB and imaging supplies critical information for patients regarding outcomes (benign versus malignant disease) and risk to facial nerve function (superficial versus deep lobe surgery). The role of intraoperative nerve monitoring is controversial in the medicolegal literature and did not have a significant impact on facial nerve outcomes in this study.
Transcervical extracapsular dissection in the parapharyngeal space: Pearls and pitfalls

K. Mantsopoulos*(1)
(1) Department of Otolaryngology, Head and Neck surgery, University of Erlangen-Nuremberg, Germany, Erlangen, Germany

Purpose of the study: This keynote lecture aims at focusing on the investigation of the significance of the transcervical extracapsular dissection in the treatment of parotid gland tumors located in the parapharyngeal space. We want to investigate the issue, to what extent an extracapsular dissection of a lesion in the parapharyngeal prolongation of the parotid gland could be associated with compromises on the functional or oncologic outcome. A further purpose of this lecture is to present our experience in the detection of some potential pitfalls by the application of this modality in the parapharyngeal space.

Materials and Methods: First of all, our lecture will concentrate on a review of the literature with a focus on the surgical modality of the extracapsular dissection and outcomes of recent relevant studies. Additionally, an analytic study of the records of all patients treated for lesions of the deep lobe of the parotid gland by means of extracapsular dissection via transcervical approach between 2000 and 2012 in our department will be presented. Last but not least, we are going to show our experience in specific cases hiding potential sources of surgical pitfalls concerning this modality and suggesting relative contraindications to this surgical method.

Results: 56 patients were detected. Our study showed acceptable oncologic and functional outcomes throughout. Special attention should be paid to cases with polylobular tumor growth on MRI or satellite tumors by pleomorphic adenomas, due to the potentially higher risk of recurrence, as well as by tumors with a broad contact to the inner surface of the deep parotid lobe and lesions with suspicion for malignancy.

Conclusion: Transcervical extracapsular surgery seems to be associated with acceptable oncologic and functional outcomes. These outcomes can be expected only if extracapsular is properly indicated after thorough investigation of the preoperative imaging study.
Usefulness of facial nerve monitoring during retrograde partial parotidectomy for benign lesions


(1)Department of Otolaryngology, Head & Neck Surgery, Kansai medical university, Hirakata, Japan, (2)Department of otolaryngology, head & neck surgery, Kansai medical university, Hirakata, Japan, (3)Department of otolaryngology, head & neck surgery, Hirakata, Japan, (4)Department of Otolaryngology, Saiseikai Noe Hospital, Osaka, Japan

Background

Surgeons perform painstaking attention to avoid facial nerve injury during parotidectomy. Controversy exists on the use of its advantage of neuromonitoring during parotidectomy. Several authors have suggested a positive effect Approach of the parotidectomy of those studies are standard antegrade dissection of facial nerve. We know of no published studies that analyse usefulness of facial nerve monitoring during retrograde partial parotidectomy.

Objectives: To determine the effectiveness of intraoperative facial monitoring (FNM) in preventing transient postoperative facial nerve weakness in patients undergoing partial parotidectomy using a retrograde facial nerve dissection.

Methods

Retrospective study of patients presenting to Kansai medical university hospital with parotid tumors from 2006 to 2016. The study population was divided into the following two groups based on the use of facial nerve monitoring and its approach: Unmonitored antegrade approach group, FNM antegrade group, Unmonitored retrograde approach group, and FNM retrograde approach group. Malignant tumors, recurrent cases, and cases with preoperative facial paresis were excluded.

Results

Overall, 344 parotidectomies were performed on 340 patients. One hundred ten cases undergo FNM and 244 cases did not undergo FNM (unmonitored). 247 were antegrade, 87 were retrograde. The incidence of transient postoperative weakness following parotidectomy was significant lower in the FNM group compared to the unmonitored group with retrograde approach (5.0% in FNM group vs 21.3% in unmonitored group). Similar finding was evident in the patients with antegrade parotidectomy when comparing postoperative facial nerve dysfuntion (11.3% in FNM group vs 22.8% in unmonitored group). The mean operation time in the retrograde parotidecotmy group with monitoring was 109.1; without monitoring 99.1 minutes. There is no statistical differences between these groups.

Conclusions

Use of intraoperative facial nerve monitoring had no significant effect on duration of surgery during partial parotidectomy. Use of intraoperative facial nerve monitoring significantly diminishes the incidence of postoperative facial paralysis compared to the unmonitored parotidectomy in both standard antegrade and retrograde approach.
WHAT IS A SAFETY MARGIN IN PAROTID PLEOMORPHIC ADENOMA SURGERY

M. Amin Riad*(1)

(1) ENT Department. Ain Shams University, Cairo, Egypt

Magdy Amin Riad, Mohamed Shehata, Ahmed Adly, Tamer Abou Ezz

Introduction:
We analyzed a prospectively recorded database of parotidectomy; the aim is to identify factors related to safety margins, tumour recurrence and other complications of parotid surgery.

Methods:
Prospective case series. Data of 192 patients with new tumours and revision parotidectomies were analyzed. The main outcome measure was tumour safety margin and recurrence; the analyzed variables were age, gender, tumour size and site, safety margin, tumour puncture, spillage, adherence to facial nerve, surgical procedure and follow up period.

Results:
The overall recurrence rate was 3.8%. Revision cases had a higher rate of second recurrence (11%) The rate of recurrence was not related to age, gender or duration of follow up. Recurrence is related to larger tumours, tumours less than 30 mm in diameter are unlikely to recur. Tumour recurrence was inversely related to safety margin. Tumours with a diameter of 4 cm or more have no margins. All the 7 tumours that recurred were punctured. Spillage was reported in 5 patients, 4 had a recurrence (80%). Tumour capsules were related to facial nerve in 75 cases, 6 of them had a recurrence (8%).

Conclusion:
Tumour puncture and spillage were the only variables which have an independent effect on recurrence, 26.9% of punctured tumours and 80% of cases of spillage recurred (p=0.043 and p=0.035 respectively). Although tumour size, safety margin and adherence to facial nerve are related to recurrence; logistic regression suggests that these are confounding variables influencing recurrence through effect on puncture and spillage rates.
Oromandibular dystonia: demographics and clinical data from 240 patients

M.Mailly*(1)

(1)Fondation Adolphe de Rothschild, Paris, France

Mailly M., Klap P., Perrin A., Brasnu D., Ayache D., Cohen M.

ENT Fondation Ophtalmologique de Rothschild 75019 Paris

Objective: To report demographic data from a large cohort of patients receiving botulinum toxin-A injections (BoNT) for oromandibular dystonia (OMD).

Methods: Retrospective review of patients with OMD treated with BoNT injections at a tertiary referral center, between 1989 and 2015. Demographic (age, sex, familial history of dystonia) and clinical (type of OMD, associated dystonia, aetiology of dystonia) data were collected from a cohort of 240 individuals.

Results: The mean age at the time of diagnosis was 51.6 year-old, with a female predominance (2:1). A family history of dystonia was found in 8 patients (3.3%). One hundred and forty nine patients (62.1%) had the jaw-opening OMD; 48 patients (20.0%) had the jaw-closing type, and 43 patients (17.9%) had mixed OMD; 64 patients (26.7%) had associated lingual dystonia. Eighty-two patients (34.2%) had a focal dystonia, 131 patients (54.6%) had segmental dystonia, and 27 patients (11.3%) had generalized dystonia. One hundred and seventy one patients (71.3%) had idiopathic OMD.

Conclusions: OMD is a chronic, disabling focal dystonia. Our study finds a female prevalence, onset in middle age and mostly idiopathic eatiology. Unlike in other studies, jaw-opening was the most frequent clinical type of OMD.
Advantage of virtual surgical planning and customized devices in free fibula mandibular reconstruction

C. Fuchsmann*(1)
(1) Hôpital de la Croix Rousse, Lyon, France

Purpose:
The main challenge in free fibula mandibular reconstruction is to properly shape the fibula flap to match the native mandible. The use of virtual surgical planning and customized guides and plates (VSP) has recently developed to optimise morphological results and reduce operating time.

Patients and method:
Four patients underwent mandibular reconstruction involving symphysis using virtual surgical planning and customized devices. The main outcome measures included overall operative and ischemia times, facial appearance and functional results. Operative times were compared with those of a conventional surgery group operated during the same period. Accuracy was assessed comparing three-dimensional computer models of the final reconstruction with the preoperative virtual plan.

Results:
Ischemia and overall operative times were significantly decreased using virtual surgical planning when compared with conventional surgery (85 vs 144 min for ischemia time p<0.01 and 433 vs 525 min for overall operative time p<0.05). Postoperative course was uneventful for all patients. Esthetic and functional results were satisfactory. The four patients were decannulated and had nasogastric feeding tube removal before discharge. Postoperative CT scans also showed excellent mandibular contours of the fibula flaps in accordance with virtual plans. The average difference between different points measured on preoperative and postoperative 3D models was less than 2mm.

Conclusion:
Virtual surgical planning and customized devices allowed accurate mandibular reconstruction. The use of cutting guides and prebent plates made the fibula flap moulding easier significantly minimizing overall operative and ischemia time.

Authors:
Dr Carine Fuchsmann, MD
Pr Philippe Céruse, MD, PhD
Department of ENT and Head and Neck Surgery
Hôpital de la Croix Rousse, Lyon, FRANCE
Aesthetic Reconstruction after total parotidectomy on young patient using a pure adipose free thoracodorsal flap

N.Brault*(1), Q.Qassemyar*(2)

(1)institut gustave roussy, Villejuif, France, (2)Institut gustave roussy, , France

Abstract

Background: After total parotidectomy, and even if facial nerve is preserved, patients keep aesthetic sequelae, particularly with sunken skin on the side of the face. This loss of volume can be corrected by different local technique, but results may be insufficient and require aesthetic improvements with other operative time. So, we propose a volume reconstruction at the same time of tumor resection with a pure adipose free thoracodorsal flap.

Methods: Four patients from 11 to 36 years old have been operated. A total parotidectomy and a volume reconstruction with a pure adipose free thoracodorsal flap was realized for each patient. The follow-up was at least 12 months after radiotherapy to evaluate reconstructed volume change and complications.

Results: After radiotherapy, volume provided by the flap remained stable, and patients were very satisfied by aesthetic results. A low morbidity was associated of the donor site according patient. No local complication, facial paralysis and Frey syndrome was founded. No patient wished to secondary aesthetic improvement.

Conclusions: The pure adipose free thoracodorsal flap seems to be a consistent volume over time after total parotidectomy and radiotherapy. Any local complication was associated and aesthetic results are very satisfied. These cases are promising, in particular for young patients for whom secondary aesthetic correction after radiotherapy can be complicated.
Anatomical Variations of the Venous Return of the Submental Flap: A Study with 70 Clinical Cases and Cadaver Dissections

H. Lin*(1)

(1) Tri-Service General Hospital, National Defense Medical Center, Taipei, China, Republic of (Taiwan)

Background:

The indications for head and neck defects with submental flaps (SFs) have been well described, and although vascular anatomy represents a determining factor in successful SF raising, less attention has been focused on the venous return of SFs. Thus, the present study aimed to investigate SF venous return.

Methods:

This study enrolled patients who underwent submental flap reconstructive surgery in a tertiary referral center between November 2009 and October 2016. We also conducted cadaveric anatomic dissection of 10 well-preserved adult Chinese cadavers. The drainage pathway of the SF venous return was routinely identified during the course of our operations to prevent damage during head and neck surgery.

Results:

The venous return data of 70 patients and 10 cadavers were reviewed. The size of the flaps ranged from 15 to 84 cm², and total flap loss was not observed in the case series. All of the submental arteries originated from the facial artery; however, the submental veins of 70 patients returned to either the internal jugular vein (IJV, 72.9%) or the external jugular vein (EJV, 27.1%). The results of the cadaveric anatomic dissection revealed 11 (55%) sides with the submental vein draining into the IJV and 9 (45%) sides with the submental vein draining into the EJV. In addition, 5 cadavers (10 sides, 50%) revealed one side with submental vein drainage into the IJV and the other side with drainage into the EJV.

Conclusions:

Our data suggest that drainage of the submental vein into the EJV, which has been previously overlooked, should receive greater attention during SF surgeries. The results support mandatory preservation of the EJV and IJV and indicate that vascular anatomy is a determining factor for successful SF raising.
Assessment of volumeric changes of antelolateral thigh free flap in head and neck field

S.Kim*(1)
(1)Seoul St.Mary’s Hospital, Catholic University of Korea, , Korea, South

Introduction

Ablative surgery with an adequate surgical margin and flap reconstruction is the treatment of choice for advanced head and neck cancer. Many reports figure out that the volume of the reconstructed flap is closely related with functional outcomes in head and neck cancer. So evaluation of reconstructed flap volume followed by years is very important, especially in reconstructed free flap. Our study aimed to evaluate volume changes in the anterolateral thigh free (ALT) flap in head and neck cancer defects and find out the effect of motor nerve reinnervation to the volume loss in free flap reconstruction.

Method

A retrospective review of the medical record of the patients who were diagnosed as SCC(Squamous cell carcinoma) of tongue, and maxillary sinus, nasal cavity and had ablative surgery reconstructed with ALTF(Anterolateral thigh free flap) from 2005 to 2013. Flap volume was estimated with MRI axial images. In axial view, each section was delineated by using DICOM ROI freedraw and area calculated. Then volume is obtained by multiplying the entire area by the section interval. We checked flap volume at POD 6 months, and after that, every 1 year.

Result

Total 21 patients were enrolled(12 tongue cancer patients, 9 sinus canacer patients) and all of tongue cancer patients had motor nerve reinnervation to hypoglossal nerve but in sinus cancer, none of patients had this procedure. Average measured reconstructed flap volume was 356.4cm³ in tongue cancer, 416.4cm³ in sinus cancer. Reconstructed ALTF shrinkage occurred with the passage of time, averagely 8.5%, 17.3% of volume loss(post-operative 1 year, 2 years) in tongue cacer patients. Meanwhile, in sinus cancer, there was 14.7%, 26.0% of volume loss after surgery, 1 year and 2 years respectively.

Conclusion

Volume loss after years should be taken into account when reconstructing with ALTF in head and neck field. And motor nerve reinnervation could be one of good option to reduce the volume loss after free flap reconstruction.
Comparing the postoperative mouth opening between skin graft and artificial collagen for patients with small oral cavity cancer

S.Terng*(1)

(1)Koo Foundation Sun Yat-Sen Cancer Center, Taipei, China, Republic of (Taiwan)

Purpose

Oral cavity cancer is the 4th leading cancer in Taiwanese male, both in terms of incidence and mortality rate, because of betel nut chewing problems in Taiwan. The betel nut chewing causes a lot more buccal mucosal cancers in Taiwan than in non-betel nut chewing western countries. Surgery is the main treatment for oral cavity cancer, with or without adjuvant therapies. Surgery for buccal mucosal cancers often caused trismus after surgery. Thus free flap reconstruction became mainstay of surgical treatment for the cancers in buccal area. However, in small primary tumors, free flap reconstruction is not always undertaken. Skin graft can be used for small defect, as well as the artificial collagen sheet or artificial dermis products. The goal of this study was to compare between the two methods for small defect repair by using skin graft or artificial collagen.

Materials and methods

We used split thickness skin graft (STSG), harvested from anterior surface of thigh of the patient during surgery, to repair the defect after resection of buccal mucosal cancer. Alternatively, we also used a commercially available artificial collagen mesh/sheet - Terudermis, a long standing product from a Japanese company Terumo, to replace the role of STSG in repairing the defect after resection. A single institute study enrolled clinically early stage (stage I or II) buccal mucosal cancer or buccogingival cancer or labiobuccal cancer from 2002 to 2015. The maximal mouth opening was measured and recorded in every patients, from the preoperative baseline to the postoperative period. The comparison between the STSG group and Terudermis group will be presented.

Result

There was only marginal difference of the maximal mouth opening between the two groups. The detailed statistical results will be presented.

Conclusion

The heavy burden of the oral cavity cancers in Taiwan posted a challenge for the surgical workload for medical institutes. Not all patients undergo free vascularized flap reconstruction, though the postoperative functional result should be better than skin graft or no repair. This study focused on the changes of maximal mouth opening, and tried to answer the questions of "which one is better, STSG or Terudermis?" for small primary cancers in the buccal area.
Endovascular Coiling of Microvascular Anastomotic Pseudoaneurysm: Another Tool in Free Flap Salvage

G.Neel*(1), N.Deep(2), T.Nagel(2)
(1)Mayo Clinic, Phoenix, arizona, United States, (2)Mayo Clinic, Phoenix arizona, United States

Endovascular Coiling of Microvascular Anastomotic Pseudoaneurysm: Another Tool in Free Flap Salvage

Purpose of the study:
To report a case of a free flap anastomotic expanding pseudoaneurysm treated by emergent endovascular coiling, resulting in complete flap salvage.

Materials and Methods Used:
Data was obtained by retrospective chart review.

Results:
A 62-year-old man presented with recurrent squamous cell carcinoma of the tongue base. Fifteen years prior, he underwent neck dissection and radiotherapy for an unknown primary squamous cell carcinoma metastatic to the right neck. His recurrence was treated with induction chemotherapy and stereotactic radiotherapy to a dose of 40Gy. Unfortunately, he presented 6 months later with significant radiation toxicity including tongue base necrosis that extended to, and included, the hyoid bone. He underwent total laryngectomy and total glossectomy with ALT free flap reconstruction of the oral tongue. Anastomosis to the left facial artery was performed. On POD#3 patient had unexplained bleeding out of bilateral nares and oropharynx. CT angiography demonstrated a small hematoma near the microvascular anastomosis, but no extravasation or aneurysm was seen. On POD#14, the patient experienced oral cavity bleeding which self-resolved. On POD#19 the patient experienced another unusual episode of oral cavity bleeding. A CT angiogram demonstrated a facial artery pseudoaneurysm hemorrhage from the proximal side of the anastomosis. Emergent endovascular treatment by coiling the aneurysm was successfully performed, maintaining blood flow through the anastomosis. There was complete flap survival and the bleeding episodes resolved.

Conclusion:
Microvascular anastomosis failure in head and neck free flap reconstruction is a devastating complication and is associated with high morbidity and mortality. Patients with a history of significant radiation exposure are at higher risk for flap complications. Unexplained, sentinel bleeding in these patients may warrant further imaging studies to evaluate for potential pseudoaneurysm at the anastomosis. We report a novel method of flap salvage involving endovascular coiling of a microsurgical anastomotic pseudoaneurysm. This technique resolved our patient’s recurrent hemorrhages, minimized morbidity by preclusion of additional operation, and avoided an impending and tragic anastomotic blowout. Surgeons should be aware of this flap salvage technique.
FAMM flap reconstructions of oral cavity and oropharyngeal defect: outcomes in a multicenter tertiary care setting comparing two different harvesting methods

B.Ibrahim*(1), A.Christopoulos(2), E.Bissada(2), L.Guertin(2), M.Olivier(2), T.Ayad(2)

(1)Université de Montréal, Montreal, Canada, (2)Université de Montréal, Canada

Background: The facial artery musculomucosal (FAMM) flap is a highly versatile and reliable reconstructive option for the oral cavity. Its use has been reported as well in many other areas of the Head and Neck. Multiple modifications of the harvesting techniques have been described. Our group has described a modification in the harvesting technique designed to avoid an obstructing pedicle. No previous study in the literature compares outcomes of different harvesting techniques for FAMM flaps.

Objectives:
1. Report on surgical and functional outcomes of oral cavity and oropharyngeal reconstructions using FAMM flaps
2. To compare surgical and functional outcomes between two different harvesting techniques

Methods: retrospective chart review. Speech language pathologist, nutrition and dentistry charts were reviewed for assessment of functional outcomes. Results reported using descriptive statistics, 2 tailed t-test and Fisher’s exact test.

Results: we reviewed 55 cases of FAMM flap with a mean follow up time of 2 years. Sub-sites reconstructed included oropharynx, lateral tongue, floor of mouth and inferior gingiva. Twenty-nine were performed using the classically described method and 26 were performed using the modified method. Surgical complications included 1 instance of partial tip necrosis not needing a secondary intervention and two cheek hematomas were noted. No instances of total flap necrosis were recorded as well as no cases of surgical site infection or abscess. The overall re-intervention rate for an obstructing pedicle or ankyloglossia was 20 % (n=11/54) with 31 % in the classical harvesting method group as opposed to 12 % in the modified method group (p=0.141). There was no statistical difference in time to decanulation and tracheostomy closure (p=0.338) as well as time to first oral intake (p=0.629) and days of hospitalization between both groups (p=0.790). Overall 73 % (n=39/53) recovered a normal or soft solid diet. Functional and intelligible speech was achieved by 80 % (n= 40/50) of patients. No statistical difference was noted between the groups for speech and swallow outcomes (p0.05). Dental rehabilitation was achieved by 90 % of patients (n=27/30).

Conclusion:
1. The FAMM flap offers a low morbidity approach to reconstruct a wide range of head and neck defects.
2. The modified harvesting technique has a similar safety and functional outcomes profile as the classical method with the added advantage of lower rates of secondary surgical interventions.
FASCIOCUTANEOUS VERSUS MUSCULOCUTANEOUS FLAPS IN TONGUE BASE RECONSTRUCTION

V.Costan*(1), B.Cobzeanu(1), O.Boisteanu(1), D.Sulea, E.Popescu(1)

(1)St. Spiridon Hospital, Iasi, Romania

Purpose of the study
We aim to present our experience regarding the advantages and disadvantages of four different flaps in the reconstruction of the posterior aspect of the tongue.

Materials and methods used
We retrospectively reviewed 16 patients that underwent surgery for tumours of the tongue base with consecutive reconstruction of the defect using a fasciocutaneous deltopectoral flap in 2 cases, a fasciocutaneous radial free flap in 6 patients, a myocutaneous pectoralis major flap in 4 cases and in 4 patients a latissimus dorsi musculocutaneous free flap.

Results
In all selected cases an adequate closure of the postoperative defect was achieved primarily. One radial free flap was lost through thrombosis of the arterial anastomosis. In 3 cases there was an early postoperatively hematoma formation treated conservatively. Tension in the closure of the wound in one case of pectoralis major flap reconstruction resulted in the formation of a salivary fistula that eventually closed under conventional treatment with prolonged hospital stay. The best functional outcomes were noticed overall in the patients undergoing free flap reconstruction. The most stable results were recorded for the fasciocutaneous flaps, with minimal changes in volume at follow-up. For one patient in the radial forearm flap, an adequate bulk of the reconstructed tongue was not achieved primarily due to the increased size of the defect and small volume of the flap, therefore subsequent lipostructure was performed at a later time in order to improve the functional outcome. On the other side, in the initially voluminous musculocutaneous reconstructions, a decrease in the bulk of the flap was noticed in all patients, but there was no need for additional surgery regarding this aspect.

Conclusion
We prefer fasciocutaneous flaps for medium to large defects due to the increased pliability of the tissues and desire for a thinner flap in the posterior aspect. When the subcutaneous adipose layer in the area of the latissimus is thick and would make the initial fitting of the flap quite difficult due to the increased bulk, the radial flap is the preferred choice. A voluminous latissimus is an indication for very large defects of the tongue in our experience. Pedicled flaps are preferred when comorbidities impose concerns of delayed healing and increased complications in the case of free flap reconstruction or when the general state dictates shorter surgery time.
Fibula flap harvesting using a posterior approach: surgical technique and interest.

D.Evrard*(1), C.Halimi(2), J.Cristofari(2), A.Picard(2), B.Barry(2), S.Albert(2)

(1)Centre Hospitalier Intercommunal de Créteil, , France, (2)Hôpital Bichat, , France

Introduction: Fibula flap is the most used free flap in head and neck for bone reconstruction. It has many advantages: solidity, bony length (up to 25 cm), reliability and no long-term functional limitations. Gilbert’s surgical harvesting procedure, which is the most currently performed, was described in 1979. We report here a new surgical technique using both anterior and posterior approach.

Objectives: To describe this technique and evaluate the efficiency of performing posterior approach on a series of 10 consecutive patients with fibula free flap, by analyzing the feasibility, morbidity, reliability, harvesting time and functional donor site outcomes

Results: First steps of surgical procedure were similar than the classical anterior approach but muscles were released only from the bone length that was needed for the reconstruction. The level of osteotomies was realized in order to harvest the same bone length than the mandibular bone defect. Then, peroneal vessels were dissected by a posterior approach facing the non-dissected bone, after releasing the soleus muscle. Ten patients were analyzed. Time of flap harvesting was shorter, leg functional recovery was quicker and postoperative pain of the donor site seemed to be lesser with this surgical procedure. No flap necrosis was observed.

Conclusion: This surgical procedure is more respectful of the leg anatomy. The muscle dissection is less extended, as well as removal length of the fibular bone that is adapted to the reconstruction. Leg functional outcomes are minimized and resumption of walk is accelerated.
Free flap and Pectoralis myocutaneous flap in head and neck reconstruction, how to choose?

O. Choussy*(1), H. Hardy(1), B. Guichard(1)

(1) Clinique Mathilde, Rouen, France

Introduction: Reconstruction following head and neck cancer surgery is a daily challenge. Microvascular free flap reconstructions are now considered as the gold standard, however, they need considerable resources and training and patients must be in relative good health status. Pectoralis myocutaneous (PMC) flap is an alternative due to its reliable vascularity, easy surgical learning curve and its operating time. The purpose of this study was to highlight the important points to choose between these two types of reconstruction.

Materiel and method: This is a prospective study in a single center during 2016 (1/1 to 31/12). The same surgical team perform all the procedures (3 senior). 30 major head and neck reconstructions were performed, 18 free flap, 8 pectoralis myocutaneous flap, 2 dorsal myocutaneous flap and 1 facial artery muscular mucosal flap (FAMM). This study compares 2 groups, the free flap group (FF) and the pectoralis myocutaneous flap (PMC) group.

Results: Patients in the PMC group were older and have a statistically a heavier medical history (malnutrition, arterial disease) and more extensive tumor. There is no significant difference in morbidity and mortality.

Conclusion: FF and PMC are complementary, PMC can be used in more older patients or in patients with heavy medical history.
Functional results of oromandibular reconstruction with osseous free flap. A GETTEC multicenter study.

S. Atallah*(1), B. Baujat*(2), A. Bozec(3), J. Longis(4), P. Ransy(5), J. Davrou(6), M. Humbert(7), E. Brenet(8), P. Schultz(9), A. Damecourt, A. Damecourt


Introduction

Modern surgical treatment for oral cancer must optimize function rehabilitation: swallowing, phonation, and esthetics.

The aim of this study is to assess the functional results of oromandibular reconstruction by osseous free flap.

Materials and methods

This transversal multicenter study included 134 patients operated more than 6 months ago, between 1998 and 2016.

Patients characteristics were collected using a standardized questionnaire (Age, etiology, radiotherapy, extension of tissue and bone resection, mouth opening, pain, oral / enteral feeding, type of alimentation, weight loss, level of elocution and aesthetics, DHI score). The questions were asked by an independent investigator.

Criteria of judgement chosen for analyses were: weight loss, mouth opening, gastrostomy dependence, type of oral feeding, DHI score.

The impact of the patient’s characteristics on these functional criteria was investigated using Chi2, exact Fisher and T tests.

Results

90 patients / 134 had a primary cancer (among which 82 % T4). Fibula flap was mainly used (80 %). 124 reconstructions were primary successes. Early complications (partial necrosis, infection) were observed in 31% of cases. 71% patients had had pre- or post-operative radiotherapy, 38% had an extensive bone resection (≥ 3 sites). 88% had less than a 50% lingual resection. 97% patients could recover sufficient oral feeding. 17% patients lost more than 10% of their weight. Only 9% had a dental rehabilitation. 49% patients consider having a good esthetic appearance, and 49% patients consider having a good quality of elocution.

We found that radiotherapy and extensive lingual resection have an impact on the quality of oral income ($p=0.04$; $p=0.03$ respectively). Radiotherapy and oropharynx extension provided more risk to be dependent on gastrostomy ($p=0.04$; $p=0.02$ respectively). The importance of bony resection did not impact significantly functional outcomes.
Discussion

Oromandibular reconstruction by osseous free flap provides good functional and aesthetic results. However, we observed a low rate of dental rehabilitation and a high rate of complications, suggesting there is still a room for improvement.
Influence of external radiotherapy on the properties of PMMA versus silicone induced membranes in a bilateral segmental bone defect in rats.

T.Sagardoy*(1), C.Ehret(2), J.Amédée(2), E.De mones(1)

(1)Otolaryngology, skull base surgery and pediatric ENT department, Bordeaux university hospital, Bordeaux, France, (2)INSERM U1026, Tissue Bioengineering, University of Bordeaux, F-33000 Bordeaux, France, France

Introduction: Reconstruction of bone defects is a challenging task, especially when adjuvant radiotherapy has been given after a surgical procedure. The concept of induced membranes has proved its efficacy to bridge gap non-union using bone cement as spacer material and then autologous bone graft. However, radiotherapy may affect the properties of the induced membranes and their functionality. The aim of this study was to compare histological and biochemical properties of induced membranes (IM) around polymethyl methacrylate (PMMA) or silicone spacers in irradiated bone sites.

Materials and Methods: The analyses were performed on PMMA or silicone-IM with and without external radiotherapy in a 6-mm bilateral femoral defect in 32 rats. Histomorphometric measurements were used to evaluate the thickness and vessel content in both groups. BMP2 and VEGF contents in lysates of the crushed membranes were measured by enzyme immunoassay (EIA). Finally, ALP activity was analyzed in human bone marrow stromal cell cultures in contact with the same lysates.

Results: Irradiation did not change the histological structure of a cellular internal layer and a fibrous outer layer. The nature of the spacer only influenced IM thickness: PMMA-IM with external radiotherapy were significantly thicker. External radiotherapy decreased the vascular density of IM but was less effective on VEGF/BMP2 production. In vitro, IM could have an osteoinductive potential on human bone marrow stem cells.

Conclusion: IM maintain their histological and biochemical properties for two-step bone reconstruction even after external radiotherapy, regardless of the PMMA or silicone spacer.
LATE RESULTS OF PLATYSMA MYOCUTANEOUS FLAPS FOR RECOVERY IN PATIENTS WITH HEAD AND NECK CANCER

B.Matos*(1), L.Kowalski(2), G.Matos(1)

(1)hospital Santa Marcelina, São Paulo, Brazil, (2)ACCAMARGO CANCER CENTER, São Paulo, Brazil

Introduction

Oncological resections of the oral cavity, oropharynx and hypopharynx, which aim at the complete removal of the tumor with safety margins, can determine major three-dimensional anatomical defects that affect noble functions, such as swallowing, speech and breathing. Among the alternatives of reconstruction, the platysma myocutaneous flap (PMF) can be employed given its versatility and ease of technical execution with the advantage of being less thick than the other myocutaneous flaps, making it better for adaptation in a series of clinical conditions.

Objective

To study the results of PMF used in reconstructions after oncological resections of tumors of oral cavity, oropharynx and hypopharynx from a functional point of view as well it’s possible complications.

Casuistry and Method

Retrospective study, approved by CEP-FMUSP, presented by the Department of Radiology and Oncology. Clinical Staging, TNM, Classification of malignant tumors, UICC, 2012

The author performed surgery of 180 cases of malignant tumors of the oral cavity, oropharynx and hypopharynx from January 1990 to December 2015, reconstruction was done with PMF.

The technique used for reconstruction was PMF with superior pedicle.

The functional evaluation of PMF was performed for breathing, swallowing, aspiration and communication.

Results

Regarding the diet and swallowing aspects: the diet was normal in 82.3% of the patients, 16.0% had pasty and liquid diet and 0.80% only liquid. As for speech type, 79.0% had a laryngeal voice, 21.0% had another type; The aspiration of the diet in the postoperative occurred in 60.5% and did not have aspiration 39.5% of the cases. Tracheostomy was definitive in 21.0% and provisional in 79.0% of the patients.

Factors related to the capacity of intake of normal, pasty and liquid diet in the postoperative period were evaluated the age, sex, anatomic region affected by the tumor, TNM, Temporary and definitive tracheostomy. Tumors of the tongue base when compared to tumors of other regions had aspiration in 40.3% (p = 0.001) in the first 15 to 30 days. Hypopharyngeal tumors had intermediate aspiration and those of the mouth had the lowest aspiration.

Conclusion

PMF was a safe technique because the complications were low and the postoperative mortality due to the surgical technique was Zero. Regarding the functional evaluation, 83.2% were fed a normal diet, 16.0% with a pasty diet and 0.8% a liquid diet.
Purpose of the study:
The mandibular reconstruction by plates and free fibula flap is a common procedure in Head and Neck. Surgery time and precision can be improved by 3D printing. It is now possible, at a lower cost, to plan and carry out these surgeries at best by printing jaw models and cutting guides.

Materials and methods:
Thanks to collaboration between our surgery center, a research organisation and an engineering school, the authors have developed a combination of software for making impressions of patient mandibles from a preoperative scanner. We propose to describe the computer steps (free software) that have resulted in the development of PLA polymer jaw models and the benefits provided.

The authors worked currently with a biomedical company to print, at lower cost, PLA cutting guides for reconstructions by fibula free flap.

Results:
For each patient undergoing a mandibular resection, a 3D impression of the jaw model was performed preoperatively to plan the procedure and to conform and sterilize the plates for 7 patients. The material cost for a model was 1 euro, the printing time of 3:30, the processing time of the images of 1:30. Four cutting guides for reconstruction using fibula free flap were printed with the same material cost. This technology increased operative efficiency while significantly decreasing operative times (around 1:30).

Conclusion:
Modern computer tools and the democratization of the price of 3D printers will allow each center to better plan complex reconstruction surgeries by printing at lower cost the patient’s facial structures. The authors are working on the commercialization of low cost 3D printed fibula cutting guides allowing each center to access this technology whose current prices (2500 to 6000 euros) are prohibitive for many.
Management of the oral defect after maxillectomy for malignant disease

A.Vlantis*(1), E.Wong(2), J.Chan(3), T.Chiu(4), K.Mo(4)

(1)The Chinese University of Hong Kong, Shatin, Hong Kong, (2)Department of Otorhinolaryngology, Head and Neck Surgery. The Chinese University of Hong Kong, Shatin, Hong Kong, (3)Department of Otorhinolaryngology, Head and Neck Surgery. The Chinese University of Hong Kong., Shatin, Hong Kong, (4)Division of Plastic, Aesthetic and Reconstructive Surgery, Department of Surgery. The Chinese University of Hong Kong., Shatin, Hong Kong

1. Purpose of the study

A review the management of the oral defect after maxillectomy was undertaken to improve patient care and outcome as the reconstructive armamentarium evolves.

2. Materials and methods used

The records of patients who underwent a maxillectomy at a single institution between January 2005 and December 2106 were reviewed. Demographic data as well as the method of managing the oral defect was retrieved.

3. Results

Twenty seven males and 17 females with a mean age of 63.8 years (range 23 – 88 years) underwent either a subtotal (sparing the orbit floor) (n=36), total (n=4) or partial (n=1) maxillectomy. A bilateral maxillectomy and an orbital exenteration was necessary in one patient each.

Access was via a Weber-Ferguson incision with (n=15) or without (n=18) a lower eyelid incision, a lip split (n=3), the transoral route (n=2), and mandibulectomy incision (n=1).

Frozen section was negative in 37 patients and positive in four.

Final histology included squamous cell carcinoma (n=27), sarcoma (n=4), mucoepidermoid carcinoma (n=4), ameloblastoma (n=2), and one case each of adenoid cystic carcinoma, adenocarcinoma, melanoma, myoepithelial carcinoma, sinonasal carcinoma, verrucous carcinoma and a pyogenic granuloma.

The lesion was right sided in 23 patients, left sided in 19 and bilateral in two.

The resulting defect was managed with a free anterolateral thigh flap in 23 patients, a split skin graft and obturator in 13, a radial forearm free flap in three, the buccal fat pad in two, a fibula free flap in two and a double free flap, both a fibula and anterolateral thigh flap, in one patient.

At the time of analysis (January 2017) 20 patients were alive.

4. Conclusion

Encouraging is the high rate of negative margins on frozen section which reflects its utility in reflecting the surgical plan and procedure, extensively aided by preoperative imaging. Management of the oral defect continues to evolve away from split skin and an obturator that was one of the main forms of management early in the series, to the almost universal use of the reliable anterolateral thigh free flap, which restores it’s anatomy, physiology and function far better than can be achieved with artificial material and which has set our standard for current patients.
Mandible ameloblastoma - Case report and surgical management

A.Crisóstomo carvalho*(1), S.Sousa(2), R.Nunes(2), R.Amaral(2), C.Marques(2), J.Marques dos santos(2)

(1)Centro Hospitalar Tondela - Viseu, , Portugal, (2)Centro Hospitalar Tondela-Viseu, , Portugal

Introduction: An ameloblastoma of the jaws is a neoplasm of odontogenic epithelial origin. It has an annual incidence rate of approximately 1.5 per million population, being responsible for 1% of all the oral and maxilomandibular cysts and tumors. The average age at the time of the diagnosis is 42.3 years in Europe. Although almost all of the ameloblastomas are histologically benign, they may be locally aggressive and present high rates of recurrence or possible malignant development when inadequately treated.

Material and methods: Case report and literature review on ameloblastomas, with surgical management step by step description and illustrations.

Clinical case: A 72 year old woman presented with a slowly growing swelling on the left side of the face with approximately 6 months of evolution. The mass was painless and did not limit the patient’s mouth opening or deglutition, although she revealed a slight difficulty in chewing. On physical examination there was a firm swelling over the left mandibular region causing left facial asymmetry. The mucosa overlying the mass showed no ulceration. There was no enlarged lymph node over the neck region. Contrast enhanced CT scan of the face and neck shows signs suggestive of a benign, non infiltrative but locally highly destructive lesion or a low grade malignant mass with differential diagnosis of multicystic ameloblastoma, aneurysmal bone cyst and giant cell granuloma, the latter two being highly unlikely. The biopsy results revealed an odontogenic epithelial lesion suggestive of ameloblastoma. The patient was submitted to a segmental mandibulectomy and immediate vascularized fibula osteoseptocutaneous flap reconstruction. She was then admitted to the ICU for 48 hours, under close monitoring, followed by hospitalization at the ENT Wing for 10 days. Both the functional and esthetic results were very satisfying for the patient.

Conclusion: Segmental mandibulectomy and immediate vascularized fibula osteoseptocutaneous flap reconstruction is the surgical treatment of choice for mandibular ameloblastomas. The challenges in the management of these tumors are to attain complete excision of the mass and to reconstruct the bony defect, in order to achieve good cosmetic and functional results.
Microsurgical reconstruction after total glossectomy

A.Polyakov*(1), P.Nikiforovich*(2), M.Ratushnyy(1), O.Matorin(3), M.Filushin(3), I.Rebrikova(3), A.Mordovskiy(3), I.Kutsenko(3)

(1)P. Herzen Moscow Oncology Research Institute, Moscow, Russia, (2)P. Hertzen Moscow Oncology Research Institute, Moscow, Russia, (3)P. Herzen Moscow Oncology Research Institute, Moscow, Russia

Purpose of the study: To invent a new method for the reconstruction of tongue after total glossectomy.

Materials and Methods: A patient X, 62 years old with tongue cancer stage IVA pT3N2bM0. Endophytic type of tumor. CT scan showed lesion size 17x38x37 mm which spreaded over the tongue middle line. The Department of Microsurgery performed glossectomy, limph nod dissection of the neck ipsilateral I-V groups, contralateral Ia-Ib groups, with simultaneous reconstruction microsurgical with revascularized, reinnervated “chimeric” flap which included the serratus anterior muscle and the latissimus dorsi.

The flap is formed from part of the latissimus dorsi muscle and part serratus anterior muscle. Pedicle: thoraco-dorsal artery and vena. In the composition of the flap including thoraco-dorsal nerve.

Post-operative rehabilitation was provide in all patients. It includes classes with a speech therapist since first days, neo-tongue electrical myostimulation and use of anticholinesterase agents.

Results: After 3 weeks nasogastric tube was removed, the patient was transferred to food in a natural way liquid food. After 4th week self swallowing without choking, nutrition with soft and liquid food were restored. After 2 months speech was restored. Long-term complications were not detected after 12 months of observation.

Conclusions: A new way of surgical management of locally advanced tongue tumors with simultaneous closure of post-operative defect, can provide resection with clear margins, restoring of the mouth floor diaphragm and forming right size neo-tongue. It provides better functional, cosmetic results and significantly reduce the hospitalisation time. This method can be recommended for the reconstruction in patients with complex oral cavity defects (tongue and mouth).
Microsurgical reconstruction in patients with tongue cancer

A.Polyakov*(1), M.Ratushnyy(1), O.Matorin(1), M.Filushin(1), I.Rebrikova(1), A.Mordovskiy(1), P.Nikiforovich(2), I.Kutsenko(1)

(1)P.Herzen Moscow Oncology Research Institute, Moscow, Russia, (2)P. Hertzen Moscow Oncology Research Institute, Moscow, Russia

Purpose of the study: to improve outcomes of surgical management in patients with different forms of tongue cancer and find the better algorithm of flap matching in this group of patients.

Materials and methods: Prospective study included 20 patients, who underwent tongue reconstruction - after total and subtotal glossectomy. All patients had primary tongue cancer. 9 patients had T3 tumor stage, 11 patients had T2. Selection of the flap was based on the algorithm, which was developed in our department. Microsurgical reconstruction of the tongue followed by resection step was performed. Colon-omental flap (4), radial forearm flap (8), thoracodorsal flap (4), TRAM - flap (2), chimeric flap with the inclusion of the serratus anterior muscle and muscle latissimus dorsi (2) were used. Flaps revascularization was performed between branches of the external carotid artery and internal jugular vein. Reinnervation of the flap between the graft nerve and the lingual nerve was performed in 4 cases by performing micro-neural anastomoses, simultaneously with vascular graft revascularization.

Results: postoperatively one patient had flap necrosis. Oral nutrition was restored in 100% patients. All patients had normal restored speech function.

Conclusion: Matching of the flap provides better outcomes in patients with advanced stage (T3, T4) of oral cancer, who underwent microsurgical tongue reconstruction.
Multicenter prospective micro-costing study evaluating mandibular free-flap reconstruction

O. Dassonville*(1)

(1) IUFC - Centre Antoine Lacassagne de Nice, Nice, French Guiana

Free-flap mandibular reconstruction is a highly specialized procedure associated with severe complications necessitating re-interventions and re-hospitalizations. This surgery is expensive in terms of health workers' time, equipment, medical devices and drugs. Our main objective was to assess the direct hospital cost generated by osseocutaneous free-flap surgery in a multicentric prospective microcosting study.

Methods: Direct medical costs evaluated from a hospital perspective were assessed using a micro-costing method from the first consultation with the surgeon until the patient returns home, thus confirming the success or failure of the free-flap procedure. For each patient, the following items were included in the costing: consultations by specialist physicians, bone and vascular imaging, general information about the main intervention and subsequent re-interventions for immediate and late postoperative complications, operative-room occupation time, type of free-flap, personnel involved cumulated time, expensive surgical devices, expensive consumables, pre- and post-surgical hospitalization (standard follow-up or more complex follow-up including re-intervention for complications) and type of units and duration of stay.

Results: From February 2009 to September 2011, 108 patients were prospectively included and treated in the 11 French participating centers. After initial free-flap intervention, patients spent an average 7.0 days in ICU and 18.0 days in conventional units. After re-intervention for immediate or late complications, patients were re-hospitalized for an average 18.0 days in ICU and 22.0 days in conventional units. Free-flap intervention failed in 14/108 patients (13.0%). The mean total cost for free-flap intervention was 34009€ (5151-119604€), the most expensive item being the duration of hospital bed occupation, representing 30 to 90% of the total cost. In the event of complications, the mean cost increased by 77.3%, due primarily to hospitalization in ICU and the conventional unit.

Conclusions: This surgery is effective and provides good results but remains highly complex and costly.
Multicentric infantile myofibromatosis of the mandible: A unique case of complex mandibular reconstruction

A.Maby*(1), B.Guay(2), F.Thuot(2)

(1)Université Laval,  , Canada, (2)Hôpital Hotel Dieu de Québec, Québec, Canada

Object: Infantile myofibromatosis (IM) is the most common benign fibrous tumor in children. We describe a unique case of multicentric infantile myofibromatosis with destruction of the mandible.

Method: A 6-month-old boy presented with a mandibular swelling on the right side and a synchronous lesion of the left thorax. Biopsies of the lesions demonstrated myofibroblast proliferation and the diagnostic of multicentric infantile myofibromatosis was made.

We describe the clinical presentation and management of this patient, including, relevant imaging, histopathological evaluation as well as medical and surgical treatment. A review of relevant literature was made.

Results : IM is mainly observed among newborns and during the first two years of life. IM is a rare pathology, although it is believed to be the most common fibrous tumor of infancy.

Three different clinical forms of IM have been defined: solitary, multicentric and generalised IM.

The diagnosis of MI is mainly histopathological. The treatment of the patient required succession of chemotherapy, a subtotal transoral resection and an hemi-mandibulectomy. The mandibular reconstruction was done first at the age of 18 month-old with titanium plate and screws and the oral reconstruction was made with a submental pedicled flap. The second part of the reconstruction was completed at the age of 42 month-old with a vascularized osteocutaneous right fibula flap. To our knowledge, this is the first case of complex mandibular reconstruction in a patient with IM.

Conclusion:

Although IM is the most common fibrous tumors in children, it remains unknown. In the absence of guidelines, the management should be individualized for each patient and reassessed regularly. As segmental mandibular defect is very rare in children, surgical reconstruction is a major challenge.
Nanocomposite implants for maxillofacial surgery

J. Markowski(1), K. Nowicka(2), E. Menaszek(3), J. Pilch(4), M. Błażewicz(2)

(1) Silesian Medical University, Laryngology Department, Katowice, Poland, Katowice, Poland, (2) AGH Technical University, Faculty of Biomaterials, Kraków, Poland, (3) Jagiellonian University, Faculty of Cytobiology and Histochemistry, Kraków, Poland, (4) Silesian Medical University, Laryngology Department, Katowice, Poland

Introduction.

In line with the development of nanotechnologies for materials, a significant development of research took place, regarding the possibilities of using them for development of a new generation of materials used as substitutes of bone tissue. Polymer nanocomposites are materials having a high potential for medical applications.

Purpose of the study.

The aim of the study was to provide the characteristics of the properties of nanocomposite materials meant for the treatment of bone tissue defects. The paper describes the properties of polymer nanocomposite material prepared on the polylactide basis, and modified with carbon nanotubes. Nanocomposite materials were produced in the form of 2D and 3D membranes (sponges), and their basic material and biological properties have been examined.

Materials and Methods.

Nanocomposite sponges have been produced by porogen casting/leaching, while the foils in the form of 2D membranes have been produced by casting on Petri dishes. The materials were made from polylactide, modified in the volume by multi-walled carbon nanotubes. Carbon nanotubes used in the study were subjected to surface modification processes, with biocompliance proven in tests of geno- and cytotoxicity. Afterwards, the surfaces of both types of materials were covered with hydroxyapatite nanoparticles in the process of electrophoretic deposition. The materials prepared that way were subjected to material and biological tests. Biological tests were performed for cytotoxicity and proliferation of cells. The cells were put in contact with materials in the form of sponges and nanocomposite foils, coated with hydroxyapatite nanoparticles.

Results.

As was demonstrated by the material studies, porous nanocomposite sponges modified on the surface with calcium nanophosphate demonstrated mechanical properties and resistivity similar to the parameters of spongy bone. Microscopic studies demonstrated that the porosity of sponges was in the range that was advantageous from the perspective of medical applications, and varied between 78 – 85 %, whereas average pore size was in the range of 124 -135 micrometers. The results of SBF incubation tests indicate that a few days of SBF incubation results in the appearance of the layer of biomimetic apatite on the sponge surface.

Conclusion

Nanocomposite materials, modified in their volume by carbon nanotubes and on the surface with nanohydroxyapatite are materials with biomimetic properties, meeting the basic requirements laid down for materials meant for materials meant for treatment of osseous tissue.

The study has been financed in the framework of project finance by the National Science Centre, (Project No.: UMO-2014/13/B/ST8/01195).
Reconstruction of voice tube after Total pharyngolaryngectomy

Y.Leu*(1)

(1) MacKay Memorial Hospital, Taipei, China, Republic of (Taiwan)

Background: Total pharyngolaryngectomy is potentially ablative surgery, resulting in compromise of some most basic functions of life, including speech and swallowing. Tracheoesophageal puncture is the gold standard for voice restoration. But it still has prosthesis-related problems.

Objectives/Hypothesis: We designed a uniquely customized radial forearm free flap (RFFF) and free ileocolic flap (FICF), which also incorporated a region for phonation tube (PT) creation, for the dual purpose of circumferential laryngopharyngeal defect reconstruction and voice production.

Methods: patients with late-stage hypopharyngeal cancer (HPC) or laryngeal cancer (LC) who received one-stage reconstruction with the fabricated RFFF-accompanying PT after totalpharyngolaryngectomy. We recorded the phonation outcome of phonation efficacy (PE) and maximal phonation time (MPT) postoperatively within 1 month and at least 1 year after surgery.

Results: There was no significant variance in the PE (79.72%, SD¼21.93% vs. 62.50%, SD¼39.60%, respectively; p ¼ 0.115) and MPT (2.58 seconds, SD¼1.80 vs. 2.97seconds, SD¼3.96, respectively; p ¼ 0.878) between the first and last follow-up points, even when the patients were grouped by radiotherapy status after surgery or by disease group.

Conclusions: The both phonation tube outcome in our experience was satisfactory and it tolerated postoperative radiotherapy during at least the 12-month follow-up period. Ileocolic free flap reconstruction improves the perceived levels of swallowing and speech without delaying the subsequent course of CCRT. Although additional clinical experience and investigation are necessary, we believe that this method provides a better quality of life for patients with advanced-stage cancer of the hypopharnx and larynx.
Reconstructive microsurgery in head and neck: retrospective analysis of 30 free flaps


(1) Pontificia Universidade Católica de São Paulo, Sorocaba, Brazil, (2) Pontifícia Universidade Católica de Campinas, Campinas, Brazil, (3) Faculdade São Leopoldo Mandic, Campinas, Brazil, (4) Pontificia Universidade Católica de Campinas, Campinas, Brazil

Background: Reconstructive surgery of the head and neck is challenging for plastic surgeons and requires extensive technical arsenal, in which microsurgery plays an essential role.

Objective: To assess the reconstructive microsurgery experience in PUC-Campinas head and neck department in the last two years.

Methods: Patients who had undergone microsurgery reconstruction after head and neck surgery from June of 2014 to October of 2016, had their charts reviewed to assess flap used, vascular pedicle length, receptor vessels, microvascular anastomosis, operating time, hospitalization time, complications and success rate.

Results: It was performed 30 microsurgical reconstructions with three kinds of flap: anterolateral thigh (n=15), radial forearm (n=8) and fibula (n=7). Receptor vessel: facial artery (70%) and facial vein (50%), in which 92,4% of the microvascular anastomosis were end-to-end. The mean operating time was 10,1 hours. The mean hospitalization time was 10,7 days. There was two flap loss due to arterial thrombosis, leading to a 93,3% success rate.

Conclusions: The microsurgical reconstructions performed were efficient in repairing complex defect, restoring shape and function of the injured tissues. There were complications in less than half of the cases, but with high morbidity. Success rate was similar to great reconstructive microsurgery centers. The learning curve is long, but it tends to improves with team training and experience acquisition over time.
Single surgeon experience with the submental island flap for head and neck reconstruction

J.Paydarfar*(1), M.Polacco(2)

(1)Dartmouth Hitchcock Medical Center, Dartmouth Geisel School of Medicine, Lebanon, United States, (2)Dartmouth Hitchcock Medical Center, Lebanon, United States

Objectives:

1) Report on a single surgeon experience with use of the submental island flap for reconstruction of a variety of defects of the head and neck

2) Analyze the risk of transfer of metastatic nodal tissue from level 1 with harvest and inset of the flap

Study Design: Retrospective review

Setting: Tertiary rural academic medical center

Patients: Patients undergoing submental island flap reconstruction from January 2007 through January 2016

Main Outcome Measures: Variations on types of submental island flaps harvested, types of defects reconstructed, average size of flap, flap related complications, patterns of recurrence in patients undergoing reconstruction after cancer resection.

Results: 52 patients fit inclusion criteria. Average flap size was 39 cm² (18 – 90 cm²). Sites of reconstruction: tongue/FOM (29/52), buccal mucosa (4/52), oropharynx (7/52), maxilla (6/52), face (2/52), orbit (1/52), lateral skull base (2/52), lower lip (1/52). Types of flaps: Pedicled utilizing anterograde flow (43/52), pedicled with retrograde flow (7/52), myofascial (3/52), osteocutaneous (2/52), free (1/52). Complications: complete loss (1/52), partial necrosis requiring operative debridement (3/52), partial necrosis requiring bedside debridement (4/52). One flap was aborted due to tumor noted along the pedicle. There were no recurrences within the flap to suggest transfer of metastatic nodal tissue.

Conclusion: The submental island flap is highly versatile and reliable flap which can be safely utilized in the reconstruction of a variety of defects in the head and neck. The risk of transfer of metastatic nodal tissue is minimal with proper patient selection.
Some Aspects of Applying Peroneal Autotransplants for Reconstructing Mid-Face Area

O.Moskaleva*(1)

(1)Central Research Institute of Dental and Maxillofacial Surgery, Moscow, Russia

Aim: to improve functional and aesthetic results of treating patients having combined defects in midface area.

Materials and methods: The authors analysed practice of treating 23 patients having combined defects in midface area. Special features of fibula flap application were: computer three-dimensional analysis of defects, studying structure of sensing osseous tissues and formation of counterforts for sound fixation. Method used: inverse planning of reconstructive operation. This comprises virtual modeling of final orthopedic result. Positioning of the bone part of the auto-transplant corresponds to the axis of the implants’ position. The transplants’ osteotomy was performed at an individually calculated angle taking into account the opposite side’s symmetrisation. Cutting and assembling guides were made for that purpose.

Results: in 1 case the necrosis of the auto-transplant was observed while in 22 other cases there was complete autotransplant acceptance. Computer simulation of peroneal auto-transplants has made it possible to successfully eliminate various mid-face area defects: upper jaw, cheek bone, the lateral border of eyehole and the infra-orbital edge.

Simulating the terminal parts of a peroneal bone based on the shape of the sensing fragment enabled the reliable fixing of auto-transplants. In 70 % of cases, more reliable fixation of extended flaps required the autotransplantation of some fragments of individually simulated parietal bone into the lost counterforts area.

Conclusions: Applying a peroneal bone and a subsequent auto-transplantation of parietal bone into the counterforts area make it possible to obtain guaranteed full-scale dento-alveolar rehabilitation. Applying contour correction and lipofilling provides good aesthetic results.
Supraclavicular Flap - A Review of Complications in the First 25 Cases

S. Jonnalagadda*(1)

(1) American Oncology Institute/Citizens Hospital, Hyderabad, India

Introduction: Though free flaps have been the gold standard in the reconstruction of many head and neck defects, local/regional flaps play an important role in certain patient subsets. Supraclavicular arterial flap (SCAF) based on the supraclavicular branch of the transverse cervical artery has come into limelight recently and is being increasingly used as a substitute for radial forearm free flap in appropriate patients. In this study we review the complications and outcomes of this flap in the initial learning curve of single surgeon in the first 25 cases.

Aims: To study the complications and outcomes of SCAF in the initial learning curve.

Materials and Methods: Retrospective case study of the first 25 cases of SCAF done by the author in from June 2014 till date.

Results: In the analysis of the complication in the first 25 consecutive cases of head & neck reconstruction using SCAF reveals major complications, that included complete flap necrosis in 4/25 (16%) cases and partial necrosis in 3/21 (14%) of the remaining patients. Minor complications included keloid/hypertrophic scar in 8/25 (32%), hematoma in 1/25 (4%), seroma in 1/25 (4%). Painful shoulder was present in 5/25 at 3 months post-op though no patients experienced shoulder movement restriction.

Conclusion: SCAF is good alternative to radial forearm free flap in select subsets of patients, but the possibility of complete flap failure and scar formation should be informed to the patient preoperatively. No shoulder movement restriction is seen, but painful shoulder would need rehabilitation.
Supraclavicular Flap Reconstruction for Major Head and Neck Defects

K. Emerick*(1), D. Deschler(1)

(1) Massachusetts Eye and Ear Infirmary / Harvard Medical School, Boston, United States

This course will provide a comprehensive introduction to the supraclavicular artery island flap. The flap is a fasciocutaneous pedicled flap that has tremendous versatility for head and neck reconstruction. While free flap reconstruction remains the primary mode of reconstruction for most surgeons, the introduction of the supraclavicular and submental flaps has expanded the options for soft tissue regional flaps. The supraclavicular flap has a long history but was recently reintroduced to the literature. This course will review the key historical aspects in the evolution of the flap. The historical understanding of this flap provides important insight into understanding the anatomy of this flap and the vascular supply which leads to successful skin island design and reliable flap viability.

This course will describe our own experience with acquiring the knowledge and skill set to ultimately use this flap and do so in a reliable fashion. We will demonstrate critical technique instruction and highlight the details of efficient, successful and reliable flap elevation technique. Success rates for this flap in experienced hands are routinely as good as free flaps and other regional flaps. This course will demonstrate the tremendous utility of this flap. In our experience, it has been useful and successful for reconstructing complex defects in the head and neck including skin, pharynx, parotid, temporal bone and oral cavity. This course will present important technical pearls related to these different site reconstructions such as adequate flap length and rotation. Lastly, will also discuss key factors such as donor site morbidity and cost utility. These elements are important to consider in today’s medical and economic climate. Lastly, this flap can have utility across the globe as it does not require the time, additional operative instrumentation, and post op care associated with free flaps.
Surgical Morbidity and Mortality in Patients after Microvascular Reconstruction for Head and Neck Cancer

Y.Joo*(1)

(1)The Catholic University of Korea, , Korea, South

Objectives: Surgery has curative potential in a proportion of patients with head and neck squamous cell cancer (HNSCC), but is associated with considerable perioperative risks.

Design: A retrospective review of case notes was performed.

Setting: Patients treated at a single institute.

Participants: The present study included 259 patients with HNSCC treated with radical surgery and microvascular reconstruction between 1993 and 2014.

Main outcome measures: We allocated the patients to three groups using a perioperative comorbidity score based on risk factors: group A (4 or 5 risk factors, n = 4), group B (2 or 3 risk factors, n = 61), and group C (0 or 1 risk factor, n = 194).

Results: Surgical mortality in this cohort was 1.9% (5 of 259 patients). The perioperative comorbidity score was associated with surgical mortality (p<0.001). Pharyngocutaneous fistula (p=0.001) and flap compromise (p=0.023) were more frequent as perioperative comorbidity score increased. Perioperative comorbidity score (p<0.001), advanced age (p=0.007), advanced pathologic T stage (p=0.028), advanced pathologic N stage (p=0.005), preoperative (chemo)radiotherapy (p<0.001), history of cardiovascular disease (p=0.015) and pulmonary disease (p=0.007), and diabetes (p<0.001) had significant adverse effects on 5-year disease-specific survival (DSS) in a univariate analysis. Multivariate analysis showed that perioperative comorbidity score, pathologic N stage (p=0.001), and preoperative (chemo)radiotherapy (p=0.019) were significantly correlated with 5-year DSS. The hazard ratio (HR) was 2.15 (95% confidence interval [CI], 1.34—3.46; p=0.001) for group B and 13.28 (95% CI, 4.01—43.97; p<0.001) for group A compared with group C.

Conclusion: Patients with a high perioperative comorbidity score have an increased risk of surgical mortality and morbidity after microvascular reconstruction for HNSCC.
The free scapular flap: a retrospective analysis of 130 reconstructions

M. Humbert*(1)

(1) CHU Caen, France

Introduction: Les moyens de reconstructions des patients présentant un stade avancé de cancer cervico-facial avec atteinte mandibulaire sont multiples. Ils doivent concilier des impératifs de couverture de perte de substance, les impératifs fonctionnels, cosmétiques, biomécaniques et de qualité de vie.

Nous nous proposons d’étudier la reconstruction des pertes de substance mandibulaire secondaire aux résections oncologiques ou pour ostéroradionécroses par un lambeau libre de scapulaire.

Méthode: Notre étude est rétrospective, porte sur une cohorte de 130 patients et s’étendant sur 20 ans, réalisée par une seule équipe de chirurgiens.

L’étude de ces dossiers nous a permis de relever le type de lésion, les caractéristiques des patients, la résection réalisée, les modalités de reconstruction et les caractéristiques des lambeaux prélevés (taille, nombre et qualité des palettes). Les complications précoces et à distance du site receveur et donneur ont été détaillées, ainsi que les séquelles fonctionnelles.

Résultats: Les résultats préliminaires montrent : un taux de viabilité du lambeau de 94,63% (5 nécroses complètes sur 93 volets). Les résultats ont été jugés bons, normal ou proche de la fonction normale pour l’alimentation et la déglutition dans la majorité des patients (83% reprenaient une alimentation per os à 6 mois et 91% à 18 mois). En ce qui concerne l’aspect esthétique les résultats en auto-évaluation (2,44 de moyenne) et en évaluation par l’examineur (2,38 de moyenne) sont très satisfaisants (sur une cotation de 1: mauvais à 3: bon), de même pour l’intelligibilité de la parole.

Une revue de la bibliographie ainsi que les autres utilisations de ce lambeau seront détaillées.

Conclusion: Avec l’expérience, la technique de reconstruction par lambeau libre de scapulaire, est excessivement intéressante. Du fait de sa diversité de tissus disponibles elle nous permet d’effectuer des reconstructions complexes et/ou étendues, avec peu de séquelles fonctionnelles.
The management of the radial transplant donor site with split thickness skin or full skin - results of a prospective randomized study

T. Hoffmann*(1)

(1) Dept. of Otorhinolaryngology, Ulm, Germany

Introduction:

Typically, a primary closure of the radial forearm donor site is not possible and must be covered by full or split thickness skin transplants. Which technique is more suitable for this purpose is not yet completely evaluated. For the first time, both reconstruction procedures were compared in a prospective, randomized study.

Methods:

Prospective randomized evaluation of defect coverage using full skin to split thickness skin in terms of functional and aesthetic result and the wound healing process.

Results:

40 patients (7 women) were included in the study. In the postoperative phase there were no significant differences between the groups with regard to pain in the area of the full or split thickness skin removal site. Wound healing of the radial forearm donor site also showed no differences. Only the healing of the split thickness skin removal defect (secondary wound healing at the thigh) lasted significantly longer than that of the full skin removal site (groin with primary closure).

In the final examination after 6 months, the mobility in the wrist was significantly reduced after full skin transplantation, but the range of movement was still within the normal range for all patients. All patients were satisfied with both functional and aesthetic results.

Conclusions:

Both procedures for the closure of the radial forearm donor site lead to good functional as well as aesthetic results. The wound healing of the split thickness skin removal defect is significantly longer, whereas in patients with full-skin transplants, a functionally rarely limited reduction of mobility in the wrist is observed.
The use of 3-D printing in Head and Neck Ablation and Reconstruction

D. Annino*(1), L. Goguen(1)

(1) Brigham and Women’s Hospital, Harvard Medical School, Boston, United States

Purpose: 3-D printing and stereolithographic (SLA) models have been shown to be a valuable resource in preoperative planning and intra-operative reconstruction in cranio-maxillofacial surgery. They also offer the ability to pre-operatively plan the surgical resection of malignancies involving bony structures and plan the osseous reconstruction at the same time. Malignancies involving bony structures do not allow direct intra-operative visualization of the tumor to determine adequate margins. They also do not allow easy frozen section control. Pre-operative 3-D printing allows reproducible and accurate planning of both the bony resection with adequate an oncologic margin and reconstruction of the resulting defect. This process involves 1) analysis, 2) planning, 3) virtual surgery, 4) fabrication of 3-D cutting guides for both resection of the tumor and the bony flap used for reconstruction, 5) fabrication of a 3-D SLA model of the proposed reconstruction 6) the pre-bending of titanium reconstruction plate based on the proposed reconstruction and 6) verification of actual planned surgery. This provides powerful tools to help the surgeon, educate the patient and the train residents, fellows and students. The purpose of this presentation is to review different applications of 3-D planning in head and neck ablative and reconstructive surgery. Materials and methods: 3-D SLA technology was used both to facilitate pre-operative planning of bony margins for the resection of tumors as well as bony reconstruction of the resulting defects. The models produced were used for diagnosis and treatment planning of the resection and the reconstruction. They were used for education of the patient, residents and students. Surgical guides were fabricated. The final model was used to pre-bend reconstruction plates which were used intra-operatively.

Results: The use of 3-D printing in head and neck ablation and reconstruction helped to improved predictability of clinical outcomes. They reduced operative time. They allowed preoperative assessment of adequate bony margin resections, and the resulting defects. The models were also used for the design and fabrication of the bone flaps needed for reconstruction and pre-bending the reconstructive plates. Conclusion: The use of 3-D printing in head and neck ablation and reconstruction is a very effective technique that lends itself to both ablation of cancers involving bone and reconstruction of the resulting defects. It offers the further advantages of reduced operative and education of patients, their families, residents and students.
TOTAL LINGUAL RECONSTRUCTION BY REINNERVATED LATISSIMUS DORSI FREE FLAP

P. Bonnefont*(1)

(1) CHU Charles Nicolle - Hôpitaux de Rouen, Rouen, France

TOTAL LINGUAL RECONSTRUCTION BY REINNERVATED LATISSIMUS DORSI FREE FLAP

Pierre Bonnefont1, Nicolas Bon-Mardion2, Nadia Benmoussa3, Nathalie Badois4, Jean-Paul Marie5

(pierre.bonnefont@gmail.com)

1: interne ; 2: PH ; 3,4: CCA; 5: PUPH

Service d’ORL et Chirurgie cervico-faciale, CHU Rouen.

EA 3830 GRHV (Groupe de Recherche sur le Handicap Ventilatoire),
FHU Surface (Chirurgie régénérative de la Tête et du Cou)

Key words : Tongue cancer, free flap, latissimus dorsi, reinnervation, tongue reconstruction.

Purpose of the study:

Oral cancers requiring a total glossectomy involve the additional realisation of a total pharyngo-laryngectomy for functional purpose. The realisation of such an operation is mutilating and poses an ethical problem. Possible restoration of a propulsion function by motor reinnervation of a flap used for lingual reconstruction may allow not to systematically associate a functional laryngectomy with total glossectomy. We present a musculocutaneous flap for lingual reconstruction folded in an original pattern associated with motor reinnervation.

Materials and methods:

Dissections were carried out in the anatomy laboratory of the Faculty of Medicine of Rouen, to study several possibilities for reinnervated reconstructions in the context of a total glossectomy. These dissections allowed to study various configurations of gracilis, serratus anterior and latissimus dorsi muscle flaps, in order to promote propulsion in the mechanism of swallowing.

Results:

Following these anatomical studies, a first free latissimus dorsi flap associated with reinnervation of the thoraco-dorsal nerve by anastomosis to the hypoglossal nerve was performed in a 61-year-old woman. She was suffering from an evolutive squamous cell carcinoma of the tongue and had the underwent radio-chemotherapy of the oral cavity. She benefited from a salvage laryngectomy and a free flap reconstruction of reinnervated latissimus dorsi. An electrical stimulation program has been implemented to limit muscle wasting and promote the reinnervation process. Functional tests will be implemented to evaluate this reconstruction.
Conclusion:

Various dissection trials, data from the literature and the experience of surgeons of our department allowed our team to choose the latissimus dorsi flap. Muscle flaps lose up to 2/3 of their volume following surgery. It remains to be assessed whether reinnervation and post-operative electrical stimulation will limit this muscle wasting. The evaluation of motor function and its positive or negative effect on swallowing remain the main focus of this study.
VALIDITY OF MANDIBULAR RECONSTRUCTION WITH MICRO-SURGICAL FLAP IN ADVANCED RESULTS


(1)Pontificia Universidade Católica de São Paulo, Sorocaba, Brazil, (2)Pontificia Universidade Católica de Campinas, Campinas, Brazil, (3)PUCCAMP, Campinas, Brazil

Objectives: To discuss the microsurgical flap of the fibula in the reconstruction of large mandibular defects, using experience of 3 cases, between 2007 and 2014, in the Head and Neck Surgery service of the Hospital and Maternity Celso Pierro.

Methodology: The information contained in this study was obtained by analyzing the medical records, evaluating the results of surgeries performed at the service and reviewing the literature. Case report: Patient 1, female, 57 years old, with a diagnosis of adenoid cystic carcinoma of the mandible, performed a glossomandibulectomy (in 2007) and a segmental mandibulectomy (in 2009). Patient 2, female, 19 years old, with diagnosis of dentigerous cyst and myxoma of mandible and salivary gland, performing unilateral mandibulectomy (in 2014). Patient 3, female, 20 years old, with diagnosis of desmoid fibromatosis with extension to the periosteum of the mandibular branch, performed a resection of the lesion with neuroiloma (in 2011), presenting a recurrence, and then partial pelvandandleclectomy was performed. All three patients had, after the mentioned surgeries, the micromurgical reconstruction performed with the osteocutaneous flap free of fibula, molded by multiple osteotomies.

Conclusion: Maxillomandibular neoplasias are rare in women and young people. Patients submitted to mandibulectomies are a group with considerable morbidity and mortality. Patients submitted to reconstruction procedures by microsurgery deserve special attention due to the risk of complications. The reconstruction of the mandible should firstly prioritize the functional aspect of the organ, but the aesthetic aspect should not be forgotten. The fibular free osteocutaneous flap has proven to be an effective option in both aspects.
“When I googled it, it was the worst. It didn’t make me calm at all and I went nah, I’m not doing this”: Issues related to patient information and prehabilitation for head and neck oncology.

S.Coulson*(1)

(1)University of Sydney, Sydney, Australia

Authors and their affiliations

Susan Coulson PhD

Aakriti Chadha BAppSc (Phty)

Faculty of Health Sciences, University of Sydney

•Purpose of the study

Facial nerve damage from head and neck cancer surgery can be physically, socially and emotionally debilitating. Ongoing psychological distress is common amongst patients. The purpose of this study was to investigate the pre and post-operative experiences of patients who underwent head and neck cancer surgery with a risk of facial nerve paralysis. The overall aim was to inform healthcare practitioners about key issues to consider when providing pre and post-operative care to this population.

•Materials and methods used

Semi structured interviews were conducted with 9 participants, 12 to 18 months post-surgery. Questioning focused on the participant’s pre-operative care, informational needs and post-operative experience. Interviews were recorded and transcribed verbatim. Thematic analysis was undertaken to identify critical aspects of the participant’s experiences.

•Results

Three themes were identified: explanation of post-operative outcomes, time and the characteristics of the surgeon. Participant stories indicated mostly positive experiences in relation to the information and support received from the health care team in both the pre and post-operative phases of their journey. However, the participants with facial nerve damage after surgery did not feel prepared for this outcome and the associated long term consequences. Participants required wide variety of time to process the diagnosis or need for surgery, with some participants indicating that they required more time to process the need for surgery. Participants also indicated that a variety of characteristics of the surgeon, including their reputation and demeanour, are factors associated with increased preparedness for surgery.

•Conclusion

The findings of this study indicate the need for individualised, patient-centred care for head and neck cancer patients who are at risk of developing a facial nerve paralysis. The development, implementation and evaluation of targeted resources, such as brochures and information sheets, is required. Further pre-operative psychological assessment strategies may be beneficial in identifying those patients who are at significant risk of coping poorly during their post-operative recovery.
Assessing Whether EORTC-C30 and FACT-G quality of life measure the same construct of health related QOL in patients with total laryngectomy

K. Iravani*(1)

(1) Otolaryngology Research Center, Department of Otolaryngology, Shiraz University of Medical Sciences, Shiraz, Iran, Shiraz, Iran

Purpose: The European Organization for Research and Treatment of Cancer QOL Core Questionnaire 30 (EORTC-C30) and Functional Assessment of Cancer Therapy-General (FACT-G) are the two most widely used measures of cancer-specific health-related quality of life. This study aims to assess whether the two instruments measure the same constructs of HRQOL in patients with total laryngectomy.

Materials & Methods: The EORTC-C30 and FACT-G were completed by 132 Iranian patients with total laryngectomy. All patients signed the informed consent forms and they were instructed in detail how to fill out the instruments. The reliability of the QOL subscales was evaluated using the Cronbach alpha coefficient. Reliability was considered satisfactory if the coefficient was greater than 0.7. Convergent and discriminative validity was assessed using Spearman correlation. The value of a correlation coefficient greater than 0.4 between an item and its own hypothesized scale provides evidence of convergent validity. Discriminant validity is supported whenever correlation between an item and its hypothesized scale is higher than its correlation with the other scales. All analyses were conducted using SPSS, version 16.0.

Results: Exploratory factor analysis showed that the EORTC-C30 and the FACT-G measure different aspects of HRQOL. Moreover, both instruments showed excellent convergent and discriminative validity except for nausea and vomiting symptoms subscale in the EORTC-C30.

Conclusion: This study revealed neither of the two instruments can be replaced by the other in the assessment of HRQOL in patients with total laryngectomy.
Effect of Preoperative Immunonutrition on Postoperative Short-term Outcomes of Patients with Head and Neck Squamous Cell Carcinoma

R.Giger*(1), C.Mayer(2), S.Meyer(3), P.Schütz(4), Z.Stanga(2), C.Aeberhard(2)

(1)Universit, Bern, Switzerland, (2)Department of Diabetes, Endocrinology, Clinical Nutrition and Metabolism, Inselspital, Bern University Hospital, and University of Bern, Bern, Switzerland, (3)Department of Oto-Rhino-Laryngology, Head and Neck Surgery, Inselspital, Bern University Hospital, and University of Bern, Bern, Switzerland, (4)Department of Endocrinology, Diabetes and Clinical Nutrition, University Department of Internal Medicine, Kantonsspital Aarau, Switzerland, Aarau, Switzerland

Purpose of the study: Head and neck squamous cell carcinoma (HNSCC) patients are at high risk of acquiring an impaired nutritional status, resulting in compromised clinical outcomes. This study was performed to evaluate the effect of preoperative immunonutrition (IN) on postoperative short-term outcomes in patients with HNSCC undergoing elective oncologic surgery.

Materials and methods used: Single centre before and after study was conducted to compare clinical outcomes of consecutive patients before (control group) and after implementation (intervention group) of preoperative IN, given for 5 days preoperatively. We used regression models adjusted for important outcome predictors to compare length of hospital stay (LOS), local infections and general complications (Buzby and Dindo classification).

Results: A total of 411 patients were included (control group: 209, intervention group: 202). LOS was significantly lower in patients receiving IN compared with the control group (median 6 vs. 8 days, adjusted mean difference of -5.65 days [95%CI -7.74 to -3.56, p<0.001]). Local infections were significantly reduced after IN was implemented (7.4% vs. 15.3%, adjusted OR 0.30 [95%CI 0.13 to 0.70, p=0.006]). Specifically, there was a significantly lower rate for local wound complications, such as abscesses (4.5% vs. 7.7%, adjusted OR 0.29 [95%CI 0.10 to 0.90, p=0.031]) and fistulas (3.5% vs. 6.2%, adjusted OR 0.10 [95%CI 0.18 to 0.56, p=0.009]). Subgroup analysis showed more pronounced effects in patients with previous irradiation and extensive surgeries.

Conclusion: Patients receiving preoperative IN had a shorter LOS and a lower rate for wound infections and local complications compared with control group, whose effects remained robust after a multivariate adjustment.
Evaluation of the information given to patients undergoing head and neck cancer surgery using the EORTC QLQ-INFO25 questionnaire: a prospective multicentric study

A.Bozec*(1), O.Dassonville(1), G.Poissonnet(1), P.Schultz(3), A.Giovanni(2), N.Fakhry(2)

(1)Institut Universitaire de la Face et du Cou, Nice, France, (2)CHU, Marseille, France, (3)CHU, Strasbourg, France

Aim: Providing head and neck cancer patients with adequate information is essential to their confidence and satisfaction regarding medical care. The aims of this study were to evaluate patient perceptions of the information received, the predictive factors of such perceptions and their potential correlation with patient quality of life (QoL).

Methods: We conducted a prospective multicentric study using the EORTC QLQ-INFO25 and QLQ-C30 questionnaires before and after surgery.

Results: This study enrolled 200 patients, 149 men and 51 women, mean age 63.5 ± 10.3 years. Before and after treatment, global QLQ-INFO25 scores were 39.3 and 42.5, respectively, whereas satisfaction with the information received scores were 69.9 and 58.1, respectively. Regarding EORTC QLQ-INFO25 scores, between the pre- and post-treatment periods, we observed a significant increase in 3 scales/items (information about other services, information about different places of care and information about things you can do to help yourself) and a significant decrease in 2 scales/items (satisfaction with the information received and overall the information has been helpful). Before and after treatment, global QoL scores were 62.7 and 61.0 respectively. Overall, we found low correlations between QLQ-INFO25 and QLQ-C30 scores. Patient age and education level, center of care, tumor site and treatment characteristics had a significant impact on QLQ-INFO25 scores.

Conclusion: Perceived information was satisfactory in the perioperative period for head and neck cancer patients. Several demographic and clinical factors were identified as significant predictors of QLQ-INFO25 scores.
Expansile Muscle Strength Training in Chronic Radiation-Associated Aspirators

K. Hutcheson*(1), M. Barrow(1), S. Lai(1), G. Eapen(1), C. Fuller(1), J. Lewin(1)

(1) The University of Texas MD Anderson Cancer Center, Houston, United States

Objective: Expiratory muscle strength training (EMST) is a simple, inexpensive device-driven therapy. During EMST, a patient expires forcefully into a one-way spring loaded valve to engage expiratory and upper airway musculature in a strengthening exercise program. EMST improves airway protection in published trials of patients with dysphagia related to neurodegenerative diseases. Therapeutic potential of EMST was examined among head and neck cancer survivors with chronic radiation-associated aspiration.

Methods: A one-year retrospective case series (n=64) examined maximum expiratory pressures (MEPs) among chronic radiation-associated aspirators (per Penetration-Aspiration Scale [PAS] score ≥6 on modified barium swallow [MBS]). Pre-post EMST outcomes were examined in a nested series of patients (n=26) who enrolled in 8 weeks of EMST (25 repetitions, 5 days/week, 75% load). Non-parametric analyses were performed to examine effects of EMST on the primary endpoint maximum expiratory pressures (MEPs). Secondary measures included perceived dysphagia (per M.D. Anderson Dysphagia Inventory), diet (per Performance Status Scale for Head and Neck Cancer Patients), and degree of airway safety (per PAS and DIGEST scores on MBS).

Results: MEPs were depressed relative to established sex-matched normative data in 91% (58/64) of radiation-associated aspirators in this cohort (mean±SD: 89±37). Twenty-six patients enrolled in EMST; three withdrew. MEPs improved on average 54% (87±29 to 137±44 cm H2O, p<0.001) among 23 who completed an 8-week EMST program. Composite MDADI improved post-EMST (pre: 59.9±17.1, post: 62.7±13.9, p=0.13). Radiographic swallowing safety (per DIGEST) improved by 1 grade or more in 30% of patients (p=0.03). PSSHN diet scores did not significantly change.

Conclusions: MEPs were depressed in chronic radiation-associated aspirators relative to normative data, suggesting that expiratory strengthening could be a novel therapeutic target to improve airway protection in this population. These preliminary data also suggest that improvement in expiratory pressure generating capabilities after EMST translated to functional improvements in swallowing safety in survivors with chronic radiation-associated aspiration. We are currently conducting an IRB-approved prospective pilot trial to explore efficacy of EMST for radiation-associated dysphagia.
FIRST YEAR POST-OPERATIVE HEALTH-RELATED QUALITY OF LIFE OF TOTAL LARYNGECTOMIZED PATIENTS IN VIETNAM

A. Bui the*(1)

(1) National Otorhinolaryngology Hospital of Vietnam, Hanoi, Vietnam

Objective: To evaluate health-related quality of life of laryngectomized patients at post-operative 3rd, 6th and 12th month.

Materials and methods: prospective research on laryngeal cancer patients suffered from total laryngectomy in Centre of Oncology – Head and Neck Surgery of National ENT Hospital from February 2013 to June 2014. HRQOL was evaluated with questionnaire QLQ-H&N35 (validated Vietnamese version) from European Organization of Research and Treatment of Cancer.

Results: 55 patients included (52 males, 3 females; average age 58.5±9.3). 100% patients were in locally – advanced stages (III, IVa) without any local/ regional recurrence or metastasis during period of study. At 3th month post-operation, HRQOL decreased significantly in following items: cough, dry mouth, sticky saliva, feeling ill, lose weight, nutritional supplement, speech, swallowing function, sense, social eating, social contact. At 6th month post-operation, HRQOL decreased significantly in following items: cough, dry mouth, sticky saliva, nutritional supplement, speech, swallowing function, sense, social eating, social contact and sexuality. At 12th month post-operation, HRQOL still decreased significantly in speech, dry mouth, sticky saliva, swallowing function, sense, social eating and social contact, while other items had tendency to recover to the same level as pre-treatment period.

Conclusion: In laryngectomized patients, HRQOL was changed significantly (in many aspects of physical, psychological and social functions) during the first year post-operation.

Key-words: quality of life, laryngeal cancer, total laryngectomy.

Authors: Anh BUI THE, Canh PHAM TUAN, Ky LE MINH, Thang TONG XUAN.
Frequency and severity of globus pharyngeus symptoms in patients undergoing thyroidectomy

C.Tomoda*(1), T.Maeda(2), M.Nagahama(2), W.Kitagawa(2), K.Sugino(2), K.Ito(2)
(1)Ito hospital, Tokyo, Japan, (2)Ito hospital, Japan

Purpose: Patients with thyroid disease may experience many symptoms, such as globus pharyngeus, dysphagia, and vocal changes, as a result of direct compression and edema of surrounding organs due to an enlarged thyroid gland. Thyroid surgery is one option for improving these symptoms. However, globus symptoms worsen following thyroidectomy and may influence the daily life of the patient for a long time. We prospectively analyzed the frequency and severity of globus pharyngeus and obtained information regarding patients who complain of symptoms.

Material and Methods: Patients scheduled to undergo thyroid surgery between February and September 2016 completed the globus pharyngeus symptoms scale (GPS, range: 0-8.2) and self-rating depression scale (SDS, range: 0-80) preoperatively and at 3 days, 1 month, 3 months, and 6 months postoperatively.

Results: The response rate for the questionnaires was 98.5%. Evaluation was completed by 1085 patients (888 females, 197 males) ranging in age from 15 to 86 years. The percentage of patients who complained about neck discomfort (GPS > 4) was 16.2% before surgery. Postoperative deterioration of swallowing increased to 44.7% at 3 days and 48.5% at 1 month after surgery, then gradually decreased to 29.8% at 3 months, and 25.9% at 6 months after surgery. Before surgery, high SDS (> 50) showed significant direct correlations with an increased foreign body sensation in the throat, but thyroid volume, thyroid disease, and older age did not. At 1 month postoperatively, GPS was significantly higher in patients who had undergone total thyroidectomy and lateral neck dissection (median, 4.73) than in those who had undergone lobectomy (median, 3.32) or total thyroidectomy (median, 3.79). These differences gradually decreased, but were still present 6 months postoperatively. Higher SDS was also recognized as an independent predictor of high GPS at 6 months after surgery, but not at 1 or 3 months postoperatively.

Conclusion: Causes of globus symptoms differed in each operation period. Preoperative symptoms and persistent globus after surgery appear directly related to psychological factors. In the early postoperative period, these symptoms are mainly caused by surgical procedures.
Functional outcome and quality of life after laser cordectomy in early glottic cancer

A.Saibene*(1), C.Pipolo(1), P.Lozza(1), C.Mossinelli, S.Portaleone(1), G.Felisati(1), A.Maccari(1)

(1)Otolaryngology Unit, Santi Paolo e Carlo Hospital, Department of Health Sciences, Università degli Studi di Milano, Milan, Italy

Introduction: Transoral laser microsurgery (TLM) holds a relevant and established role in early glottic cancer treatment. A thorough, multi-step evaluation of patients allows the surgeon to select the best type of cordectomy in order to obtain a radical resection while giving patients an optimal to satisfying postoperative voice quality and quality of life (QoL).

Material and Methods: We retrospectively reviewed the medical records of all patients who were diagnosed with glottic carcinoma at our institution, enrolling in the study 18 patients treated with exclusive TLM with a minimum follow-up of 6 months. Patients underwent MDVP voice analysis and their voice quality outcome and quality of life were assessed with different measures, scales and questionnaires (voice handicap index, GIRBAS scale, maximum phonation time, SF-36 e UW-QOL). Statistical analysis was performed in order to assess correlation between vocal outcome, QoL, tumor grading, staging and cordectomy type.

Results: Statistical analysis showed that higher staging tumors correlate with lower perceived QoL, while higher grade tumors correlate with lower perceived QoL and voice quality. Last, vocal muscle resection correlate with worse voice outcome, while ventricular fold resection doesn’t.

Conclusions: Exclusive TLM causes only mild subjective and objective voice alterations, while its impact on QoL is minimal.
Impact of nutritional status on quality of life in head and neck cancer patients.

M.Atallah*(1), E.Bissada(2), A.Christopoulos(2), S.Moubayed(1)

(1)Université de Montréal, , Canada, (2)Université de Montréal, Montréal, Canada

Background: Head and neck cancer and the side effets related to its treatment predispose
patients to malnutrition, which is an important cause of morbidity and mortality. However,
uncertainties persist as to its impact on quality of life.

Objective: The objective of this study is to evaluate the nutritional status of patients treated for
head and neck squamous cell carcinoma and its impact on their quality of life at four months
and one year after diagnosis.

Methods: Data regarding nutritional status, as measured with BMI, weight loss, albumin and
prealbumin, was collected before the beginning of treatment. Quality of life was evaluated
prospectively, using the University of Washington Quality of Life Questionnaire, on three
occasions: before the beginning of treatment, four months after diagnosis and one year later. A
total of 155 consecutive patients treated for head and neck squamous cell carcinoma were
reviewed from this prospective databank. Multiple linear regression was used for statistical
analysis.

Results: With adjustment for age, sex, cancer stage, type of treatment and progression of the
disease, a lower BMI is associated with a poorer overall quality of life at one year post-
diagnosis (p=0.017). No association was demonstrated between the nutritional markers and
quality of life at four months after diagnostic.

Conclusion: Evaluation of nutritional status is an essential component in the care of head and
neck cancer patients, as malnutrition is correlated with poorer long-term quality of life.
Malignant transformation of rhinosinusal inverted papilloma – four case reports

G.Raluca*(1), P.Paula(2), P.Bogdan(1), A.Catrinel(1), B.Serban(1), N.Alexandru(1)
(1)Coltea Clinical Hospital, Romania, (2)Coltea Clinical Hospital, Bucharest, Bucharest, Romania

PURPOSE OF THE STUDY: The authors aim to present four cases of inverted rhinosinusal papillomas with malignant transformation, focusing on the way and particularities of diagnosis and also the treatment approach.

MATERIALS AND METHODS: We assessed the clinical and paraclinical status of the patients. All cases presented an aggressive local extension, with a certain degree of malignant transformation, but only in the case of a 45 years old patient with rhinosinusal carcinoma was necessary the external approach with radical resection. The rest of the cases were resolved by endoscopic surgery.

RESULTS: There are frequent discussions in literature regarding the surgical approach of rhinosinusal tumors – open surgery versus endoscopic surgery. The election treatment is the complete resection with different ways of approach: external, endoscopic or both, completed when necessary with ontological one.

CONCLUSIONS: The inverted papilloma is the most frequent benign rhinosinusal tumor, but the aggression of the local extension, high rate of recurrence and tendency to malignant transformation impute a challenge in endoscopic rhinosinusal surgery. The rhinosinusal carcinoma is a rare type of cancer, but with a rate of 60-70% in rhinosinusal neoplasms. Sometimes the differential diagnosis is difficult and the two entities can associate. The follow-up regarding the patients with inverted papillomas, which histologically presented little areas of dysplasia has good results, but the rhinosinusal carcinoma present recurrences.
Management of the fistulas in oncologic surgery of the head and neck – positive results if reconsider glutamine role

R.Grigore*(1), B.Popescu*(2), S.Bertesteanu*(3), C.Antonie(3), A.Nicolaescu(3), O.Paun(3), P.Pascu(3)

(1)ENT, Head&Neck Surgery Clinic, Coltea Clinical Hospital, Bucharest, Romania, (2)ENT, Head&Neck Cancer Clinic, Coltea Clinical Hospital, Bucharest, Romania, (3)Coltea Clinical Hospital, Romania

Introduction: surgical treatment but also radiation therapy are both influenced by nutritional status of the patient. Head and neck cancers determine decrease in body weight and major alterations of nutrition.

Consequences are poor results of major surgeries, long hospitalization time and decreased survival rates.

Material and methods: Tissue defect reconstruction after major surgery is influenced by local factors as the capacity of healing of local tissue, which is specific for every patient. Fistulas are relatively frequent complication. We present our experience in treating this complication adding to surgery, a supplement of 30 mg glutamine/day. 41 cases of fistulas are analyzed, either after surgery or radiation. Nutritional support can be administered either nasogastric tube or PEG. The most important thing is to administer specific nutritional products with high calories intake and to supplement the intake of glutamine daily. The treatment should be made after the surgery, 2 weeks prior to radiation, continues during the radiation and 2 weeks after the radiation is finished.

Results: there is a direct correlation between nutritional status, development of fistulas, radiation which can be reduced with glutamine intake. This decreased healing time for fistulas, in some cases even without surgical treatment.

Conclusion: accurate analysis of nutritional status before surgery, correcting deficits, together with surgical management has an important role in reducing complications in oncologic patients.
Modified Frailty Index in patients affected by Head and Neck Neoplasm: a new instrument to stratify complication risks.


(1)E. Agnelli Hospital, Pinerolo - turin, Italy, (2)ENT clinic E Agnelli Hospital, Pinerolo - turin, Italy, (3)ENT clinic, E Agnelli hospital, Pinerolo - turin, Italy, (4)ENT clinic, E Agnelli Hospital, Pinerolo, turin, Italy, (5)Radiotherapy, San Luigi Gonzaga Hospital, Orbassano - turin, Italy, (6)department of Anesthesia , E Agnelli Hospital, Pinerolo - turin, Italy

Purpose of the study

More and more in Head and Neck Oncology field we feel the need to frame and foresee the risk of morbility in patients undergoing both surgical and radiotherapy treatment. The concept of fragility is proving central in the management of cancer patients and can’t be simply limited to the ASA scale assigned in pre-hospital care.

Recently in several surgical branches great emphasis has been given to the Modified Frailty Index (mFI), predictive index to evaluate the risk of peri-post op complications in elderly patients, to identify patients with increased morbility and mortality risk regardless their chronological age.

In Otorhinolaringology the spread of this index is at present rather limited. However a retrospective study carried out in the United States (Adam..) on a significant number of patients has shown that mortality rates and complications gradually increase with the number of suffered items.

Materials and Methods

We carried out a first retrospective study on patients with head and neck cancer who underwent treatment in 2015 and 2016, evaluating if there is any possible relation between their mFI score and the impact of early and late complications. 77 patients has been enroled with oral cavity, oropharynx, hypopharynx, larynx cancer (65 female, 12 male, average age 68,12). 65 of them underwent surgical treatment +/- radiotherapy, 12 chemotherapy e/o radiotherapy treatment.

Results

Of these 77 patients 10 developed early complications and 8 late.

Even without statistical significance because of the reduced number of patients, there is evidence of increased risk of complications in patients with mFI>2.

Conclusion

Modified Frailty Index can be very useful also in Otolaryngology for the stratification of operation risk, for a full multidisciplinary assessment in order to choose the best possible care, especially in oncology field, for a correct informed consent and optimization of prep and operating choices.

Our aim is to shape a prospective employment of this index for stratification of patients who are most at risk, to test its reliability and usefulness in ORL oncology.
Multicentre research on quality of life in patients with advanced oropharyngeal carcinoma with long term survival related to human papilloma virus

M.Di luca*(1), A.Serra(1), A.Gulino(1), A.Conti(1), L.Maiolino(1), S.Cocuzza(2)

(1)ENT Department of the University of Catania (Italy), Italy, (2)ENT Clinic of the University of Catania (Italy), Italy

Purpose of the study: The aim of the present study is to evaluate the quality of life in patients with a long-term survival, treated with combined therapy for squamous cell tumours in the tonsils and at the base of the tongue, comparing results reported by HPV-positive and HPV-negative patients.

Material and methods used: The present study has been a multicentre cross-sectional study that has provided the following inclusion criteria: squamous cell tumour in the tonsils or at the base of the tongue at stage III-IVB; patients who have not been previously treated for squamous cell tumours in the tonsils and at the base of the tongue, regardless of the correlation with HPV; treatment that includes surgery plus (chemo)-radiotherapy or primary chemoradiotherapy ± rescue surgery; complete remission after treatment; treatment completed at least 60 months before being included in the study and patients who don’t show signs of the disease when requested to fill in the questionnaire.

Results: According to statistical analysis, differences in general quality of life and of the single scales which have been analysed are not correlated to the type of therapy chosen for the patient. Quality of life (QoL), considered taken into account the presence of HPV, the kind of treatment, the subregion tonsils versus base of tongue, the stage at the moment of diagnosis, emerged to be non influential in relation to such variables.

Conclusion: In the present study quality of life, considered taken into account the presence of HPV, the kind of treatment, the subregion tonsils versus base of tongue, the stage at the moment of diagnosis, emerged to be non influential in relation to such variables. It is consistent with other afore-mentioned literature studies, where the role of HPV and of QoL in general, after a year from the treatment, cannot be distinguished from the HPV-negative one. The analysed sample in the current study, including pathology at an advanced stage and with long-term survival, considers patients from 5 to 16 years after the treatment. Considering this time gap it emerges that the only significant variable on the quality of life is the age of the patient.
Multiportal combined transnasal-transoral approaches to skull base and parapharyngeal lesions


(1)Ospedale di Circolo e Fondazione Macchi, Università degli studi di Brescia, Varese, Italy, (2)Ospedale di Circolo e Fondazione Macchi, Varese, Italy, (3)Università dell’Insubria Varese, Varese, Italy, (4)Università di Pisa, Pisa, Italy

Purpose. Endoscopic endonasal approaches to the skull base have evolved considerably over the last years and have lead the way to new endoscopic-assisted corridors, namely transoral and transpharyngeal. Supported by oncological and functional successes obtained in skull base cancers, minimally invasive endoscopic approaches have been extended to the treatment of selected lesions laterally and inferiorly extended to involve the infratemporal fossa and the parapharyngeal spaces.

Methods. Combined endoscopic-assisted transnasal-transoral multiportal approaches were performed to resect selected skull base malignancies that could not be adequately managed using a single approach.

Results. Four cases of skull base cancer (squamous cell carcinoma, polymorphous low-grade adenocarcinoma, high-grade osteosarcoma, and a persistence of undifferentiated nasopharyngeal carcinoma) were suitable for such an approach. In all cases, a radical resection was obtained without major complications and with minimal morbidity for the patient. The patients started feeding by mouth in the 3rd-5th post-op day and they have been discharged from hospital within 4-7 days after surgery. Post-operative pain was mild and successfully controlled with acetaminophen in all cases.

Conclusion. The transnasal and the transoral surgical windows are complementary approaches that, when combined, provide excellent exposure for selected skull base malignancies that have extended too laterally and inferiorly to allow an exclusively transnasal approach. Preliminary data showed good local control of the disease and reduced morbidity for the patients compared to traditional external approaches. Future studies will be necessary to validate these findings.
Nutritional support of the oncologic patient – the impact on therapeutic management and QOL

R. Grigore*(1), S. Beresteanu(2)

(1) ENT, Head&Neck Surgery Clinic, Coltea Clinical Hospital, Bucharest, Romania, (2) ENT, Head&Neck Surgery Clinic, Coltea Clinical Hospital, Bucharest, Romania

Introduction: Nutritional status of the patients which will undergo major surgical procedure for head and neck malignancies is very important from the point of view of evolution and healing process. Also for the QOL, because eating is one of the indicators for life quality. Authors present the results of an observation based study made in ENT Clinic, Coltea Clinical Hospital during 2 years, which analyzed the nutritional status of the patients with tumors of the head and neck and the difference in evolution after introducing nutritional support.

Material and methods: we took in the study 600 patients, with head and neck cancers, or those who undergone iterative surgical procedures; first step at the admission was the questionnaire regarding nutritional screening, using NRS 2002 score; for nutritional evaluation we used the body mass index and other laboratory findings (albumin, creatinine, urea, lymphocytes number). We decided to administer the nutritional support either via nasogastric feeding tube or via percutaneous endoscopic gastrostomy tube (PEG).

Results: 65% of hospitalised patients were under nutrition at the admission; more than 85% of patients are at the risk for advanced decrease of the nutritional status during hospitalisation, because of surgical peculiarities and severity of the disease. We noticed that taking care of nutritional support via PEG or nasogastric feeding tube decreased the weight loss, decreased the hospitalisation duration and complication rate (fistulas) while the lack of nutritional support increased the readmission rate.

Conclusion: there is a direct correlation between nutritional support with specific hypercaloric products and the evolution after surgical treatment, further more after combination with radiation therapy. This decreased the complications rate and hospitalisation time in patients with head and neck malignancies; the way of administering the nutritional support has no significant impact, either PEG or nasogastric tube. The concept of clinical nutrition is very important for the surgeon and should be applied on every oncologic patient.
Outcome of head and neck cancer national screening campaign

Z. Al-Dhahli*(1)

(1) Oman medical specialty board, Oman

Abstract:

Background: Head and neck cancer is account about 3% of all cancers diagnosed in US. The prognosis of this disease significantly depended on the stage of disease at diagnosis that determined the survival rate and quality of life of patient. Majority of patients with head and neck cancer present in relatively late stages which is despite quality of management available it may carry significant burden on patient life and health care system. Awareness and Early detection of cancer through screening programs is one of suggested solution to reduce the burden of this disease. In this article we will share our experience in national head and neck cancer screening and awareness campaign, which was conducted in Al-Nahdha Hospital in 2015-2016. We aim to determined weather head and neck cancer screening help in early detection of disease and to increase level of awareness about head and neck cancer among Omani population.

Methods: we used head and neck cancer alliance screening form. The screening was conducted twice (one in 2015 and the 2nd on 2016) in Al-Nahdha Hospital by ENT and OMFS doctors.

Result:

From 215 participants 7% had positive head and neck cancer screening examination results. 3% of the participants are smokers

Conclusion:

Head and neck cancer screening is a good tool for early detection of cancer in population and in increasing community awareness about this disease and it is risk factors. We are planning to conduct this campaign biannual and to involve other regions in screening.
Total laryngectomy is a surgical procedure indicated for locally advanced cancer of the larynx and the hypopharynx. This procedure is heavy with consequences both physically - since changing major functions as respiration, swallowing, and phonation - and psychosocial consequences since changing the patient outward appearance, his self-image and self-esteem. These psychosocial consequences are underestimated in the usual care of patients. The main objective of this work was to develop a Therapeutic Education Program that is aimed to improve the quality of life for caregivers and patients having undergone a Laryngectomy called PETAL (in French : Programme d’Education Thérapeutique visant à l’amélioration de la qualité de vie des Aidants et des patients Laryngectomisés). The phase I, that is called the pilot phase, included a first observational, exploratory and analytical stage, involving the evaluation of the needs and expectations for patients, caregivers and health professionals who manage them. This stage was then used as a basis for defining the aims of the program, and for choosing its operating modalities: therapeutic workshops with medical, social and psychological objectives that are available for patients and caregivers; And a website with a crucial role by providing information and formation for health professionals (www.petal.fr). As a result of the first pilot phase, the phase of replication will start, which is aimed to evaluate the necessary human and material conditions for the program replication in others centers. Finally, the last phase of the project will have the purpose of evaluating statistically, with the help of quality of life scales, the effectiveness of PETAL program. This evaluation will be performed through the implementation of PETAL in 12 centers in France and in Belgium.
Phonatory and swallowing functions after laryngectomies or pharyngolaryngectomies.


(1) ENT and Head & Neck department, University Medical Center, Strasbourg, France, (2) ENT and Head & Neck department, Nantes, France, (3) ENT and Head & Neck department, Nancy, France, (4) Surgical department, IUCT Oncopole, Toulouse, France, (5) ENT and Head & Neck department, Besançon, France, (6) Surgical department, IUCT Oncopole, Toulouse, France

Purpose of the study

This GETTEC (Groupe d’Étude des Tumeurs de la Tête Et du Cou) study aims at evaluating the performance of phonation and swallowing after total laryngectomies or pharyngolaryngectomies. The assessment is carried out with or without phonatory or pharyngeal rehabilitation, including patients operated for more than 6 months and without local recurrence.

Materials and methods used

In this retrospective study, French Head & Neck departments were asked to review their patients. Patient’s general health, tumor stage and location, surgical procedure and patient’s autonomy were reported. The vocal performance was assessed according to phonatory patient’s rehabilitation, swallowing performance and patient’s autonomy (dependence regarding stoma nursing). These data were compared to the results of EORTC QLQ H&N35 questionnaire fulfilled by all patients. A consent form was also signed by each patient.

Results

157 patients were included in this study. Eighty per cent of patients were rehabilitated with primary TEP (Tracheo-esophageal-Puncture). Phone communication was better after laryngectomy (65%) than pharyngolaryngectomy (48%) and better if a myotomy of the inferior pharyngeal constrictors was performed (63% versus 51%). Most of the patients were irradiated after or before the surgical procedure. Swallowing disorders, poor health condition or autonomy, esophageal speech, salvage laryngectomy were responsible for difficulties in speech production.

The EORTC QLQ H&N 35 questionnaires report smell, taste and xerostomia complain as well as trouble taking on the phone. On the other hand swallowing was preserved in 84% of patients.

Conclusion

A voice prosthesis insertion allows restoring an efficient speech in the majority of patients whether autonomy and swallowing are preserved. When these requirements are fulfilled, a systematic primary insertion of voice prosthesis is recommended.
Post radiation velopharyngeal insufficiency: Prospective evaluation of oropharynx autologous fat injection

W.Ghanem*(1), N.Assouly(2), Q.Qassemyar(1), F.Kolb(1), S.Temam(3), A.Agirod(4)

(1)Gustave Roussy, France, (2)G, France, (3)gu, France, (4)Polyclinique Courlancy, France

Purpose of the study:

In a previous retrospective study, we ventured into analyzing the Postradiation Velo-Pharyngeal Insufficiency (PRVPI), an unusual side effect of radiotherapy responsible for voice distortion and nasal food reflux. We studied the Oropharynx Autologous Fat Injection OAFI results in eight patients. Despite technical difficulties and complications caused by radiation fibrosis, the results were encouraging.

The aim of our prospective study is to evaluate long term functional results after treatment of PRVPI using OAFI.

Materials and methods:

Five patients aged between 35-65 years with severe PRVPI have been included since July 2015. The average time between radiotherapy and OAFI was 14 ± 4 years. The initial tumor was in nasopharynx in three patients and oropharynx in two. No patient underwent previous oropharyngeal surgery.

The patients were injected with 3.5 to 15 mL of fat in the posterior, lateral pharyngeal walls, and soft palate under general anaesthesia with endoscopic control. A second fat-grafting procedure was performed on one patient. Complete evaluation was performed at one, three, and six months with an ENT specialist and a speech pathologist including Pittsburgh Weighted Speech Scale (PWSS) assessment. Furthermore, autoevaluation by the patient using voice handicap index 30 (VHI30) and EORTC QLQ-H&N35 questionnaires were requested. Follow-up was 6 to 18 months after surgery.

Results:

Postoperative nasofibroscopy revealed a reduction in the closure gap in all patients included in our study. The perceptual evaluation demonstrated improved speech intelligibility and reduced nasal food reflux in four of the cases after surgery. Assessment six months after the last procedure showed the following:

PWSS average preoperative score reduced from 11 ± 3 to 6 ± 3. VHI30 preoperative average of 77 ± 15 reduced to 67 ± 12. EORTC QLQ-H&N35 preoperative average of 94 ± 11 reduced to 89 ± 10.

Conclusion:

PRVPI is a rare but serious complication appearing a long time after radiation. Unfortunately, this problem is becoming more frequent due to increasing oropharynx human papillomavirus induced cancer treated with radiotherapy. This is prevalent in young patients who complain of long-term toxicity after radiation.

This is the first study evaluating OAFI for PRVPI. OAFI appears to be a safe and promising technique to improve PRVPI. However, a full recovery cannot always be achieved and multiple operations on the same patient could be necessary.
Prevalence of Comorbidities in Head and Neck Cancer Survivors in the United States
D. Eytan*(1), A. Blackford(2), C. Fakhry(3), M. Patel(3)

(1) Department of Otolaryngology-Head and Neck Surgery, Baltimore, Maryland, United States, (2) Division of Oncology Biostatistics and Bioinformatics, Johns Hopkins University, Baltimore, Maryland, United States, (3) Department of Otolaryngology-Head and Neck Surgery, Johns Hopkins University, Baltimore, Maryland, United States

Purpose: The prevalence of oropharyngeal cancer (OPC) survivors in the United States has increased due to increasing incidence and survival and younger age at diagnosis. Although OPC survivors have good prognosis relative to non-OPC head and neck cancers (HNC) survivors, there is interest in reducing long-term side effects, which manifest years after cure and decrease quality of life. However, the prevalence of comorbidities for OPC and non-OPC survivors is unknown as are the changes over time during the survivorship trajectory. Therefore, the purpose of this study was to estimate the prevalence of comorbidities in HNC survivors over time.

Materials and Methods: In this retrospective cross-sectional study, individuals with a first incident primary diagnosis of HNC from 2004-2011 from the Surveillance, Epidemiology, and End Results (SEER)-Medicare linked Databases were included in analysis. The presence or absence of 47 comorbid conditions was identified among OPC and non-OPC cases during distinct time periods at time of diagnosis, and after diagnosis (years 1, 1-3, 3-5, and 5+).

Results: The study population consisted of 8281 individuals diagnosed with OPC (n=3185) and non-OPC (n=5096). The proportion of patients with a Charlson Comorbidity Index of 2+ was similar at diagnosis (21.7% non-OPC v. 21.2% OPC), but was more prevalent for non-OPC survivors at 5 years compared to OPC survivors (52% v. 47%, respectively). At diagnosis, hypertension, hyperlipidemia, and diabetes were the most prevalent comorbidities for both OPC and non-OPC survivors. Hypertension was the most prevalent across all time periods considered. Following treatment, anemia became the second most common comorbidity in both groups. From time of diagnosis to 5 years post-diagnosis, the prevalence of cancer-related comorbidities such as dysphagia (3.7 to 43.6%, p < 0.001), malnutrition (0.6 to 30.3%, p < 0.001), and weight loss (2.1 to 40.4%, p < 0.001) increased significantly among OPC 5-year survivors. Dysphagia was more prevalent in OPC than non-OPC patients 5 years after diagnosis (43.6 vs 29.6%, p=0.002).

Conclusion: A comprehensive understanding of the comorbidities that HNC survivors experience during the survivorship trajectory will inform surveillance and survivorship care plans and ultimately improve quality of life for HNC survivors in the United States.
Prevalence of obstructive sleep apnea syndrome following oropharyngeal cancer treatment: a Prospective cohort study

A.Loth*(1), N.Fakhry*(2), L.Santini(1), J.Michel(1), A.Giovanni(1), P.Dessi(1)

(1)CHU Conception, Marseille, France, (2)APHP, , France

Purpose: To evaluate the prevalence of obstructive sleep apnea syndrome (OSAS) in a population of patients treated for an advanced cancer of the oropharynx (AJCC Stage III or IV), depending on treatment strategy and to evaluate its impact on quality of life.

Materials and methods: Fifty-one disease free patients were prospectively included in a single center. Forty-one patients received a combined chemoradiotherapy (CRT) while 10 patients have been treated by surgery followed by (chemo)radiotherapy. All patients gave signed informed consent. Every patient underwent a formal sleep consultation and was asked to complete the Epworth sleepiness scale and EORTC QLQ C-30 and the EORTC H&N 35 questionnaires. A home overnight respiratory polygraphy was performed in every subject.

Results: The mean age of patients was 61 years. The mean time between the end of cancer treatment and OSAS analysis was 54 months. An OSAS was found in 25.5 % of our patients. There was no significant difference between patients treated with surgery (30 %) or CRT (24.39 %), p=0.79. The EORTC QLQ C-30 questionnaire showed a significant difference between positive and negative OSAS groups about the Global Health Status Scale (50.64 vs. 67.11, p = 0.02) and on the fatigue item (35.04 vs. 17.25, p = 0.03).

Conclusions: Our population with advanced oropharyngeal cancer, whatever treatment strategy, was at risk of developing OSAS with negative impact on quality of life. A routine screening and treatment of OSAS seems necessary to improve the quality of life of patients treated for advanced cancer of the oropharynx.
Primary versus secondary tracheoesophageal puncture for voice rehabilitation in laryngectomy patients: A systematic review

K.Luu*(1), B.Chang(1), D.Valenzuela(1), D.Anderson(1)

(1)University of British Columbia, Canada

Purpose of study: Among voice restoration options following laryngectomy, tracheoesophageal puncture (TEP) appears to be the most common. Currently, there is no consensus that exists with regards to the timing of performing TEP and the decision to perform a primary or secondary TEP has mostly been based on physician preference and expert opinion rather than data. Primary TEP has the potential to decrease time to phonation and the number of procedures for the patient. The objective of this study was to compare primary and secondary tracheoesophageal puncture (TEP) for voice rehabilitation in laryngectomy patients in terms of success and complication rates.

Material and methods: A systematic review of studies in the English literature was conducted for studies that directly compared primary and secondary TEP. A comprehensive search of MEDLINE, EMBASE, and Web of Science was performed. The PRISMA protocol was followed.

Results: 1392 unique titles were identified and 82 full texts articles were reviewed. 11 retrospective clinical cohort studies were ultimately included. No randomized controlled trials were identified. Newcastle-Ottawa score for assessment of quality ranged from 5 to 7. Success rate was defined differently across most studies. Two studies found higher success with primary TEP compared to secondary TEP; nine studies found no difference. Voice outcomes were inconsistently measured; no difference between groups was found in 4 studies. The mostly commonly reported complications were leakage around the TEP, pharyngocutaneous fistula, and stomal stenosis. Overall, complications between primary and secondary TEP were similar. One study reported a higher pharyngocutaneous fistula rate in the primary TEP group in salvage laryngectomy patients and six studies reported no difference in fistula rates.

Conclusion: Overall, the literature is of low quality. No difference between primary and secondary TEP was found in all but one study which showed a higher rate of pharyngocutaneous fistula rate.
Prognosticators and kinematic characteristics of swallowing function after esophagectomy with gastric tube reconstruction

Y.Seino*(1), H.Moriya(2), T.Suzuki(1), T.Yamashita(1)

(1)Department of Otorhinolaryngology, Kitasato University School of Medicine, Japan, (2)Department of Surgery, Kitasato University School of Medicine, Japan

Purpose: Esophagectomy with thoracotomy, lymph node dissection and gastric tube reconstruction is one of the most invasive surgery. The aim of this study was to analyze prognosticators in relation to swallowing outcome and dynamic videofluoroscopic swallowing studies (DSS) after the surgery.

Methods: Data from 41 patients, who underwent esophagectomy with gastric tube reconstruction as treatment for thoracic cancer between 2012 and 2015, were retrieved from the files of the Kitasato University. A retrospective analysis of clinical features was performed in the cohort of 41 patients (mean age 70±6.7). Twelve patients (mean age 75±4.3) had sufficient DSS data to be included in DSS analysis focused on measures of displacement and timing. DSS results were compared to normal values for age and bolus volume. Analyses were completed using p70, O.R.=7.4, p=0.014) was significantly associated with PEG dependent. Deterioration of laryngeal elevation was demonstrated in the DSS analysis (p=0.019).

Conclusions: If over 70 year old patients have complications after the procedure extra care for nutrition management should be taken when undergoing swallowing rehabilitation. Shaker exercises, supraglottic swallow method and effortful swallow can be utilized to reinforce laryngeal elevation to achieve swallowing safety. It is vital that we should select suitable rehabilitation strategies based on DSS findings.
QoL in patients treated with electrochemotherapy for uncurable recurrent head and neck cancer

B. Pichi*(1)

(1) National Cancer Institute "Regina Elena", Roma, Italy

In case of unresectable recurrent or persistent HNC, NCCN 2015 guidelines recommend reirradiation +/- systemic therapy, systemic therapy only, clinical trial or best supportive care (BSC). The treatmet options should be evaluated considering the patient's performance status, the life expectancy and the quality of life.

Electrochemotherapy (ECT) is an emerging treatment strategy consisting in the combination of electroporation and chemotherapy. The aim of this prospective study was to evaluate the feasibility and the efficacy of ECT in terms of improvement of quality of life in the palliative setting in patients with recurrent uncurable head and neck malignancies not suitable for standard options. Goals of treatment in palliative setting are mainly symptom control, prevention of new cancer related symptoms, improvement in quality of life, disease stabilization and if possible increasing of OS.

From April 2011 to April 2015 a total of 24 patients, observed at the department of otolaryngology head and neck surgery of national cancer institute of Rome "Regina Elena", with recurrent uncurable HNC have been submitted to ECT. Our results showed a median OS rates in average superior to BSC control group, as pain, bleeding, frequency of dressing and QoL. ECT is a very reliable treatment that can be performed in every patient independently from the performance status because of the possibility of local anesthesia and the short time of the procedure. ECT could play an important role in the palliation of HNC especially in patients not fit for systemic therapy and should be considered as a valuable/adjuvant strategy to chemotherapy.
Quality of life and functional outcomes after lateral temporal bone resection and reconstruction

J.Connell*(1)

(1)Royal Adelaide Hospital, Adelaide, Australia

Background: Lateral Temporal bone resection is an increasingly utilized adjunct surgical procedure for non-melanoma cutaneous cancers of the head and neck. It aims to achieve en bloc removal of the bony ear canal with preservation of the facial nerve and inner ear in an effort to avoid disfigurement and disability associated with more involved resections. Where it is indicated for locally advanced salivary gland malignancy, non-melanoma cutaneous cancers and locoregional malignancies with metastatic potential, facial nerve sacrifice is often necessary. The typical demographic of candidates undergoing this procedure is older with multiple pre-existing comorbidities. The combination of active malignancy requiring complex surgical management, pre-existing poor functional reserves and the potential for functional deficits as a surgical side effect can predispose to less than favorable quality of life outcomes.

Purpose: The Royal Adelaide Hospital has been performing lateral temporal bone resections in the management of non-melanoma, cutaneous malignancies of the head and neck. We set out to assess the impact of lateral temporal bone resection on quality of life in a cohort of patients with a restricted pre-morbid functional state. We were aiming to assess the efficacy of lateral temporal bone resection as a procedure that can maintain quality of life and functional outcomes in a cohort predisposed to poorer surgical outcomes.

Method: We conducted a 10-year chart review of consecutive patients who underwent lateral temporal bone resections at the Royal Adelaide Hospital. The head and neck department database contained 45 lateral temporal bone resection procedures from 2005 to 2015. 16 were new malignancies, 26 were recurrent disease and 3 unknown at the time of procedure. 40% had pectoralis major flaps and 60% had free flaps for reconstruction. The majority of the cohort had comorbidities associated with a lower quality of life and increased risk of adverse surgical outcomes. Complications and functional outcomes were assessed. Procedural efficacy, health outcomes and functional deficits were assessed. Longitudinal data was recorded at regular outpatient intervals for functional progress (specifically hearing and facial nerve function.)

Results: Inpatient survival was 96% (43/45.) Postoperative complications included respiratory complications (22%), new facial nerve palsies (17%), flap failure (13%), wound breakdown/infection (13%) and new dysphagia/dysphonia (17%).

Conclusion: Lateral temporal bone resection is an effective treatment modality with good survival rates, acceptable complication rates and preserved functional outcomes that can avoid the adverse outcomes associated with more involved resections in disadvantaged populations.
Quality of life study after transoral laser resection of early glottic and supraglottic tumours and cost benefit

M.Csanady*(1), Z.Tobias(1), J.Czigner(2), L.Rovo(2)

(1)Department of Otorhinolaryngology, Head and Neck Surgery, University of Szeged, Szeged, Hungary,
(2)Department of Otorhinolaryngology, Head and neck Surgery, Szeged, Hungary

Introduction

Transoral CO2 laser surgery of early (T1, T2) laryngeal cancer is demonstrated focusing on oncological results, quality of life, complications and cost benefit aspects.

Material and methods

438 endoscopic laser surgeries of early laryngeal cancer (375 laser cordectomies and 63 supraglottic resections) were analysed. Patients underwent endoscopy, CT, (MRI) and quality of life study as voice analysis, aspiration, social life (The Euro QoL Group 2014 and questionnaire) and cost benefit aspects comparing with open access surgery.

Results

After a single laser cordectomy 87.5% of the patients is tumour free, but after salvage treatments 97%. In the supraglottic group 47 patients are free of tumour after primary laser resection (75%). Survival after salvage therapy is 98%.

Analysis of voice quality of glottic cancer revealed an acceptable-good voice in type I_II. laser cordectomies and no significant change in supraglottic cases. Transoral laser surgery resulted in a significantly less aspiration and complications than external approach method, also avoiding tracheostomy. Hospitalization after endoscopic surgery patients is 1-8 days versus 10-30 days of external approach surgery.

Conclusions

Transoral CO2 laser surgery of the early laryngeal cancer proved to be a primary treatment option with good oncological results, better peri- and postoperative quality of life and benefits on costs.
Shoulder dysfunction and quality of life following neck dissection: a clinical explorative study for risk factors.

H. Michaël*(1)

(1) CHU de Nantes, Nantes, France

Authors: Hénoux, Michaël MD; Michel, Guillaume MD; Ferron, Christophe MD; Aufauvre, Valérie MD; Malard, Olivier MD, PhD; Espitalier, Florent MD.

ENGLISH

Object: Neck dissection procedures are commonly associated with shoulder syndrome, despite accessory nerve preservation. This study retrospective aims to identify risk factors for the development of shoulder syndrome after neck dissection.

Material and methods: All participants underwent neck dissection with accessory nerve preservation. Shoulder range of motion and pain were assessed by physical examination, and shoulder function and quality of life were assessed using respectively DASH questionnaire and EORTC QLQ-C30 and EORTC H&N35.

Results: 75 patients were included; 27 patients (36%) were affected with shoulder dysfunction. History of cardiovascular disease was found to increase the development of shoulder syndrome, whereas radiation therapy didn’t have any influence. Our study didn’t show any effect of physical therapy on development of shoulder syndrome.

Conclusion: Shoulder syndrome is a common complication of neck dissections. This preliminary study highlights risk factors for shoulder syndrome and lays the foundation for a prospective randomised controlled trial investigating the effect of physical therapy on shoulder syndrome.

FRANÇAIS


Matériel et méthodes: Les patients traités par évidement unilatéral avec préservation du NSA ont été inclus. Les amplitudes articulaires et la douleur ont été mesurées ; la fonction de l’épaule et la qualité de vie ont été évaluées par questionnaires.


Soft tissue metastasis or regional neck metastasis? An undefined pathological entity

P. Pondorfer*(1), S. Vasicek(2), M. Ratschek(2), T. Weiland(2), A. Wolf(2), M. Graupp(2), M. Karakitsiou(3), D. Thurnher(2)

(1) ENT Graz University Hospital, Graz, Austria, (2) Graz University Hospital - ENT, Graz, Austria, (3) Graz University Hospital - ENT, Graz, Austria

PURPOSE:

Head and neck cancer patients with advanced disease, sometimes show contiguously located soft tissue metastasis (cSTM) in the postoperative neck dissection specimens. These specimens contain histopathologically metastatic tissue without evidence of primary lymph node tissue. Currently, for these cases there is no distinct staging according to the UICC/AJCC TNM system.

METHODS:

A total of 466 consecutive patients with head and neck cancer operated between 01/14-12/15 were analyzed retrospectively. Nine patients (2%) showed cSTM. Histopathological slides were assessed twice by achieved by independent examiners, to differentiate cSTM and metastatic lymph nodes of the neck.

RESULTS:

The average follow-up of patients with cSTM was 33.2±9.3 months after diagnosis. Mean age at diagnosis was 63.4±12 years (f n=1; m n=8). No patient had distant metastasis at time of surgery; five (56%) patients showed a mean recurrence for cSTM of 26.8±9.3 months after primary tumor resection. Primary tumor subsites were: oropharynx (n=2), CUP (n=3), paranasal sinus (n=1), larynx (n=1), nasopharynx (n=1), and thyroid (n=1). Four patients had their major metastatic lesions resected during primary neck dissection, three patients received radio- and chemotherapy prior to cSTM detection, and eight patients had postoperative radio- and chemotherapy.

DISCUSSION:

Currently there is no clear guideline whether cSTM should be staged as regional or distant metastasis, a difference in diagnosis which changes the management of the patient completely. This study exclusively reports on a cohort with STM contiguously located to the primary tumor and results will be compared to current literature. At our institution further studies are under progress to identify whether STM and its prognostic power is rather related to distant metastasis than lymphatic node metastasis.
The role of nutritional management in the evolution of patients with head and neck cancer

S.Bertesteau*(1), B.Popescu*(2), R.Grigore*(2), A.Nicolaescu(2), C.Antonie(2), O.Paun(2)

(1)University of Medicine and Pharmacy Carol Davila Bucharest, Coltea Clinical Hospital, Bucharest, Romania,
(2)Coltea Clinical Hospital, Bucharest, Romania

Purpose of the study: Nutritional status of the patients which will undergo major surgical procedure in our field is very important from the point of view of evolution and healing process. Authors present the results of an observation based study made in ENT Clinic, Coltea Clinical Hospital during 1 year, which analyzed the nutritional status of the patients with tumors of the head and neck and the evolution after nutritional support.

Material and methods: we took in the study 560 patients, with head and neck cancers, or those who undergone iterative surgical procedures; first step at the admission was the questionnaire regarding nutritional screening, using NRS 2002 score; for nutritional evaluation we used the body mass index and other laboratory findings (albumin, creatinine, urea, lymphocytes number). We decided to administer the nutritional support either via nasogastric feeding tube or via percutaneous endoscopic gastrostomy tube (PEG).

Results: 65% of hospitalised patients were under nutrition at the admission; more than 85% of patients are at the risk for advanced decrease of the nutritional status during hospitalisation, because of surgical peculiarities and severity of the disease. We noticed that taking care of nutritional support via PEG or nasogastric feeding tube decreased the weight loss, decreased the hospitalisation duration and complications rate (fistulas) while the lack of nutritional support increased the readmission rate.

Conclusion: nutritional support with specific hypercaloric products decreased the complications rate and hospitalisation time in patients with head and neck malignancies; the way of administering the nutrition support has no significant impact, either PEG or nasogastric tube.
Translation and validation of EORTC QLQ-H&N 35 into Moroccan Arabic for ENT head and neck cancer patients in Morocco.

M.Alami*(1), N.Ouattassi*(2), N.Benmansour(1), S.El fakir(3), C.Nejjari(4)

(1)ENT Head and Neck Surgery Department, Hassan II University Hospital, Fez, Morocco, (2)ENT Head and Neck Surgery Department at Hassan II University Hospital, Fez, Morocco, (3)Epidemiology and public health department, medecine faculty of Fez, sidi mohammed ben abdellah University, Fez, Morocco, (4)Epidemiology and public health department, medecine faculty, Sidi Mohamed Ben Abdellah University, Fez, Morocco

Purpose of the study: Disease-specific quality of life (QOL) measures have enhanced the capacity of outcome measures to evaluate subtle changes and differences between groups. As many of the QOL measures have been developed in English, they require translation to ensure their usefulness in a multi-cultural and/or international society. Published guidelines provide formal methods to achieve cross-culturally comparable versions of a QOL tool. The aim of this study was to adapt the head and neck specific module of the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-H&N 35 questionnaire) into Moroccan Arabic and to determine its psychometric properties. Material and methods used: After translation, back translation and pretesting of the pre-final version, the translated version was submitted to a committee of professionals composed by otolaryngologists and epidemiologists. The psychometric properties were tested in patients with ENT cancer. Internal consistency was tested using Cronbach’s alpha and the test–retest reliability using interclass correlation coefficients. Construct validity was assessed by examining item convergent and divergent validity. It was also tested using Spearman’s correlation between QLQ- H&N 35 scales and EQ-5D. The study was conducted in 120 patients.

Results: The Moroccan version was internally reliable, Cronbach’s a ranged from 0.71 for “trouble with social contact” to 0.94 for “senses impairment”, indicating good internal consistency. Test–retest reliability was assessed using the intra-class correlation coefficient, which ranged from 0.64 for “speech trouble” to 0.89 for “physical activities”. The instrument demonstrated a good construct and concomitant validity. Conclusion: We have developed a semantically equivalent translation with cultural adaptation of EORTC QLQ-H&N 35 questionnaire. The assessment of its measurement properties showed that it is quite reliable and a valid measure of the effect of cancer on the quality of life in Moroccan patients.

Keywords: Cancer - Quality of life - Reliability - Validity
A clinical trial of combination neoadjuvant chemotherapy, transoral robotic surgery, and customized adjuvant therapy in patients with T3 and T4 laryngo-hypopharyngeal cancer

S.Kim*(1)
(1)Yonsei University, , Korea, South

Objective: We conducted a prospective clinical trial of combination neoadjuvant chemotherapy, transoral robotic surgery, and customized adjuvant therapy in patients with locally advanced laryngo-hypopharyngeal cancer.

Materials and Methods: Of the 95 patients with laryngo-hypopharyngeal cancer who visited the Yonsei Head and Neck Cancer Center between September 2008 and August 2016, 35 were enrolled in this clinical trial.

Results: Twenty patients had hypopharyngeal cancer and 15 laryngeal cancer. The primary cancer subsites were the pyriform sinus (12), posterior pharyngeal wall (8), true vocal cords (5), aryepiglottic fold (5), epiglottis (3), and false vocal cord (2). Twenty-nine patients (82.9%) had T3 and 6 (17.1%) T4 disease; 12 patients (34.3%) had stage III and 23 (65.7%) stage IV disease. The 5-year overall survival rate was 69.4% and the 5-year disease-free survival rate 77.8%. Decannulation was successful in 31 of 34 patients at an average of 18 days postoperatively. Of all patients, 83% exhibited a favorable subjective swallowing status, while 5 patients (14.4%) became dependent on feeding tubes.

Conclusion: Although more extensive studies and longer-term follow-up are needed to confirm our results, neoadjuvant chemotherapy combined with transoral robotic surgery and customized adjuvant therapy, based on detailed pathological information, afforded favorable oncological outcomes and preserved organ functionalities in patients with T3 and T4 laryngo-hypopharyngeal cancer.
A huge retrosternal goiter resected through transaxillar approach by Robotic assisted surgery – case Report

E.Najjar*(1), N.Cornu(2), G.Boccara(2), P.Aidan(2)

(1)Rabin Medical Center - Beilinson Hospital, , Israel, (2)American Hospital of Paris, , France

Abstract

Background

A goiter is a common reason of thyroidectomy, with rare cases of retrosternal extension. Most mediastinal goiters are retrosternally situated in the anterior mediastinal compartment.

Surgery for mediastinal goiters should always be considered, even in elderly patients because of the high risk of tracheal compression and the low morbidity of the surgery.

In the article we present a case report of robotic transaxillar approach thyroidectomy of a huge retrosternal goiter.

The main outcome measures were feasibility of the robotic approach, patient and gland characteristics, operative time and complications.

Case presentation

A 37 year-old female with an enlarged goiter with substernal extension underwent a transaxillary robot-assisted gasless thyroidectomy in the American Hopsital of Paris.

The neck ultrasound revealed a huge enlargement of the right thyroid lobe with retrosternal extension, measuring approximately 15 cm. An MRI was made to evaluate the retrosternal involvement which was confirmed by a remarkable sub-sternal extension, tracheal compression and pulling to the contralateral side.

The patient was determined not to be operated by classic cervical approach fearing a neck scar.

Results

There was no conversion to laparoscopic or open surgery or combined approach. The robotic working space creation time was 25 min and total operative time was 140 min. The patient tolerated the procedure well. Estimated blood loss was 50 ml.

The procedure went without complication; the RLN was preserved bilaterally and monitored via NIM. Both parathyroid gland from the operated side were identified and preserved.

A large specimen of 15 cm length was extracted only via the Trans axillar incision. There were no perioperative or postoperative complications.

In addition there was no evidence of postoperative vocal cord palsy or paresis. PTH and calcium post-operative levels were within normal limits. The patient was so thankful and discharged home 72 hours after surgery.

Conclusion

This case represents what we believe to be the first documented case in literature, emphasis the enormous progress surgeons made with de Vinci robotic thyroid surgery in a short time.
This initial experience demonstrates that this technique can be a feasible, safe and effective method for thyroidectomy via transaxillar approach. The use of robotic technology for endoscopic thyroid surgery could overcome the limitations of conventional endoscopic surgeries in the surgical management of thyroid disease.
Nowadays, Transoral Robotic Surgery (TORS) has been developed and applied for oropharyngeal cancer worldwide. However, without the anatomical understanding during TORS lateral oropharyngectomy, the risk for interrupting the vital internal carotid artery (ICA) could lead to catastrophic events.

After a series of TORS experience on hundreds of patients by one solo surgeon, we reviewed our experiences how to overcome this significant challenge. Between January 2014 and September 2016, we have experienced eight cases of carotid artery exposure after TORS. Five cases were simple exposure of the carotid artery superficial to the stylopharyngeus muscle, two cases were carotid artery exposure beyond SPM and a remaining case was with carotid artery tortuosity.

Among the 8 patients with carotid artery exposure, 5 simple cases had carotid exposures less than 1cm and the defects were above the stylopharyngeus muscle, not in the dependent portion where saliva pooling occurs. We used local hemostatics for secondary healing and all patients were well re-epithelialized after several weeks.

For high risked 3 patients, we prepared for local coverage flaps - buccal myomucosal flap with fat pad transposition - on the oropharyngectomy site. There were no flap failures or postoperative wound complications after 1 year with both cases.

Based on experience, obsessive preoperative evaluation, concurrent neck dissection, dissection with the indocyanine green (ICG) firefly technique, and preparation for local flaps were the breakthrough to prevent bleeding. During preoperative evaluation, tortuous or kinked ICA must be seeked prior to dissection to prevent undesired events. Concurrent neck dissection with full exposure of the carotid arteries aids preparation for lingual artery ligation or hemostasis in advance. Utilization of the robot-built-in indocyanine green (ICG) firefly technique visualizes arterial structures and allows meticulous dissection with the magnified view.

Buccal myomucosal flaps provide mucosal sensation in a short recovery time with a low risk of failure in multi directions. These local flaps were performed on patients with more than 1-cm of carotid exposure beyond the SPM. The stylopharyngeus muscle was the key important borderline structure whether to decide on coverage with local flap for oropharyngeal defects. Decision between secondary healing or buccinator myomucosal flap should depend on the size of the exposure and the depth beyond the stylopharyngeus muscle.

Obsessive preoperative evaluation, concurrent neck dissection, dissection with the indocyanine green (ICG) firefly technique, and preparation for local flaps should always be considered in TORS lateral oropharyngectomy.

Da Hee Kim, Joo Hyun Kim, Youngmin Moon, Se-Heon Kim
Yonsei University, Seoul, Korea
Can TORS be performed safely for the treatment of residual or recurrent oropharyngeal squamous cell carcinoma after concurrent chemo radiation?

T.Sagardoy*(1), S.Van der vorst(2), G.Lawson(3)

(1)Otolaryngology, skull base surgery and pediatric ENT department, Bordeaux university hospital, Bordeaux, France, (2)ENT department, CHU-UCL Namur, Belgium, (3)UCL Louvain, Belgium

Objective: The aim of this work was to assess the feasibility and safety of salvage trans oral robotic surgery (TORS) for oropharyngeal squamous cell carcinoma (SCC) in a group of patient who previously underwent concurrent chemo radiotherapy.

Methods: Patients with a diagnosis of residual or recurrent oropharyngeal SCC AND a previous external primary or adjuvant chime-radiation, were prospectively included. Exclusion criteria were: limited oral access to the tumor; bony structure invasion; large neck lymph node with carotid invasion. This present case series were retrieved from our tertiary center TORS database (2008 to 2016). Surgical feasibility, per operative complications, post operative course were analyzed.

Results: Nineteen patients were enrolled (mean age: 62 ± 7 years; 16 males; median follow-up 20 months [1-53]). The TORS procedure was performed at a median time of 18 months [3; 103] after radiotherapy completion. The tumour stages were T1: n=8; T2: n=8; T3: n=3. All resections showed negative margins. In 13 cases, the margin was < 1mm, but the systematic complementary mucosal resection were disease free in all cases. Twelve patients presented a recurrent disease (7 on the local site, 3 on a cervical lymph node, and 2 distant metastases.). One postoperative bleeding occurred, with the need of a new surgical procedure to control it. The most frequent complication was dysphagia (8/19). A nasal feeding tube was systematically placed; it has been removed for 13 patients with a median time of 30 days [5; 545]. Four per protocol preventive tracheostomy were performed, one patient had to keep it permanently because of major swallow disorder. The 2-year overall survival rate was 66.9%; the 2-year disease recurrence-free survival was 33.6%.

Conclusion: TORS for oropharyngeal SCC could be safely performed as a salvage surgery after chemo-radiation, with no major complication rates. Tracheostomy might not be systematic. The need for new adjuvant radiotherapy has to be discussed for selected patients, regarding the recurrent-disease rates. Salvage TORS for oropharyngectomy might be safe and feasible. It offers a minimally invasive and effective therapeutic option.
Clinical and functional outcomes of salvage transoral robotic surgery: a comparative study

C.Gauche*(1), L.Chaltiel(1), E.Chabrillac(1), A.Dupret-bories(1), G.De bonnecaze(2), B.Vairel(1), T.Filleron(1), S.Vergez(1)

(1)IUCT-Oncopole, Toulouse, France, (2)CHU Larrey, Toulouse, France

Background: The main purpose of the study was to compare the clinical and functional outcomes of transoral robotic surgery (TORS) after previous radiotherapy group (PRG) or as a primary treatment group (PTG) for head and neck carcinoma

Methods: The data from patients who were treated by TORS from 2009 to 2016 were analyzed retrospectively. Clinical and functional outcomes were compared according to the rate of perioperative complications, requirement of a gastrostomy tube, and tracheotomy in the radiotherapy group and primary treatment group. These same results were analyzed according to the tumor localization (pharyngeal or laryngeal).

Results: Forty-nine patients were included (12 in the PRG and 37 in the PTG). No differences in clinical outcomes or perioperative complications were detected between the groups. Functional outcomes tended to be more difficult in the PRG than in the PTG (tracheotomy: 41.7% vs. 18.9%; p = 0.1359; gastrostomy: 41.7% vs. 16.2%; p = 0.6594). No differences in the clinical outcomes were found for pharyngeal or laryngeal lesions. We found more preventive tracheotomy for laryngeal lesions in radiotherapy group than in primary treatment group (n = 3 (75%), n = 2 (12.6%), p = 0.0320).

Conclusion: Our study confirms that TORS is therapeutic for patients undergoing salvage surgery. However, patients must be prepared to receive tracheostomy and gastrostomy tubes.
Evolution of Surgical Technique in dealing with SCM muscle and Spinal accessory nerve in Robotic Modified Neck Dissection

(1)Yonsei University College of Medicine, Seoul, Korea, South

Purpose: The authors have previously verified the feasibility and oncologic safety of robot-assisted neck dissection (RAND) with comparative analysis of conventional neck dissection. Since the adoption of the upgraded da Vinci Xi model, we were able to refine the technique and provide the patients with an improved postoperative results. This study introduces our initial surgical experiences of the upgraded RAND technique without dissecting and elevating the sternocleidomastoid (SCM) muscle. More specifically, we proved the surgical feasibility and oncologic safety of Retroauricular(RA) robotic neck dissection.

Methods: Five patients received RAND with the former technique of lifting the SCM and five patients underwent RAND with the SCM laterally retracted. We analyzed and compared total operation time, Hospital stay, retrieved lymph node, postoperative neck discomfort, numbness, and acute complications.

Results: All of the 10 patients received RAND of levels II-V followed by retroauricular thyroidectomy for thyroid cancer with cervical metastasis. There were no significant differences in the number of retrieved lymph node, perioperative complication rate. The average total operation time was 219.6 min for RAND with SCM elevation and 170.4 min for RAND with lateral retraction of SCM. The average hospitalization period was 7.8 days for RAND with SCM elevation and 6.7 days for RAND with lateral retraction of SCM. Patients who received the RAND with the new technique showed less degree of hypesthesia and paraesthesia than the patients who received RAND with the former technique.

Conclusion: The refined RAND technique could preserve the cervical plexus with less trauma to the spinal accessory nerve and could provide the patient with an improved postoperative results in terms of neck sensation. Also the total operation time could be reduced and postoperative recover period shortened. Further studies are warranted with larger number of patients to verify the newly developed surgical technique of RAND.
Experience in Robotic Transoral Surgery (TORS) at Clinica Las Condes

L.Cabezas*(1), F.Cardemil(2), F.Krause(2), R.Montes(2), F.Panussis(2)

(1)Clinica Las Condes, Santiago, Chile, (2)Clinica Las Condes, , Chile

Luis Cabezas, Felipe Cardemil, Francisco Krause, Rodrigo Montes, Felipe Panussis

Department of Otolaryngology and Head and Neck Surgery, Clinica Las Condes, Santiago, Chile

Purpose of the study: Robotic transoral surgery (TORS) has become a valid alternative for the treatment of oropharyngeal tumors, parapharyngeal space tumors, supraglottic tumors and others, as well as tongue base management in obstructive sleep apnea syndrome. The aim of this study is to describe the results of TORS treatment in patients treated at Clinica Las Condes.

Material and Methods: Clinical series of patients with upper airway tumors treated with TORS in the departments of otolaryngology and head and neck surgery at Las Condes Clinic in the years 2015 and 2016.

Results: A total of 8 patients were treated during the study period. One patient was treated of a left palatine tonsil squamous cell carcinoma T2N1M0, which was treated with exclusive surgery by lateral oropharyngectomy with negative margins and ipsilateral selective dissection. The second case corresponds to a patient with an adenoid-cystic carcinoma of the tongue base, who underwent resection of the base of the left tongue, achieving excision with negative margins. Three cases correspond to patients with severe tongue base hyperplasia suspected of having a lymphoma, with a lingual tonsillectomy with complete resection of lingual tonsils, the biopsy of which indicated non-specific lymphatic hyperplasia. One patient underwent a tongue tonsillectomy for obstructive sleep apnea syndrome. One patient underwent resection of a recurrent preepiglottic cyst. One patient was operated on for a relapsed Eagle syndrome.

Conclusion: TORS is a useful and effective alternative for the management of selected tumors of the upper airway tract and of tongue base hyperplasia. It is important to achieve adequate training and accreditation in order to be able to use robotic surgery in the proper management of patients with these conditions.
Feasibility study and oncological outcome of TORS for Stage I and II HPV negative Supraglottic cancers: Interim analysis.

S.Dabas*(1), K..(2), A.Sharma(2), R.Ranjan(2)

(1)Rajiv Gandhi Cancer Institute and Research Centre, , India, (2)RGCI&RC, , India

BACKGROUND:

The aim of this study was to determine technical feasibility, safety and adequacy of surgical margins and oncological outcome for transoral robotic surgery (TORS) in stage I and II supraglottic cancers.

METHODS:

From February 2014 to May 2016, 46 patients with supraglottic lesions underwent TORS with or without neck dissection using the da Vinci® Surgical system. Data recorded on surgical time, blood loss, complications, functional and oncological outcome of patients.

RESULTS:

46 patients (44 males and 2 females) underwent TORS, with ipsilateral neck dissection in 40 of the patients and bilateral in 12. Mean age at presentation was 62.9 years. Most common site of primary was Arye-epiglottic fold in 22 (47.8%) patients, rest being epiglottis in 16 (34.8%) and Pharyngo-epiglottic fold in 6 (13%) patients. Twenty-two (47.8%) patients were cT1N0 and 24 (52.1%) were cT2N0 at presentation. All patients underwent Neck dissection first and TORS subsequently in the same sitting. Average robotic operative time was 42.9 min. Average blood loss during surgery was 33 ± 15ml. Superior laryngeal artery ligation was done in 31 patients. One patient had to be converted to open because of difficulty in access due to trismus. A positive or close margin was seen in 12 patients (26%) on frozen, which were revised intra-operatively. On final histology 3 (6.5%) patients had margin < 5mm. Average closest margin on final histology was 6.2mm. Twenty four (52.1%) patients required tracheostomy, and 11 (23.9%) patients underwent percutaneous endoscopic gastrostomy for feeding. All except 3 patients were successfully decannulated after surgery. Six (13%) patients were dependent on long term Ryles tube/PEG feeding. Patients started tolerating oral feeds within two week of procedure (mean 13.4 days), with the nasogastric tube removed within two to three weeks post-op (mean 20 days). Of the 46 patients, 41 (89.1%) patients were HPV negative. Follow-up ranged from 7 to 32 months with an average follow-up of 18 months. One patient was lost to follow-up; 4 (8.7%) patients expired due to other causes. Four (8.7%) patients had locoregional recurrence on follow-up. Thirty seven (80.4%) of the patients are on regular follow-up with no evidence of disease and are doing well.

CONCLUSION:

TORS is a safe, feasible, minimally invasive and oncologically safe procedure in patients with early supraglottic cancers. It has the least morbidity and offers benefits in terms of early airway and feeding rehabilitation and can avoid complications resulting from radiation therapy for these patients.

A.Sharma*(1), S.Dabas(2), K..(3), R.Ranjan(3)

(1)Rajiv Gandhi Cancer Institute and Research Centre, India, (2)RGCI& RC, India, (3)RGCI&RC, India

Background:
Incidence of oropharyngeal squamous cell carcinoma is on the rise in developing countries like India. With advent of Transoral resection techniques, especially Transoral robotic assisted surgery, increasing number of patients are being subjected to surgical resection. Objective of this study is to determine the incidence of hemorrhage post transoral robotic surgery, its risk factor and steps to reduce or prevent it.

Methods:
A retrospective chart review of 326 patients undergoing transoral robotic assisted surgery from March, 2013 to September, 2016 for oropharyngeal carcinoma was done for incidence of post TORS hemorrhage and its risk factors. Data was collected for history of prior irradiation, transcervical vessel ligation and incidence of post-operative hemorrhage. Data was analyzed using SPSS 22.0 software.

Results:
A total of 326 patients (279 males and 47 females) were operated for TORS by daVinci® Surgical system for oropharyngeal carcinoma. Mean age of presentation was 57 years. Concomitant neck dissection (either ipsilateral or bilateral) was done in 297 (91.1%) patients. Transcervical ECA branch (Single vessel: Lingual artery or Two vessel: Lingual and Facial artery) ligation were done in 179 (60.6%) patients. Twenty two (7.4%) patients had bleeding from surgical site post-operatively. Mean day of bleed was the post-operative day 8. Nine (3.1%) patients required some form of surgical intervention for their bleed. Of the 22 patients who bleed, 12 (54.5%) patients had one or two vessel ligation, whereas 10 (45.5%) patients did not undergo any vessel ligation (p=0.76). Bleeding was less frequent in vessel ligated patients (12 of 179 (6.7%) vs 10 of 118 (8.5%)). Though, this was not statistically significant (p=0.385), there was a trend towards decreased incidence of bleed in patients with prophylactic vessel ligation. There was no statistical difference in incidence of bleed between patients with prior history of irradiation as compared to treatment naïve patients.

Conclusion:
TORS for oropharyngeal carcinoma is safe and incidence of post TORS hemorrhage is rare, but can be life threatening. Prophylactic transcervical ECA branch ligation tends to decrease the frequency of post-TORS bleed but it is not statistically significant. Prior irradiation does not increase the incidence of hemorrhage post TORS.
Innovative minimally invasive Transoral Robotic Surgery (TORS) for sellar tumors with the da Vinci: first patients’ experience

D. Chauvet*(1), G. Lot(2), S. Hans(3)


Purpose:
From preliminary cadaveric and anatomical studies(1,2), we hypothesized that the sella could be approached by TORS using the da Vinci system (Intuitive Surgical, Sunnyvale, Ca, USA), in order to avoid the rhinologic side effects of classical endonasal surgery and to offer a new visualization of the sella.

Materials and methods:
We proceeded to a prospective study on patients with sellar tumors, after specific selection (particularly mouth aperture (2)). During surgery, soft palate was left intact and retracted. The three robotic arms were inserted in the oral cavity. A U-shape mucosal flap was dissected on the posterosuperior face of the cavum by the head and neck surgeon at the console (SH). Then the sphenoid sinus and the sella were drilled by the neurosurgeon at the bedside (DC), as no drilling instrument exists so far. The tumor was removed and the mucosal flap reapplied. The main outcome measure was the sellar accessibility and all postoperative usual outcomes (particularly potential TORS side effects) were collected.

Results:
Four females (mean age 49 y o) with compressive sellar cystic tumors, which were revealed by bitemporal hemianopsia, were included. In all cases, TORS allowed a wide exposure on the cavum and the sella. All tumors were approached safely and then removed. All patients recovered from their visual defect. One patient had a delayed CSF leak and another one a diabetes insipidus. No patient suffered from rhinologic inconvenience. All patients had minor transient soar throat and three patients had a transient hypernasal speech. On all postoperative MR, satisfying chiasmatic decompressions were observed. One case had a partial removal.

Conclusions:
We present the first minimally invasive TORS for sellar tumors. This innovative approach needs dedicated tools and a longer series of course. But it seems promising, especially for large suprasellar extension. Indeed the tumor is approached with an inferosuperior axis that corresponds to the tumor growth direction, instead of the anteroposterior axis of endonasal surgery.


Is submandibular Gland Sparing Neck Dissection along with Transoral Robotic Surgery for Oropharyngeal cancers oncologically safe in cN0 patients? An Institutional review.

R.Ranjan*(1), S.Dabas(2), K..(2), A.Sharma(2)

(1)Rajiv Gandhi Cancer Institute and Research Centre, India, (2)RGCI, India

Objective:
This study is aimed to see the incidence of oro-cervical communication during the surgery and level Ib nodal recurrence on long-term follow-up in patients with cN0 stage who underwent simultaneous submandibular gland sparing neck dissection and Transoral Robotic Surgery.

Methods:
From March, 2013 to September, 2015 a total of 92 patients of oropharyngeal carcinoma who underwent submandibular gland sparing neck dissection with TORS using daVinci Surgical system were followed up for the incidence of oro-cervical communication during or after surgery and rates of level I recurrence on long-term follow-up.

Results:
A total of 92 (69 males and 22 females) patients of oropharyngeal and supraglottic squamous cell carcinoma operated between March, 2013 to November, 2015 were followed. All patients were cN0 at the time of surgery. All patients underwent Submandibular gland sparing neck dissection followed by TORS by daVinci® Surgical system at the same sitting. Mean age at presentation was 47.9 years (32 to 88 years). Sixty seven (73.7%) patients were treatment naïve and 25 (26.3%) were salvage cases that had received some prior treatment in the form of radiation or chemoradiation, but were N0 even before the initial treatment. Follow-up ranged from 12 months to 43 months, with the mean follow-up of 27 months. Only 1 (1.1%) patient developed oro-cervical communication during surgery and was managed conservatively. A total of 4 patients developed nodal recurrence on long-term follow-up, out of which only 1 (1.1%) patient developed nodal recurrence at level I.

Conclusion:
Transoral robotic surgery with parallel Neck dissection is safe, feasible and cost effective option. A submandibular gland sparing neck dissection in cases of oropharyngeal carcinomas is an oncologically safe option and can avoid complications like oro-cervical communication, marginal mandibular nerve palsy and dryness of mouth post-radiation.
New endoscope holder for sinus and frontal skull base surgery.

J.Kristin*(1), P.Kraus(2), R.Geiger(2), J.Schipper(3), T.Klenzner(4)

(1)Department for otorhinolaryngology, Head and neck surgery; University Hospital Duesseldorf, Duesseldorf, Germany, (2)Aktormed GmbH, Barbing, Germany, (3)Department for Otorhinolaryngology, Head and Neck Surgery, University hospital Duesseldorf, Duesseldorf, Germany, (4)Department of Otorhinolaryngology, Head and Neck Surgery, University hospital Duesseldorf, Duesseldorf, Germany

Purpose of the study: Minimal invasive surgery in head and neck surgery has stepped forward through the use of endoscopic techniques. Today, as a result of improvements in optics and instrument design in combination with image-guided surgery, endoscopic procedures establish more surgical options and new accesses to the operative field. Furthermore there are efforts to optimize surgical procedures and to minimize the surgical risks. It has been shown that a third hand is useful for holding the endoscope during endoscopic surgery. Hereby are both hands of the surgeon free for instrumentation.

The aim of our study is to modify the SOLOASSIST camera holder (AktorMed GmbH, Germany), which is used for abdominal surgery, for head and neck surgery.

Material and Methods:

In the first step we proofed the feasibility of the original active camera holding system Soloassist on anatomical specimens in the area of the nose, nasopharynx and larynx. In the next step intraoperative movements of the hand-held endoscope during sinus surgery, rigid laryngoscopy, and lateral skull base surgery were measured and calculated. Additionally we measured forces that occur intraoperatively during sinus surgery. We drafted different technical concepts and discussed the advantages and disadvantages of the systems. Next, we designed a computer-aided design (CAD) model. Finally, the first production prototype was produced and we used it for a frontal skull base procedure on an anatomical specimen. In the last stage of development the technicians implemented additional axes and an ergonomic endoscope clamp to fulfill all our needs. With the final endoscope holder ENDOFIXexo we successfully performed sinus surgery on anatomical specimens.

Result:

In the first anatomical studies we could present an ergonomic set-up. The third hand enabled a still and clear picture without undesired camera movement and all instruments were controlled by the surgeon. Different disadvantages were shown and the necessity for technical changes was given. Based on many applications of the developed new holder on anatomical specimens we found a successful concept for the new endoscopic camera holder.

Conclusion: Many technical changes of the original holder and different applications on anatomical specimens were necessary to adapt and finally develop an endoscopic holder for the use in the field of head and neck surgery. We can demonstrate a problem-free application for sinus surgery on anatomical specimens. In a further step, the endoscope holder is applied to the patient.
Novel clinical trial of neoadjuvant chemotherapy plus transoral robotic surgery with customized adjuvant therapy in patients with T3, T4 oropharyngeal cancer

S. Kim*(1)
(1)Yonsei University, , Korea, South

Objective: We analyzed the oncological and functional result of transoral robotic surgery in T3 and T4 oropharyngeal cancer to affirm oncological safety as well as rapid functional recovery of patient who underwent transoral robotic surgery.

Material and methods: Between April 2008 and April 2016, 92 patients with oropharyngeal cancer were treated by transoral robotic surgery. We analyzed only 26 patients who diagnosed T3, T4 oropharyngeal cancer. We assessed overall and disease-free survival by Kaplan-Meier method, and we evaluated patients’ subjective swallowing status.

Results: Twenty-seven patients were tonsil cancer and 4 were tongue base cancer. Transoral robotic surgery was carried to resect T3 (54%) and T4 (46%) tumors, 11% of patients had stage III, and 89% of patients had stage IV. 16 patients (62%) had clear surgical margin. Overall survival at 5 years was 84% and disease-free survival was 75%. Oral diet was tolerable after a mean of 6.5 days. Most patients showed favorable swallowing ability based on FOSS score. All patients could breathe and phonate without permanent tracheotomy.

Conclusion: The oncological and functional results of transoral robotic surgery were acceptable for the treatment of oropharyngeal cancer. Transoral robotic surgery is a valid treatment for selected patients with advanced oropharyngeal cancer.
Oncologic Outcomes with transoral robotic surgery for supraglottic squamous cell carcinoma: Experience of a French evaluation cooperative subgroup of GETTEC

M. Doazan*(1)

(1)Hôpital de la Croix-Rousse - Hospices civils de Lyon, Lyon, France

Background: The development of transoral laser microsurgery (TLMS) in the 1970s paved the way for the concept of minimally invasive surgery. The rapid progress of this technique over recent decades resulted in low morbidity and sequelae inherent in laryngectomies previously performed transcervically. However, in the context of tumors not limited to the glottic plane, this technique requires trained teams, with a long and difficult learning curve. Thus, transoral robotic surgery (TORS) seems particularly suitable for supraglottic tumors, among other localizations of squamous cell carcinoma (SCC). Many studies highlighted good clinical outcomes and feasibility of this technique, showing lower numbers of tracheotomy, shorter hospital stay, and faster food recovery. However, the oncological results of TORS have rarely been explored, often with reduced numbers of patients or with a short follow-up.

Methods: We conducted a French multi-center study using a case series with planned date collection from 2008 to 2015. We included patients with supraglottic carcinomas treated by TORS, with a minimum follow-up of 2 years. The primary endpoint was local control, the secondary endpoints were regional control, overall survival, and disease-specific survival.

Results: 117 patients (88 male, 29 female) were included in the study, the mean follow-up was of 41 months. Primary subsites included: epiglottis in 65 (56%) patients, lateral epilarynx in 39 (33%) patients, and medial wall of the piriform sinus in 13 (11%) patients. Permanent pathologic examinations revealed that 8 patients (6.8%) had positive surgical margins, 49 (41.9%) had close margins (lower than 3 mm) and 60 (51.3%) had negative margins. Adjuvant radiotherapy was necessary for 61 of the 117 patients (52.1%), and in 16 patients (13.7%) because of close or positive margins.

There were 14 local recurrences and 3 regional recurrences. The mean time to notice a local recurrence was 26 months. Local and regional control were reached in 88% and 85.5% of the population respectively.

Fifteen patients (12.8%) died during the follow-up period of various causes not linked to the carcinoma, and 3 patients died of postoperative adverse events, leading to an overall survival of 78%. The 2-year disease-specific survival was 92.3%.

Conclusion: The results of this large multicenter study indicates that TORS is a good option to treat patients with supraglottic carcinoma. The local control is close to those already published with TLMS and transcervical approach. Furthermore, with this technique, 48% of the patients didn't need an adjuvant treatment.
Oncological outcome following de-intensification of treatment for Stage I and II HPV negative Oropharyngeal cancers following single modality treatment by TORS: An interim analysis.

K..*(1), S.Dabas(1), R.Ranjan(2)

(1)Rajiv Gandhi Cancer Institute and Research Centre, New delhi, India, (2)RGCI, , India

Objective:
This prospective study aimed to see the long-term oncological outcome of Transoral Robotic Surgery as a single modality treatment for cT1-T2 N0 HPV negative oropharyngeal malignancies.

Method:
From March, 2013 to October, 2015, 46 patients with early stage oropharyngeal carcinoma underwent TORS with neck dissection using the daVinci® Surgical system. Patients were followed and evaluated for disease free survival, overall survival, locoregional and distant metastasis.

Results:
A total of 46 patients (37 males and 9 females) underwent TORS for early stage oropharyngeal carcinoma. All patients underwent ipsilateral neck dissection and 12 patients underwent bilateral neck dissection. None of the patients received any adjuvant treatment in the form of radiotherapy or chemoradiotherapy. Mean age at presentation was 59.4 years (37-88 years). Most common site of involvement was the BOT in 24 (52.1%) patients. Other sites were, tonsil in 18 (39.2%); soft palate in 3 (6.5%) and Posterior pharyngeal wall in 1 (2.2%) patients. Nineteen (41.3%) patients were cT1 and 27 (58.7%) were cT2 at the time of surgery. The follow-up ranged from 13 to 44 months with an average follow-up of 29 months. During the follow-up, 2 (4.3%) patients recurred locally, 3 (6.5%) patients had nodal recurrence and 1 (2.1%) patient had distant metastasis. Two patients expired due to causes other than malignancy. Thirty eight (82.6%) patients were disease free on an average follow-up of 29 months with an overall survival of 89.1% at mean follow-up of 29 months.

Conclusion:
Transoral Robotic Surgery as a single modality treatment is a good option for cure in relatively radio-resistant HPV negative early resectable oropharyngeal malignancies. TORS can be used to de-intensify the treatment of early stage oropharyngeal carcinoma and thus avoid the early and late toxicities associated with Radiotherapy/Chemoradiotherapy.
Open maximal mucosa-sparing functional total laryngectomy

P.Dulguerov*(1)

(1) SERVICE D’OTO-RHINO-LARYNGOLOGIE, Geneve, Switzerland

Background: Total laryngectomy after (chemo)radiotherapy is associated with a high incidence of fistula and therefore flaps are advocated. The description of a transoral robotic total laryngectomy prompted us to develop similar minimally invasive open approaches for functional total laryngectomy.

Methods: A retrospective study of consecutive unselected patients with a dysfunctional larynx after (chemo)radiation that underwent open maximal mucosal sparing functional total laryngectomy (MMSTL) between 2014 and 2016 is presented. The surgical technique is described and the complications and functional outcome are reviewed. The technique retains the main advantages of the transoral robotic laryngectomy: 1) minimal neck incisions, 2) maximal mucosa sparing, 3) minimal pharyngotomy defect, 4) minimal lateral dissection towards the carotid sheath, 5) horizontal closure, and 6) preservation of prelaryngeal muscles, allowing minimizing the risk of fistula.

Results: Ten patients underwent MMSTL. Their average age was 71 ± 9 years. The average BMI was 18.7 ± 8. They all had a dysfunctional larynx and swallowing, with 90% already having a feeding tube and 50% having a tracheostomy in place.

The average duration of surgery was 121 ± 32 minutes. The average hospital stay was 20 ± 4 days for the entire cohort and 17 ± 2 days for the patients without fistula.

Only one patient developed a post-operative fistula requiring a suprascapular pandiculated fascio-cutaneous flap for closure.

Conclusions: MMSTL could be used to perform functional total laryngectomy without a robot and with minimal incidence of complications.
Our Robotic Surgery Experience Thyroidectomy of Graves' Disease: is it a Feasible and Safe procedure?

E.Najjar*(1), N.Cornu(2), P.Aidan(2), G.Boccara(2), R.Feinmesser(1)
(1)Rabin Medical Center - Beilinson Hospital, , Israel, (2)American Hospital of Paris, , France

Abstract

Background:
Thyroid surgery is in a state of evolution from traditional open approaches to novel robotic techniques. The learning curve for transaxillary-robotic thyroidectomy is rather steep; reasonable progress in terms of operating times can be achieved within few cases. However with more cases the standard becomes wider and more complicated cases such as large thyroid carcinomas, Goiter and Graves' disease can be deal well. Graves's is always challenging for surgeon, moreover to be done by transaxillary-robotic assist.

This paper presents what the authors believe to be the largest cohort of patients reported in world undergoing transaxillary-robotic thyroidectomy due to Graves’ disease with the aim of defining the feasibility and the safety of this procedure.

Material and Methods:
The files of patients who underwent robotic-assisted thyroidectomy at the American Hospital of Paris during 2010 – 9/2016 were reviewed.

503 patients were operated during this period and underwent transaxillary-robotic surgery. All patients were operated by one surgeon at one clinical center. Archived Files of all patients with known Graves’ were reviewed and analyzed.

Reviewed data included patient characteristics, pathological characteristics and extent of surgery, intra and postoperative complications, Follow up including thyroid function and neck US post-surgery. The mean follow-up time was 24.6 months.

Results:

42 patients were included, three males and 39 females. Mean age at surgery was 37.2 years.

Although large amount of bleeding were reported in operation time from the thyroid gland, good hemostatis control was obtained by the surgeon, no case was converted to open approach due to bleeding or any other reason.

Two cases (4.7%) demonstrate hematoma in the working space was re-operated by robotic assist, the bleeding notice to be from the working space with no cervical or tracheal compression.

No major events - tracheal damage, major vessel bleeding or recurrent laryngeal nerve injuries - were noted.

Three patients (7.4%) had temporary hypocalcemia after the surgery that was corrected by medicament supply and resolved after 3-5 days.

Conclusions:
In conclusion, the transaxillary robotic approach to thyroid surgery is fast becoming a viable alternative to open or endoscopic methods and has been predicted to become the standard technique for thyroid surgery in the future. The indications for this technique are continually expanding; Robotic gasless transaxillary thyroidectomy is a technically feasible and safe procedure for the patients with Graves’ disease that results in a scar-less outcome on the neck.
Radiographically Enchanced Airway Clinical Tool (REACT) in Transoral Robotic Surgery (TORS) - Feasibility and Preliminary Observations

C.Rassekh*(1), J.Atkins(2), C.Aguilar(1), G.Weinstein(1), B.O'malley(1), X.Quan(1)

(1)University of Pennsylvania, Philadelphia, United States, (2)University of Pennsylvania Department of Anesthesiology, Philadelphia, United States

The purpose of this study is to provide preliminary results of our study utilizing a new airway clinical evaluation which we call "REACT" and to see if it can have utility in identifying or categorizing patients prior to Transoral Robotic Surgery that may have difficult airway problems or difficult exposure.

Methods: A comprehensive airway evaluation tool which included specific history, physical examination and radiographic criteria was used for preoperative assessment of patients undergoing Transoral Robotic Surgery (TORS). The term REACT (Radiographically enhanced airway clinical tool) was created to identify this evaluation. The clinical evaluation of this tool requires taking numerous anatomical measurements and the imaging component of this evaluation involves measurements on sagittal cross-sectional imaging. Patients scheduled to undergo Transoral Robotic Surgery or Sialendoscopy procedures were included in this study. Patients underwent a preoperative assessment which included a large set of criteria that have been associated with difficult laryngoscopy or difficult intubation. Subsequently, during surgery, the anesthesiologist was asked to provide the Cormack and Lehane intubation grade, method of intubation, number of attempts and other relevant airway issues. The attending surgeon was asked to grade the surgical exposure as easy, medium or difficult. The data was collected prospectively. Additional information for the REACT tool was added retrospectively from medical records and imaging study assessment.

Results: From July 2013 to August 2016, 175 patients were enrolled in the study. To date, we have identified 31 patients in whom the designation of "difficult airway" was considered relevant either as a result of challenging intubation or difficult surgical exposure. The clinical and imaging features of these 31 patients was reviewed. The data is remarkably heterogeneous. Observations including the availability of appropriate imaging for the radiographic assessment, imaging findings and the presence or absence of a "safety triangle" on sagittal imaging as well as the impact of videolaryngoscopy on the POGO score (percentage of glottis opening) demonstrated that a multifactorial airway scoring system involving numerous components of the assessment is required.

Conclusion: The preliminary findings of our study suggest that all of the data we have been collecting is relevant but that there are some patients whose difficulties are possibly predictable but not by criteria currently included in the study. As a result, additional radiographic criteria are being evaluated. Our techniques of measurement, findings of the patients with difficult or borderline airways/exposure will be elaborated.
RALP: Robot-assisted Laser Phonomicrosurgery provides precise and intuitive laser micromanipulation for uniform resections

N.Deshpande*(1), G.Barresi(1), L.Guastini(2), F.Mora(2), L.Mattos(1), G.Peretti(2)

(1)Istituto Italiano di Tecnologia, , Italy, (2)Ospedale San Martino, Università degli Studi di Genova, , Italy

Purpose of the study:

1. Enhance the surgical quality and effectiveness in traditional transoral laser microsurgeries (TLM)
2. Provide an ergonomic, intuitive, and easy-to-use surgeon-machine interface with robot-assisted laser micromanipulation
3. Improve precision, safety, controllability, and surgical efficiency
4. Introduce assistive technologies for intraoperative planning and automatic execution providing controlled and uniform resections and ablations

Materials and Methods: The RALP system consists of:

(i) Novel motorized laser micromanipulator: with 2 degrees-of-freedom precise motion control of the laser deflection mirror. The system is designed to be attached to state-of-the-art surgical microscope while allowing unobstructed view of the surgical site.

(ii) State-of-the-art commercial laser system – the DEKA SmartXide2 with the UniMax2000EWD reflective laser focusing optics and beam-splitter (laser deflection) mirror.

(iii) State-of-the-art surgical microscope: allowing direct line-of-sight of the site.

(iv) Graphics Stylus with Tablet: integrated with the motorized laser micromanipulator, this component allows intuitive, pen-like control of the laser deflection mirror, dramatically simplifying the surgeon-machine interface. It allows precise and effortless laser aiming as against the traditional manual joystick-based control available in state-of-the-art commercial systems.

The RALP system introduces assistive features for the surgeon, heretofore unavailable in state-of-the-art systems:

(i) stylus-based laser aiming: through a comfortable, ergonomic, and easy-to-learn pen-like device;

(ii) intraoperative scan patterns for automatic resection: The stylus can define virtual scan patterns in the surgical area which the motorized laser micromanipulator can automatically execute. This allows incision planning of pre-defined paths as well as ablation planning of pre-defined regions in the surgical area.

(iii) gesture scaling for increased precision: where the surgeon is relieved from making constrained hand gestures for laser aiming and manipulation.

The new system was tested in the month of June 2016. Real surgical procedures, e.g., cordectomy, were implemented using ex-vivo pig larynxes for qualitative performance evaluation with 57 expert and novice surgeons.

Results: The surgeons were given qualitative questionnaires with scores on the 1-7 Likert-type scale. Surgeons evaluated the RALP system to be easier-to-use and learn and to be an
improvement over the state-of-the-art systems in TLM. The smooth and precise micromanipulation provided improved quality of cut through both large and fine resections, and reduced carbonization. The intraoperative planning freed up one hand of surgeons allowing better surgical access and safer execution of resections. The overall effect was a significant improvement in the surgical quality while reducing the stress and fatigue during the surgery.

Conclusion: The new RALP system provides improved safety, precision, control, ergonomics, and intuitiveness along with better surgical outcomes in TLM.
Recent Progress of Retroauricular Robotic Thyroid Surgery after Introduction of the New Surgical Robotic System: Single Institute 3 years' Experiences


(1)Yonsei University College of Medicine, Seoul, Korea, South

Background: Previously, we reported the feasibility of various robotic neck surgeries including retroauricular (RA) robotic thyroidectomy. Despite its promising surgical outcomes, there were certain mechanical limitations inherent to the da Vinci Si System (Intuitive Surgical Inc., Sunnyvale, CA, USA). Since the introduction of the newly upgraded model, the Xi System, by the Intuitive Surgical in 2014, it has been heavily incorporated into our surgical practice. Here we describe the differences in our surgical methods when performing the RA robotic thyroidectomy and its treatment outcomes between the Si and Xi system.

Methods: There were a total of 165 consecutive patients who received RA robotic thyroidectomy from January 2013 to February 2016 at our institution. The patients were divided into two groups: 125 patients received the surgery using the former Si system, and the remaining 40 patients received the robotic thyroidectomy using the new Xi system.

Perioperative and clinical outcomes were compared and analyzed.

Results: All RA robotic thyroidectomy operations were successfully completed without any significant intraoperative complications. There was no conversion to open surgery. The biggest advantage of the Xi system during RA robotic thyroidectomy, compared to the Si system, was the addition of the 3rd robotic instrumental arm which is thinner and longer and resulted in a significantly shorter operative time for total thyroidectomy in the Xi group (180 min vs 130 min, p=0.020). The operation time for total thyroidectomy with simultaneous modified radical neck dissection was also significantly shorter in the Xi group (274 min vs 243 min, p=0.006). Postoperative thyroglobulin levels were compared between the two groups for surgical completeness where there was no significant difference. The total numbers of retrieved lymph nodes for both of the central and lateral RANDs were comparable between the two groups. Compared to the Si group, the ERBE® energy system was used instead of Harmonic shears in the Xi group. There were no significant differences in postoperative complications such as vocal cord palsy, hypoparathyroidism, seroma, hematoma, chyle leak, mouth corner deviation, and skin flap ischemia.

Conclusion: The RA robotic thyroidectomy with the new Xi System can greatly facilitate the robotic surgery with comparable or improved surgical outcomes. Its application is expected to open up a new era of robotic neck surgery.
Rhinopharynx access by minimally invasive transoral robotic surgery: anatomical study

A. Harichane*(1), D. Chauvet(2), S. Hans(3)

(1) AP-HP, Montrouge, France, (2) Fondation Ophtalmologique Adolphe de Rothschild, Paris, France, (3) Hôpital Européen Georges Pompidou, Paris, France

Introduction: The rise of Transoral Robotic Surgery (TORS) in Oto-rhino-laryngology allows new approaches to areas that were until then hard to reach.

It has proven its efficiency in reaching the larynx and the oro-hypopharynx but was less considered as far as the rhinopharynx and the skull base were concerned.

This study was made to assess the possibilities and limits of minimally invasive transoral approach to the rhinopharynx using the Da Vinci surgical robot. Materials: It was conducted on eleven corpses, without need for palatine split, using surgical robots Da Vinci models S HD and Si HD mounted with a 30 degrees 3D camera, a monopolar cautery and a dissector. Mouth opening was carried out by a spreader, retraction of the soft palate by two catheters. Measurement of the mouth opening and of the length of the hard palate by fluoroscopy was conducted prior to the procedure. We have defined "anatomical key landmarks" on all sides of the rhinopharynx, in order to confirm our hypothesis. Results: All of the rhinopharynx could be visualized and transorally reached by the robot with a validation of all the key landmarks. The external retraction of the soft palate along with the 30 degrees angulation of the camera and the use of thin instruments made this minimally invasive approach of the rhinopharynx possible. At the same time, a sphenoid mucosal flap, the opening of the sphenoidal sinus and the resection of the pituitary gland transorally were conducted without difficulties. The anatomical differences between the subjects did not interfere. Discussion: The advantages and shortcomings of this technique were discussed, as well as the ability to use those results on human subjects. This study allowed us to show the possibility to access the rhinopharynx by minimally invasive transoral robotic surgery. This new technique opens a new field for surgery of the skull base or the cavum.
Risk Factors and management of Hematomas after ROBOTIC TRANSAXILLARY Thyroid or Parathyroid Surgery: Retrospective Analysis of a 520 Inpatient Sample Database. AUTHORS: Dr BECHARA Maroun, Dr BOCCARA Gilles, Dr DEROIDE Gregoire, Dr AIDAN Patrick. Hopital A

M.Bechara*(1)

(1)AMERICAN HOSPITAL OF PARIS, Neuilly sur seine, France

Purpose of the study

Hematomas post thyroid or parathyroid open surgeries is an uncommon but known and life threatening complication. Little is known about trans axillary robotic thyroid surgery and no data concerning hematomas and their management. Our purpose is to find risk factors related to robotic surgery and propose a management chart.

Methods

We conducted a retrospective study of 520 patients that underwent trans axillary robotic thyroid or parathyroid surgery between 1st April 2010 and the 31st October 2016, in a single center and by a single surgeon. We compared the hematoma population to the one without hematoma using student’s t-test and chi-square test. A p value≤0.05 was deemed statistically significant.

Results

The occurrence of post-operative hematomas was 2.69% (14/520) and 9 patients (1.7%) had surgical control of bleeding. Several risk factors were statistically tested. The hematoma population was significantly older and males are at higher risk. Our population characterized by two phases with Blake drain and then without Blake drain. No life threatening hematomas occurred and those who were managed surgically were controlled through the trans axillary approach except one case.

Conclusion

Robotics in thyroid and parathyroid surgeries is as safe as classic techniques concerning postoperative hematoma with no risk of airway compression. Main risk factors are the older age and the male sex. A management step by step chart is proposed.
Spondylodiscitis after transoral robotic surgery: about five cases in the French robotic group (GETTEC)

C.Carpentier*(1), S.Morinière*(1), B.David*(2), B.Lallemant*(3), R.Garrel*(4)

(1)CHRU Tours Bretonneau, Tours, France, (2)Centre François Baclesse, Caen, France, (3)CHU Nîmes, Nîmes, France, (4)CHRU Montpellier, Montpellier, France

INTRODUCTION: Few cases of cervical bone infections after pharyngeal surgery have been described in the literature, but none of them after transoral robotic surgery (TORS).

The aim of this study was to describe five cases of this complication in the French TORS group (GETTEC) and to assess the clinical, radiological, microbiological and therapeutical management of these potentially lethal complication.

METHOD: This multicenter retrospective observational study reported all patients affected by cervical spondylodiscitis after robotic pharyngeal cancer surgery in France, from 2008 to 2015 in the database of the French TORS group. The spondylodiscitis diagnosis was done by MRI or TDM for all the patients. The parameters studied were: TNM status, radiotherapy or not, tumor localization, clinical symptoms, biological markers, bacteriology and imaging results, treatment and follow up.

RESULTS: Five patients (three males and two females aged from 54 to 69 years) in four different centers were included in the study.

The five patients had a carcinoma of the posterior or lateral wall of the oropharynx or hypopharynx. The tumor stage was 2 T1 and 3 T2.

One patient had undergone radiochemotherapy after the TORS. Two of them had radiotherapy before the TORS. The delay between surgery and spondylodiscitis diagnosis was from 10 days to 2 months, with an average of 26.8 days.

Four patients presented with a neck pain (80%), associated with a scar defect in one case and with hemiplegia in a second case. One patient presented a confusion with a cardio respiratory stop.

Diagnosis of spondylodiscitis has been done by MRI in four cases and by TDM in one case. The bacterial agent were documented in 2 cases: Streptococcus contellatus, Cricobacter koresi. Four patients were treated by intravenous antibiotic, associate with a surgical management (1 drainage, 2 spine decompressions). The follow up showed one healthy evolution with no carcinological recurrence and no neurological impairment after 2 years, one neurological impairment (ataxia, hypoesthesia) and three deaths.

DISCUSSION: This is the first study that reports spondylodiscitis as a complication of TORS. Our multicenter study identified five patients in seven years in France. The spondylodiscitis is a rare but severe complication with a mortality of 60%. The TORS surgeon must be aware of this complication. Late neck pain, asthenia, elevation of inflammatory markers must alert the clinician. MRI is the most sensitive and specific imaging modality to diagnose spondylodiscitis and its possibly lethal complications such as epidural abscess.
The role of TORS in the treatment of oropharyngeal cancer.

G.Mercante*(1), R.Pellini(2), G.Cristalli(1), V.Manciocco(1), B.Pichi(1), G.Spriano(1)

(1)National Cancer Institute "Regina Elena", Rome, Italy, (2)National Cancer Institute "Regina Elena", Roe, Italy

Dr. Giuseppe Mercante and Prof. Spriano would like to present a brief history of the treatment of the oropharyngeal cancer (OPC) moving form open surgery to radiotherapy.

In 2009, the FDA approval of TORS for the treatment of OPC signed a new era for the surgical approach to those tumor. TORS avoids the morbidity due to the surgical approach as it happens with open approaches. Short hospital stay and the chance to correctly stage the patient with the adjunct of the neck dissection are two of the many advantages of the procedure in case of low stage tumors (T1-2 and N0-1). Some technical aspects will concern the biometric measures to consider in order to avoid difficult exposure. The management of the neck and the timing to perform it (concurrent or staged) will be presented. The levels to be dissected will be indicated on the evidence of the current literature. The risk to add radiotherapy and chemotherapy in case of advanced stage tumors is one of the most critical points to be discussed. Some videos will help the audience to appreciate the advantages of the technique. A review of the literature will help the participants to orient between the different therapeutic options (surgery alone vs surgery with adjuvant therapy vs radiotherapy or chemoradiotherapy alone).
The Universal Application of the Retroauricular Approach to the Neck incorporation with TORS


(1)Yonsei University College of Medicine, Seoul, Korea, South, (2)CHUV, UNIL, Switzerland, Lausanne, Switzerland, (3)University of Pittsburgh Medical Center, Pittsburgh, United States, (4)A. C. Camargo Cancer Center, Sao paulo, Brazil

Moderator

Eun Chang Choi, MD, PhD - Professor and Chairman, Yonsei University (Role: Moderator)

Presenter(s)

Christian Simon - Professor and Chairman, CHUV, UNIL, Switzerland

- Safe Implementation of TORS and Retroauricular Robotic Neck Surgery in Europe

Yoon Woo Koh, MD, PhD - Professor, Department of Otorhinolaryngology, Yonsei University College of Medicine

- Updates on Retroauricular Robotic Neck Dissection

Umamaheswar Duvvuri, MD, PhD - Assistant Professor of Otolaryngology, University of Pittsburgh Medical Center

A New Paradigm for the Management of the Unknown Primary : Incorporation with TORS and Robotic Neck Dissection

Luiz Paulo Kowalski, MD, PhD - Professor, A. C. Camargo Cancer Center, Head and Neck Surgery and Otorhinolaryngology Department

- Proposal of Global Prospective Multicenter Trial for Retroauricular Endoscopic & Robotic Surgery(RERS)

Renan Bezerra Lira, MD, PhD - Dr, A. C. Camargo Cancer Center, Head and Neck Surgery and Otorhinolaryngology Department

- Safe Implementation of Retroauricular Robotic Neck Surgery in Latin America

Program Description

Recent advances in technology has urged the introduction of surgical robotics in the field of head and neck surgery and changed the landscape indefinitely. Major applications of robotics in head and neck surgery were transoral robotic surgery (TORS) and robotic thyroidectomy which have been propagated worldwide. The robotic thyroidectomy has a distinct difference to other minimally invasive surgeries since it adopts a gasless transaxillary (TA) technique. Conversely, robotic applications to other neck surgeries such as SMG resection or neck dissection were still in its infancy stage. Based on the initial reports of Terris on robotic facelift thyroidectomy and our extensive surgical experience on TA endoscopic thyroidectomy, we have actively utilized the retroauricular (RA) approach in head and neck surgery and developed many operative techniques of robotic head and neck surgery including Benign mass excision, Thyroidectomy, and Neck dissection. This session will discuss in detail various endoscopic and robotic head and neck surgeries via RA approach.
Tips and Pearls to improve exposure in TORS

N.Rabinovics*(1), E.Ozer(2)

(1)Rabin Medical Center, Tel aviv, Israel, (2)The Ohio state university, , United States

Introduction: Trans-oral robotic surgery (TORS) revolutionized the field of head and neck surgery and has become popular worldwide. TORS provides surgeons with a minimally-invasive access to tumors of the upper aerodigestive tract while significantly reducing patient morbidity.

Adequate exposure in TORS is a key component to the success of the procedure: it allows an en bloc tumor resection with wide oncological margins; it decreases the risk of damage to adjacent neurovascular structures and it saves time, thereby shortening the length of the procedure and reducing perioperative complications.

Safe and feasible application of TORS requires practice, and achieving optimal visualization is one of the more challenging aspects.

Objective: The aim of this study is to give head and neck surgeons with limited experience in TORS, some techniques to improve exposure in their patients.

Methods: several aspects will be discussed: patient selection, anesthesia and intubation considerations, patient positioning, mouth and tongue retractors and robot and arms positioning.

Conclusion: Exposure in TORS procedures may present a challenge, especially to less experienced surgeons, but application of certain techniques and maneuvers, may make it feasible. As robotic technologies advance toward reduction in the size of the instruments and adding new ones, TORS indications will continue to expand.
Transoral Endoscopic and Robotic Thyroidectomy: Preclinical simulation in Cadavers

S.Lee*(1), H.Shin(2), Y.Koh(3), A.Anuwong(4), D.Kim(5), J.Kim(6)

(1)CHA University, Bundan CHA Medical Center, Seongnam, Korea, South, (2)Department of Otorhinolaryngology-Head Neck Surgery, National Health Insurance Corporations, Ilsan Hospital, Republic of Korea, Ilsan, Korea, South, (3)Department of Otorhinolaryngology Head Neck Surgery, Yonsei University College of Medicine, Seoul, Republic of Korea, Seoul, Korea, South, (4)Dept. of Surgery, Police General Hospital, Siam University, Bangkok, Thailand, (5)Dept. of ORL-Head Neck Surgery, Yonsei University, Severance Hospital, Seoul, Korea, South, (6)Dept. of ORL-head and neck surgery, Yonsei University, Severance Hospital, Seoul, Korea, South

Purpose

Minimally invasive, remote access, and robotic thyroidectomy with/or without gas insufflation techniques have been described for more than a decade. Although dissection is small, patients who are particularly opposed to a neck scar, remote access and robotic thyroidectomy techniques have been proposed. Recently, transoral endoscopic- and robotic thyroidectomy was introduced in the world despite scant preclinical data.

We pursued a systematic preclinical investigation of a new access, trans-oral endoscopic- and robotic thyroidectomy and central neck dissection (CND) in cadavers. To determine feasibility, we evaluated the three categories of accessibility, surgical completeness, and safety.

Study design

Experimental cadaver dissection study for endoscopic- and Robotic thyroidectomy via trans-oral approach.

Materials and Methods

Three fresh, unembalmed human cadavers were used. A 10-mm, 30-degree rigid telescope, endoscopic instruments, and a Harmonic scalpel were used for endoscopic thyroidectomy and DaVinci Xi system was used for Robotic thyroidectomy each.

Working space was created through oral vestibule incisions. Surgical procedures included the isthmusectomy, identification and ligation of the superior thyroid pedicle, peri-thyroid fascia dissection, dissection of the inferior pole, identification of the recurrent laryngeal nerve (RLN), dissection near the Berry ligament, and CND.

Results

We successfully performed total thyroidectomy and CND in all cadavers.

I. Accessibility: The working space was adequate for the instrumentation.

II. There was neither capsule injury in the specimen nor remnant thyroid tissue in the surgical field, indicating surgical completeness of the procedure.

III. Safety: In all thyroidectomies, the RLN and superior and/or inferior parathyroid glands were preserved. There was no tracheal or esophageal injury, indicating the safety of the procedure.

Conclusion

Our study demonstrates the feasibility of trans-oral thyroidectomy and CND using gas-insufflated endoscopic- and robotic-thyroidectomy that results in a sufficient access, surgical completeness, and safety. We also have described and refined a reproducible surgical protocol
for accomplishing a new trans-oral endoscopic- and robotic thyroidectomy. Cautious clinical implementation to explore safety and feasibility appears to be justified.

Key words. : Robotic, Endoscopic, transoral, thyroidectomy, cosmetic, access
Introduction
Le prélèvement du lambeau antérolatéral de cuisse dans le plan du fascia superficialis permet d’obtenir un lambeau fin et homogène en réduisant la morbidité du site donneur. Nous présentons les résultats précoce de notre série de patients opérés par voie transorale assistée par robot d’un cancer de l’oropharynx avec reconstruction par lambeau libre antérolatéral de cuisse fin.

Matériel et Méthodes
Les patients étaient atteints d’un carcinome épidermoïde dont la résécabilité, l’opérabilité et l’indication chirurgicale ont été confirmés en réunion multidisciplinaire. L’indication d’une chirurgie reconstructrice était retenue devant (1) une exérèse emportant plusieurs sous-régions oropharyngées, (2) une chirurgie de rattrapage après échec local de radiothérapie, (3) ou une chirurgie en terrain irradié. Après trachéotomie et curage(s) ganglionnaire(s), l’exérèse de la tumeur avec recoupes de marges en extemporanée était réalisé par voie transorale avec l’assistance du robot da Vinci Xi. La taille de la perte de substance était mesurée sur le site opératoire. La dissection du lambeau ALT-f était réalisée dans le même temps en double équipe. Après sevrage, le lambeau était placé sur le site opératoire et la partie supérieure de la suture était réalisé par voie buccale. Par une pharyngotomie le passage du pédicule du lambeau permettait sa microanastomose aux vaisseaux du cou. La totalité de la palette du lambeau était alors suturée par voie transorale. Le site donneur du lambeau était fermé directement.

Résultats
Onze patients ont été opérés entre septembre 2015 et novembre 2016. Quatre patients ont été opérés en première intention (paroi postérieure n=3, sillon amygdałoglosse n=1), trois patients ont été opérés d’une seconde localisation en terrain irradié (pilier postérieur n=1, loge amygdałienne n=1, sillon amygdałoglosse n=1), et quatre patients ont été opérés d’une récidive locale après radiothérapie (loge amygdałienne n=4). Les patients ont été décanulés en moyenne à j10, avec une reprise alimentaire per os à j19. L’hospitalisation a été en moyenne de 23 jours. Aucun trouble de cicatisation et aucune séquelle sur le site donneur n’ont été constatés. Les scores QLQHN35, QLQC30 et MDADI étaient favorables.

Discussion
Les résultats fonctionnels précoce favorables montrent la faisabilité d’une chirurgie oropharyngée large par voie transorale assistée par robot avec reconstruction par lambeau libre antérolatéral de cuisse fin, avec une morbidité limitée.

U.Patel*(1)

(1)Northwestern University, Chicago, United States

Purpose: Elongation of the styloid process with calcification is a rare but well-described cause of neck and cervicofacial pain also known as Eagle’s syndrome. Treatment for this is largely surgical with significant improvement or complete resolution in most patients. Surgical approach can be transcervical or transoral with good results achieved with both, though tonsillectomy commonly performed with transoral approach. With increasing availability of transoral robotic surgery, the authors examined TORS resection of the styloid process for Eagle’s Syndrome, and also the possibility of avoiding concomitant tonsillectomy.

Methods: A retrospective review was performed at 2 tertiary care academic institutions and included patients undergoing TORS assisted resection of the styloid process between 2010 and 2015. TORS procedures were performed in conjunction with a tonsillectomy or more commonly without. For those avoiding tonsillectomy, the approach was closed with sutures at the conclusion of each procedure. Medical charts were reviewed and data extracted. Extracted data included preoperative symptoms and imaging, intraoperative data, and postoperative assessment of complications and course of symptoms.

Results: 9 patients underwent TORS resection of the styloid process, 2 of which underwent simultaneous bilateral procedures. Pre-operative symptoms included odynophagia, neck pain, and facial pain. 4 of the patients had prior tonsillectomy; one underwent intra-operative tonsillectomy; and the remaining 4 did not require tonsillectomy with this approach. All procedures achieved styloid process resection with TORS dissection of the parapharyngeal space. There was clinical improvement noted in 8 of 9 patients with high patient satisfaction of symptom resolution. One patient experienced no significant benefit. There were no patient admissions for complications such as bleeding, pain management, or dehydration. No patients underwent revision or secondary procedures for Eagle’s syndrome.

Conclusions: TORS approach to the parapharyngeal space for styloid process resection is a viable approach for the surgical management of Eagle’s syndrome patient. Procedures achieved good resolution of symptoms with no apparent complications in this small series. Advantages include excellent visualization and the possibility to perform this surgery transorally without removal of the tonsil and its associated sequelae.

Urjeet A. Patel, MD (1); Joseph A. Paydarfar, MD (2)

1-Northwestern University, Chicago, IL USA
2-Dartmouth-Hitchcock Medical Center, Lebanon, NH USA
Transoral robotic surgery (TORS) with the Flex Robotic System in patients with hypopharynx and supraglottic tumors

S. Mattheis*(1)

(1) Department of Otorhinolaryngology, Head and Neck Surgery, University Hospital Essen, Germany, Essen, Germany

Purpose of the study

The Flex® Robotic System is a new flexible robotic device specifically developed for TORS. We performed a prospective clinical study, assessing the efficacy of the Medrobotics Flex® Robotic System in the transoral surgery of head and neck tumors.

Methods

From 2014 until 2016 a total of 19 patients required a surgical procedure for malign lesions (T1 and T2 carcinoma) of the supraglottis (n=12) and hypopharynx (n=7). Access and visualization of different anatomic subsites were individually graded by the surgeon. Set up times, access and visualization times, surgical results as well as adverse events and system malfunctions were documented intraoperatively. The mean follow up was one year.

Results

The lesions could be exposed and visualized properly in all patients. The surgical procedures performed with the Flex® Robotic System were intraoperatively evaluated as successful. Especially in anatomic regions difficult to reach such as aryepiglottic fold, postcricoid or piriform sinus, the system provided a good surgical overview. No serious adverse events occurred. We observed no local recurrence during follow-up.

Conclusion

Lesions in hypopharynx or supraglottic larynx could be successfully resected using the Flex® Robotic System thus making the system a safe and effective tool in transoral robotic surgery.

Authors:

Stefan Mattheis MD, PhD
Pia Hasskamp MD
Laura Holtmann MD,
Stephan Lang MD, PhD
Department of ORL, Head and Neck Surgery
University Hospital Essen
Germany
Transoral robotic surgery for residual and recurrent oropharyngeal cancers: exploratory study of surgical innovation using the IDEAL framework for early phase surgical studies

H.Fox*(1), V.Paleri(1), S.Coward(1), M.Ragbir(1), A.Mcqueen(1), J.O'hara(1), M.Robinson(1)

(1)Freeman Hospital, Newcastle upon tyne, United Kingdom

Purpose and Methods:
There have been significant changes in the management of oropharyngeal cancer (OPC) over the last decade. In particular, the emergence of high-risk human papilloma virus (HPV) as an etiological agent in OPC, the higher responsiveness to treatment and disease control of HPV driven OPC has led to an increased need for research into newer treatment strategies. Transoral Robotic Surgery (TORS) has evolved from this need. To date, several studies have very clearly highlighted the oncologic efficacy of TORS in the primary management of oropharyngeal and laryngeal cancers, with further reports emerging for its use in hypopharyngeal cancers.

The Northern Head and Neck Unit in the UK, after acquiring sufficient expertise in performing primary resections, decided to introduce this technique for recurrent cancers. This has been established utilising an IDEAL 2a developmental study design framework, where few selected patients are performed in single or limited centres with the output being a clear description of the procedure.

Results:
Between January 2014 and December 2016, 22 patients have been assessed with a view to TORS for recurrent cancers. A TORS resection was performed on 18 (81.8%) patients. The overall survival at 24 months is 60.6%, with a relapse free survival of 62.9% and a disease specific survival of 85.7%. Two patients recurred with local disease and underwent successful open salvage surgery. Both patients had negative margins on frozen section, and from the defect side, but the specimen driven margins were close.

Patients presented with a wide range of pre-surgical diet restrictions (median 50, range 0-100). Swallow assessment took place at a median of 4 days after surgery (range 1-42 days). Nine patients (56%) had increased dietary restrictions at three months following surgery and six (40%) experienced no change. One patient improved, which was attributed to a reduction in pain. Patients with the greatest restriction in diet (normalcy of diet score <40) had oropharyngeal resections crossing the midline. These patients were restricted to puree or fluid diet. Normalcy of diet scores at six months were available for 11 patients. The majority (n=10; 90%) remained unchanged, with one patient improving.

Conclusion:
This is the first report of TORS for recurrent oropharyngeal cancer, where a technique has been iteratively modified and described using the IDEAL framework. This study also reports for the first time the timeline of swallowing recovery before and after TORS in patients with recurrent head and neck cancer.
Transoral surgery of the larynx using the Flex Robotic System: Initial Experience

U.Duvvuri*(1), M.Persky(2), N.Goyal(3), D.Goldenberg(3)

(1) University of Pittsburgh Medical Center, Pittsburgh, United States, (2) University of Pittsburgh, Pittsburgh, United States, (3) Hershey Medical Center, Pennsylvania State University, Hershey, United States

Objectives: To describe the experience using the Flex system for transoral laryngeal surgery.

Study design – Single center, retrospective review

Methods – All patients that were scheduled for transoral robotic surgery using the Medrobotics Flex Robotic System between September 2015 and October 2016 were retrospectively reviewed. In particular, the ability to visualize and successful access anatomical subsites was gauged.

Results – A total of 13 patients underwent 15 operations with intent to use the Flex Robotic System. The average age was 58 years (range 38-76 years). The robot was successfully used 12 times in the supraglottis, 12 times in the palatine tonsils and twice in the glottis. The average length of stay for patients undergoing transoral procedures alone was 2.1 days (range 0-7 days). No patients required readmission after discharge. There were no conversions to open or endoscopic procedures and there were no intraoperative complications. Two patients underwent a planned tracheostomy. Negative resection margins were achieved in all patients.

Conclusions – The Flex Robotic System can safely be used to approach and resect lesions in the larynx. Negative margin resections can be accomplished in this cohort of patients. Continued efforts are necessary to develop retractors that will improve exposure of the glottis and deeper supraglottic masses.
Up-front and Salvage Transoral Robotic Surgery (TORS) for Head and Neck Cancer: a Belgian Multicenter Retrospective Case Series

J. Meulemans*(1)

(1) University Hospital Leuven, department of otorhinolaryngology, head and neck surgery, Leuven, Belgium

Purpose of the study: Transoral robotic surgery (TORS) is increasingly being applied in the treatment of head and neck malignancies. We reviewed functional and oncologic outcomes of primary and salvage TORS procedures performed in 3 Belgian institutions with a similar philosophy.

Materials and methods: A retrospective review of records from 86 patients who underwent TORS between 24-12-2009 and 25-09-2015 was performed. Besides descriptive statistics, overall survival, disease specific survival and disease free survival (Kaplan-Meier) were evaluated, as well as the variation of these outcomes according to whether patients had TORS as primary surgery or as a salvage procedure (univariate log rank analysis).

Results: Of 86 patients, 56 (65.1%) underwent TORS as a primary treatment and 30 (34.9%) were treated in a salvage setting for recurrent or second primary cancer. Tumor location was mainly oropharynx (N=62; 72.1%) followed by supraglottic larynx (N=12; 14.0%) and hypopharynx (N=11; 12.8%). Most tumors were staged as cT1 (N=39; 45.3%) or cT2 (N=41; 47.7%) and cN0 (N=43; 50.0%). Neck dissection was performed in 58 patients (67.4%). Patients were postoperatively submitted to follow-up (N=33; 38.8%) or received adjuvant radiotherapy, either as single modality (N=30; 35.3%) or with concomitant cisplatin (N=17; 20.0%). Mean and median follow-up was 23.1 and 21.2 months respectively. Functional results were excellent (no definitive tracheostomy, no tube feeding in 59%, long term tube feeding in only 7%). Estimated 2-year overall survival was 84.0% (SE=4.8%), 2-year disease specific survival was 92.0% (SE=3.9%) and 2-year disease free survival was 82.8% (SE=4.8%). A non-statistically significant trend towards better oncological outcomes for primarily treated patients, as compared to salvage patients (OS, p = 0.262; DSS, p=0.677; DFS p=0.139) was observed.

Conclusion: This retrospective study confirms favorable oncologic and functional outcomes of TORS for selected head and neck malignancies, both in the primary and in the salvage setting.

J. Meulemans(1,2), C. Vanclooster(1,3), T. Vauterin(4), E. D'heygere(1,2,4), S. Nuysts(5,6), P.M. Clement(2,7), R. Hermans(8), P. Delaere(1), V. Vander Poorten(1,2)

1 Otorhinolaryngology-Head and Neck Surgery, University Hospital Leuven, Leuven, Belgium
2 Department of Oncology, section Head and Neck Oncology, KU Leuven, Leuven, Belgium
3 Otorhinolaryngology-Head and Neck Surgery, AZ Sint-Lucas, Ghent, Belgium
4 Otorhinolaryngology-Head and Neck Surgery, AZ Sint-Jan, Bruges, Belgium
5 Radiation Oncology, University Hospital Leuven, Leuven, Belgium
6 Department of Oncology, section Experimental Radiotherapy, KU Leuven, Leuven, Belgium
7 Medical Oncology, University Hospital Leuven, Leuven, Belgium
8 Department of Radiology, University Hospital Leuven, Leuven, Belgium
Phase 3 prospective multicenter randomized study comparing elective neck dissection with sentinel node biopsy in T1-T2N0 oral and oropharyngeal squamous cell carcinomas: SentimerORL

R.Garrel*(1), P.Gilles(2), S.Temam(3), G.Dolivet(4), N.Fakhry(5), B.Lallemant(6)
(1)HOPITAL GUI DE CHAULIAC, Montpellier, France, (2)IUFC, Nice, France, (3)IGR, Villejuif, France, (4)Centre Alexis Vautrin, Nancy, France, (5)CHU Conception, Marseille, France, (6)CHU Caremeau, Nimes, France

Purpose: The authors present the results of the French multicenter randomized study comparing the sentinel node (SN) technique versus elective neck dissection (ND) in T1-T2 N0 oral cavity and oropharynx tumors accessible to injection under local anesthesia. The main assessment criterion was 2-years cervical lymph-node control (progression free survival, PFS); secondary criteria were complications.

Materials and method: A prospective multicenter study supported by grant from the French National Institute of Cancer (ClinicalTrial.gov: NCT02855723) allowed to randomize consecutive patients with T1T2N0 oral or oropharyngeal cancer planned to be treated with surgery. In experimental arm, SN technique was applied following usual recommendations. In the other arm, patients underwent a classical ND with respect to primary tumor location. Patients were followed every two months the first year and every four months the second year after initial treatment. PFS was calculated with the method of Kaplan Meier and comparison between the two arms with the method of log Rank. The duration of hospital stay was evaluated. A scale derived from Constans and Murley score was used at each visit.

Results: 307 patients were prospectively included and randomized. 161 underwent SN (arm SN) and 146 ND (arm ND). Primary tumor was located into oral cavity in 87% and oropharynx in 13%. The PFS at 12 Months was 0.82 [0.77-0.86] and PFS at 24 Months was 0.73 [0.67-0.79]. There was not significant difference between SN and ND arms, p = 0.7199. Functional evaluation showed lower hospital stay in SN arm p = 0.0027. The neck and shoulder dysfunction scale was significantly altered in ND arm regarding shoulder stiffness, shoulder pain, limited in ability in leisure and work p<0,02 at 2 months, 4 months, 6 months. However, there was no more differences at 12 months and beyond.

Conclusion: This study validates that the SN strategy is as effective as the traditional strategy based on ND regarding two-year neck control. SN technique gives better functional results in the first year after treatment.
Sentinel lymph node biopsy for squamous cell head and neck cancer: A tertiary cancer center experience

N. Süslü*, O. Kuşçu(1), F. Özer(1)

(1) Hacettepe University Faculty of medicine, Department of Otorhinolaryngology, head and neck surgery, Ankara, Turkey

Purpose of the study: To assess the feasibility and accuracy of Sentinel lymph node biopsy for head and neck squamous cell cancers.

Methods: A prospective cohort study consisting of patients diagnosed with head and neck squamous cell cancer at Hacettepe University faculty of medicine, Department of Otorhinolaryngology, Head and Neck cancer between 2016-2017. All patients underwent sentinel lymph node detection, immediately followed by neck dissection. The confirmation of metastasis to the cervical lymph node was inverted in the paraffin embedded formalin fixed specimens.

Results: The detection rate of metastasis in cervical lymph nodes in Sentinel lymph node biopsy and compared with the other lymph nodes removed during the neck dissection. The positive and negative predictive value of Sentinel lymph node biopsy in identifying occult metastasis were noted.

The presence of cervical occult metastasis compared with the tumor size and depth of the primary lesion.

Conclusion: Identification of sentinel lymph node in patients with squamous cell cancer of head and neck is technically feasible.

This technique could potentially guide us to the patients who would benefit most from selective neck dissection and prevent the morbidity of unnecessary comprehensive neck dissections. Also this technique has the potential to decrease the number of neck dissections performed in clinically negative necks.
Sentinel lymph node biopsy in head and neck cutaneous malignant melanoma
D.Evrard*(1), C.Mateus(2), J.Lumbroso(2), F.Kolb(2), C.Robert(2), A.Moya-plana(2)
(1)Centre Hospitalier Intercommunal de Créteil, , France, (2)Gustave Roussy, , France

Introduction. Cutaneous melanoma’s incidence is increasing more rapidly than any other cancer. Sentinel lymph node biopsy (SLNB) is now a standard of care for cutaneous malignant melanoma, but its use is still controversial for cutaneous head and neck melanoma (CHNM).

Objectives. To evaluate the efficiency of performing SLNBs on a series of consecutive patients with CHNM from 2008 to 2012 at our institution. The feasibility, morbidity and prognostical significance of this technique were analysed concerning overall survival (OS) and disease-free survival (DFS).

Results. One hundred and twenty-four patients were included. Primary melanomas were mainly located on patients’ face (77.7%) then on scalp (24.1%) and neck (13%). SLNB was realized in 97.6% of the cases. No significant post-operative morbidity was observed. Nineteen percents of patients had a positive SLNB while only 14.3% of complete lymph nodal dissection (CLND) had additional nodal metastasis. The risk of recurrence after a positive SLNB was significantly higher (69.2% vs 30.8%, p= 0.043). The false omission rate was 7.3%. OS and DFS were better for negative SLNB (82% vs 49%, p<0.001 and 69.3% vs 41.8%, p= 0.0131). Conclusion. As in other sites, SLNB status is a strong prognostic factor with comparable false omission rate and no superior morbidity.
Sentinel lymph node biopsy in head and neck cutaneous melanoma: a single institution analysis

M.Penicaud*(1), J.Grob(2), D.Taïeb(2), A.Giovanni(2), N.Fakhry(2), P.Dessi(2)

(1)APHM Marseille, Marseille, France, (2)APHM, , France

1. Presentation’s subject:
   The aim of our study was to analyze a series of patients from our institution who underwent surgery for head and neck cutaneous melanoma and who received sentinel lymph node biopsy (SLNB).

2. Material and methods:
   A single-center observational cohort of 120 head and neck mélanome patients was investigated from 2002 to 2011.

3. Results:
   Among the 107 patients (89.2%) with lymph node identified during lymphoscintigraphy, at least one node was collected and analyzed in 96 patients (90.6%).

   A positive sentinel lymph node (SLN) was found in 9.4% of patients.

   Our data showed higher failure rate of lymphoscintigraphic identification (11.7%), lower rate of SLN positivity (9.4%), and higher false-negative rate of SLNB (24.1%) than the usual figures established for malignant cutaneous melanomas in other locations.

   With a mean follow-up of 38.1 months, the disease-free survival (DFS) rate in the positive SLN group was 53% versus 75% for the negative SLN after 2 years of follow-up and 53% versus 48% after 5 years (p=0.44).

4. Conclusion:
   The complexity of lymphatic drainage and the anatomy of the cervical region probably accounts for a specificities which result in a lower predictive value of SLNB in head and neck melanoma than in cutaneous malignant melanoma in other locations.

   However, this technique is recommended in this indication when the Breslow index is greater than 1 mm because it allows better staging of the tumor and inclusion in novel therapeutic protocols.
Sentinel Node Biopsy in Early Oral Squamous Cell Carcinomas: A 15-Year Experience

A.Moya plana*(1), S.Temam*(2), J.Lombroso(2), O.Casiraghi(2), F.Janot(2)

(1)Gustave Roussy Cancer Center, Villejuif, France, (2)Gustave Roussy Cancer Campus, Villejuif, France

In order to evaluate the long-term reliability of the sentinel node (SN) biopsy in early oral squamous cell carcinomas, we realized a prospective cohort study over 15 years. We conducted a primary prospective study on 53 consecutive patients presenting T1, T2 N0 squamous cell carcinomas of the oral cavity between January 2000 and June 2003. Primary results demonstrated a negative predictive value of 100%. The series was then extended until June 2015, with a total number of 254 successful procedures.

The cohort accounted for 165 males and 84 females with a mean age of 57 years. The median follow-up period was 62 months. There were 55 patients (22%) with positive SNs, 20 of them (36.3%) only harboring micrometastasis.

The negative predictive value of the sentinel node biopsy was 95.2%. The SN involvement was strongly correlated with the tumor location (29% of SN+ for the tongue vs. 12% for the floor of mouth, p = .005), tumor stage (18% of SN+ for T1 vs. 40% for T2, p = .002), depth of invasion (median depth for SN+ lesions was 6.5 mm vs. 4 mm for SN- lesions, p = .028), perineural spread (p = .0015) and lymphovascular involvement (p < .0001).

Isolated nodal recurrence was associated with SN positivity (p = .031), nodal macrometastasis (p = .048), depth of invasion > 5mm (p = .016) and number of positive SN > 2 (p = .037). Moreover, when SN was positive, no better oncologic outcomes were observed in the micrometastatic group.

Thus, the sentinel node biopsy appears to be an excellent staging method in early oral carcinomas. This study also provides evidence that routinely undiagnosed micrometastasis may have clinical significance.
Superselective Neck Dissection (IIa, III) as a technique for replacement of extended supraomohyoid neck dissection in patients with N0 supraglottic and glottic squamous cell carcinoma

M. Hamela*(1), I. Zohdi(1), L. El Sharkawy(1), M. El Bestar(1), H. Abdel Tawab(1), A. Hareedy(1)

(1) Kasr Alainy School of Medicine-Cairo University, Egypt

PURPOSE OF THE STUDY: To evaluate the effectiveness of selective neck dissection of sublevel IIa and level III in cases of glottic and supraglottic laryngeal squamous cell carcinoma in the absence of lymph node metastasis and to show if there is value in dissecting the sublevel IIb or level IV in these cases in some cases where microscopic examination is negative with high suspicion of metastasis immunohistochemistry with cytokeratin is done.

PATIENTS AND METHODS: Twenty-five patients with N0 glottic or supraglottic cancer were subjected to unilateral or bilateral selective neck dissection according to the site and the extent of the tumor, and the specimens were histopathologically examined for metastasis.

RESULTS: Twenty-five patients (23 males and 2 females) with mean age of 55.72 years were included in the study. Lymph node metastasis to sublevel IIa and level III was found in 6/25 (24%) cases with glottic or supraglottic carcinoma, while to sublevel IIb and level IV was found in 1/25 (4%) with P-value of 0.05, which is statistically significant.

CONCLUSION: Selective neck dissection of level IIb is not required in cases of the supraglottic laryngeal cancer. Dissection of sublevel IIa and level III takes less time and is effective. Dissection of level IV is not needed in the case of supraglottic cancer.
The acuity of PET scan interpretation for the neck lymphadenopathy in esophageal cancer

C.Chun-chih*(1)

(1)Mackay Memorial Hospital (MMH), Taiwan, Republic of (Taiwan)

PURPOSE

The aim of this study was to determine the acuity of positron emission tomography scan (PET) in the diagnosis of neck lymph node metastasis in patients with esophageal cancer. We also compare its results with pathological findings.

MATERIALS AND METHODS

Thirty-two patients with esophageal squamous cell carcinoma who underwent esophagectomy with neck lymph node dissection between July 2013 and March 2015 were analyzed retrospectively. All of these patients accepted 18F-FDG PET/CT imaging before the operation. PET/CT images were subject to comprehensive diagnostic analyses by experienced radiologists, on the number of metastatic lymph nodes and the maximum standardized uptake value (SUVmax). We compared the diagnosis of preoperative PET/CT to the postoperative histopathological examination in all 32 patients.

RESULTS

This study examined 32 cases of patients: 30 males and 2 females, aged 60 ± 19 years old. PET/CT scan showed nine patients were unilateral and two patients were bilateral positive finding (28.1% and 6.3% respectively). Twenty-one patients were negative finding in PET scan (65.6%). A total of 238 lymph nodes were taken out from the patients (178 from right neck and 160 from left neck), only one was confirmed with metastasis. There was no correlation between PET/CT imaging and pathologic finding (P=0.344)

CONCLUSIONS

Because no correlation in PET/CT imaging and pathologic finding, PET/CT alone is insufficient to determine the acuity of neck lymph node metastasis.
Comparison of incidence and risk factors for development of pharyngocutaneous fistulas after total laryngectomy with and without tracheostomal pouch plasty according to Herrmann

P.Wolber*(1)

(1)ENT Department, University Hospital Cologne, Germany, Köln, Germany

The development of a pharyngocutaneous fistula is the most common major wound complication after total laryngectomy. Herrmann introduced a tracheostoma plasty technique with the construction of a tracheostomal pouch that aims at a better voice rehabilitation. In this study we aimed to compare the incidence of pharyngocutaneous fistulas in patients that underwent laryngectomy with and without performance of a tracheostomal pouch plasty according to Herrmann. In addition to that we aimed to assess significant risk factors for the development of pharyngocutaneous fistulas.

This retrospective analysis includes all patients that were enrolled at two tertiary referral centers and scheduled for surgical treatment by total laryngectomy over a thirteen year period (ENT Department of Lukas Hospital Neuss: January, 01, 2003 – December, 31, 2015; ENT Department of University Hospital Cologne: January, 01, 2010 – December, 31, 2015).

The patient cohort consisted of 173 patients. Sixty patients (34.7%) received a tracheostomal pouch plasty according to Herrmann, 113 patients (65.3%) received a laryngectomy without tracheostomal pouch. Relevant oncological, clinical and demographic parameters were equally distributed between the groups. Overall incidence of pharyngocutaneous fistulas was 23.7% (n=41). Patients with tracheostomal pouch plasty showed an incidence of 23.3% (n=14) compared to patients without tracheostomal pouch plasty with an incidence of 23.9% (n=27) (p=0.91). A positive history of alcohol abuse (p=0.03), cardiovascular disease (p=0.03), histologic proof of lymphatic invasion of the tumor (p=0.03) and wound dehiscence (p=0.04) were positive predictors for the development of a pharyngocutaneous fistula.

Laryngectomy with performance of a tracheostomal pouch plasty according to Herrmann is a safe procedure and does not entail an increased risk for the development of pharyngocutaneous fistulas.
Digestive free flap reconstruction in head and neck cancer: a ten years single-center experience
M. Lesnik*(1)
(1) Institut Curie, Paris cedex 05, France

PURPOSE OF THE STUDY:
Digestive free flaps (DFF) are the most effective and widely used methods for reconstruction of pharyngeal and/or esophageal circumferential defects. Our institution manages numerous patients previously treated by cervical radiotherapy and/or surgery. Thereby we chose to study and compare the outcomes of DFF in first- or second line treatment.

MATERIALS AND METHODS:
Data of patients who underwent DFF reconstruction of circumferential pharyngo and esophageal defects for cancer between 2005 and 2015 in our institution were retrospectively reviewed.

RESULTS:
Twenty-seven patients underwent DFF for stage IV hypopharyngeal, cervical esophagus or extensive laryngeal cancer, and among them 21 in second line.

Median disease free survival was 7 months (SD = 2.1), and median overall survival 11.1 months (SD = 1.5) with no difference between the patients with or without prior treatment (p=0.4).

Twenty-five jejunal FF and 2 omental FF were performed with a low donor site morbidity (3%), and FF failure (6%). In 5 patients, major defects requested a simultaneous deltopectoral flap. Oral feed could be achieved in 21 patients (77%).

CONCLUSION:
DFF are reliable with a low local and general morbidity and acceptable functional outcomes. They should still be considered as a first but also second line procedure in the management of stage IV cancers requiring circumferential pharyngo-laryngectomy.

AUTHORS:
(1) Department of Surgical Oncology, Institut Curie, Paris
(2) Department of Radiotherapy, Institut Curie, Paris
(3) Department of Medical Oncology, Institut Curie, Paris
Multiple malignancies of the head and neck: report on four cases

S.Bertesteanu*(1), C.Antonie(1), A.Nicolaescu(2), P.Pascu(1), R.Grigore(1), P.Bogdan(1), P.Oana(1)

(1)Coltea Clinical Hospital, Bucharest, Romania, (2)Coltea Clinical Hospital, Bucharest, Romania

Introduction: Patients who present a head and neck cancer are always at risk of developing a second neoplasm, due to the exposure to the carcinogens factors, genetic instability, oncological treatments, immune deficiency and prolonged survival after some primary tumours. The incidence of second primary malignancies is increasing, especially in the patients suffering from cancer of the larynx, squamous cell variant.

Materials and methods: We present four cases of patients with two primary malignancies. First, patient A was diagnosed with left preauricular basal cell carcinoma, 2 years after total laryngectomy and bilateral lymph node dissection. Patient B was diagnosed with nasopharyngeal cancer 5 months after being treated for clear cell renal carcinoma. Patient C was treated in our clinic for tonsillar cancer and during the follow up he was diagnosed with laryngeal cancer, and patient D was diagnosed with squamous cell cancer of the nose and paranasal sinuses, underwent surgery and oncological treatments and 2 years later he was diagnosed and treated for laryngeal cancer.

Results: The carcinogens factors are common for most head and neck cancers, smoking and alcohol consumption being very frequently involved. All the patients received surgical treatment for their first malignancy along with oncological treatments. The prognosis of patients with multiple cancers is poor.

Conclusions: As the incidence of multiple malignancies of the head and neck is increasing, it is very important to monitor and investigate regularly patients that have survived a head and neck cancer. The curiosity of these cases was that both cancers appeared in a short period of time.
Pharyngocutaneous fistulization rate following Salvage Total Laryngectomy

N.Rabinovics*(1), T.Teknos(2), J.Rocco(2), R.Carrau(2), A.Agrawal(2), E.Ozer(2)

(1)Rabin Medical Center, Tel aviv, Israel, (2)The Ohio state university, , United States

Introduction: With the increasing use of organ-preserving treatments for advanced head and neck cancers, total laryngectomy (TL) is often used as a salvage procedure for persistent or recurrent disease. Pharyngocutaneous fistulization (PCF) is the most frequent complication in the early postoperative period after TL, with incidences that vary from 2.6% to 65.5%. Salvage total laryngectomies (STL) performed after radiation failure are often more prone to complications compared to upfront TL. Several studies described using healthy vascularized tissue to reinforce pharyngeal repair, demonstrated reduction of PCF rate, but without statistical significance. We aim to present our single-institution experience.

Methods: A retrospective chart review was conducted of all patients treated for laryngopharyngeal tumors with total laryngectomy in the past 10 years at the Ohio State University.

Results: Overall, 520 patients underwent TL, 237 of whom were previously treated with radiation or chemoradiation and comprised the STL group. Pharyngeal reconstruction included primary suture closure in 96 (40%) of the STL patients; primary closure with stapling device in 42 (18%) and locoregional or free flaps in 99 (42%) patients. Overall, 64 (27%) patients who underwent STL, developed PCF – 27 (28%) of the primary suture closure group; 12 (28%) of the stapling device group and 29 (29%) of the flaps group. 96% of the PCF following STL, resolved within an average of 50 days (range 9d-4m).

Conclusions: PCF rates following STL with primary pharyngoplasty were not statistically different compared with flap reconstruction (p=1). More large-scale studies are required to establish surgical recommendations for STL patients.
Pharyngoesophageal Reconstruction and Neck Resurfacing after salvage ablative surgery in prior radiation treatment patients. Personal experience.

D. Mele*(1)

(1) Institute of Otorhinolaryngology, Università Cattolica del Sacro Cuore, Rome, Italy, Italy

PURPOSE OF THE STUDY: The oncologic ablative surgery and reconstruction of the larynx and hypopharynx malignancies present challenges such as the creation of neoconduit for digestive continuity, swallowing function and speech.

Salvage laryngopharyngectomy or laryngeal dysfunction from prior chemoradiotherapy introduces additional complexity, compromising the quality of the remaining soft tissue and neck skin for primary closure and tracheal-stoma creation, as well as the quality of vessels for microanastomosis. Consequently, additional vascularized tissue is required for this purpose.

MATERIALS AND METHODS: we evaluated 36 patients who underwent salvage pharyngolaryngectomy for pharyngolaryngeal SCC recurrences after radiotherapy or concurrent chemoradiotherapy with immediate pharyngoesophageal reconstruction, from July 2005 to April 2016.

RESULTS: The ALT remains our flap of choice for hypopharyngeal reconstruction because of its easy elevation, minimal donor-site morbidity and versatility in designing multiple skin paddles or chimeric flaps.

If the ALT flap use is precluded, a forearm-based fasciocutaneous flap could be an alternative. Moreover the ALT flap provides additional fascial coverage over the neoconduit suture-line, which may provide protection against salivary leakage.

Furthermore, neck coverage with vascularized tissue is recommended in patients with prior radiation-therapy or neck surgery, for neck vessels without adequate coverage, if conduit reconstruction has created a resurfacing deficit and if the neck skin doesn’t approximate with gentle apposition. Both thighs should be prepared in case local ALT flap anatomy does not allow for a chimeric solution and a second flap with separate anastomosis is needed.

However, if the carotid system may have been previously used, encased in scar, or otherwise compromised a pedicled flap should be required. In turn of well known pectoralis flap or supraclavicular flap, an internal mammary artery perforator (IMAP) propeller flap prepared in anticipation was performed in our patients for neck resurfacing.

Conclusions. Prior radiation treatment are strong predictors for pharyngoesophageal reconstruction and for resurfacing needs. The ALT flap remain our workhorse while IMAP flap resulted very useful local option for simultaneous neck skin resurfacing; it is reliable and versatile, allows a quick harvest, and could be a novel true “spare wheel” flap in reconstructing complex defect. Careful surgical planning and proper flap selection and design can help manage even the most complex scenarios and improve patients outcomes.

Giovanni Almadori, Giuseppe Visconti*, Francesco Bussu, Aurora Almadori*, Dario Mele, Gaetano Paludetti, Marzia Salgarello*

Institutes of Otolaryngology Head & Neck Surgery and of Plastic Surgery*, Catholic University of the Sacred Heart, A. Gemelli University Hospital Foundation, Rome, Italy.
Radical neck dissection and common and external carotid artery resection after radiotherapy

B.Popescu*(1), O.Paun(2), C.Antonie(2), P.Pascu(2), R.Grigore(3), S.Bertesteanu(3)

(1)Carol Davila University of Medicine and Pharmacy, Bucharest, Romania, Coltea Clinical Hospital, Bucharest, Romania, (2)Coltea Clinical Hospital, Bucharest, Romania, (3)Coltea Clinical Hospital, Carol Davila University of Medicine and Pharmacy, Bucharest, Bucharest, Romania

Purpose of study

Head and neck cancer in Romania is responsible for 12 new cases every year at 100.000 individuals. In our E.N.T. department we treat mainly head and neck cancer patients either with primary surgery, either after concurrent radiotherapy or chemotherapy. Some 50% of cases are classified as T3 or T4 tumors and N1 or N2. Stage IV cancer is treated by radical oncology surgery followed by external beam radiotherapy or by external beam radiotherapy followed by salvage surgery for cases that are not responsive single oncology therapy.

Materials and method

The implication of head and neck lymph nodes is present in as much as 80% of the cases which is indication for neck dissection. In as much as 30% of the cases there is the need for radical neck dissection. The involvement of the carotid artery axis is present in our study in 35 cases and in 12 series we performed the resection of the entire carotid artery axis or the external carotid artery.

Results

The over-all survival rates for stage IV head and neck cancers decrease by as much as 50% when there is lymph node involvement and the survival rates are as low as 15% when there is an encasing of the carotid artery more than 270 degrees.

Conclusions

The authors take into discussion the possibility of extending the resection indications for T4b tumors of the head and neck regarding the implication of the carotid artery axis implication.
Salvage Laryngectomy after Laryngeal Preservation Failure in Larynx Carcinoma

E. Guillén lozada*(1), A. Menoyo bueno*(1), M. Chaves conde*(2), A. Strusberg benavides*(1), I. Tirado zamora*(1), F. Esteban ortega*(1)

(1) Department of Otorhinolaryngology. Virgen del Rocío University Hospital, Seville, Spain, (2) Department of Medical Oncology. Virgen del Rocío University Hospital, Seville, Spain

Introduction: Squamous carcinoma of the larynx in various stages can be effectively treated by radiotherapy and chemotherapy, preserving the larynx and its function, reserving salvage surgery in cases of relapse or progression.

Purpose of the study: To analyze the results of salvage laryngectomy after failure of primary treatment with chemo and radiotherapy including a survival study. To determine those factors influencing overall survival: N+, Persistence vs recurrence and pharyngocutaneous fistula (PCF).

Study Design: Retrospective review.

Materials and methods: We studied eighty-four patients with laryngeal carcinoma T3 stages who received chemo and radiotherapy for primary between 2009 and 2015. Of these patients, thirty-five were undergone salvage surgery (total laryngectomy).

Results: Overall survival at 2 years and 5 years was 84% and 47.2%, respectively. Overall mortality was 51%. Pharyngocutaneous fistula formed in 52.4%. No significant differences were found between persistence vs recurrence (P=0.266) and N+ vs N0 (P=0.280). There were significant differences between patients who had PCF vs who had not (P=0.25). Those patients had a 3.11 relative risk of death.

Conclusions: Salvage laryngectomy in laryngeal cancer has good results depending on tumor progression. The incidence of pharyngocutaneous fistula 52% is similar to previously described in the literature. There is a relationship between PCF and lower survival.
SURGERY IN LOCOREGIONALLY ADVANCED HYPOPHARYNGEAL CANCER: WHICH PROGNOSTIC FACTORS?

J. Rodrigues¹, E. Breda², E. Monteiro²

¹Hospital Senhora da Oliveira - Guimarães, Portugal, ²IPO-Porto, Portugal

Introduction

Hypopharyngeal tumours are head and neck malignancies associated with great morbidity and mortality and treatment of advanced tumours constitutes a challenging problem. Despite the evolution in radiotherapy and chemotherapy, survival rates remain precarious. Pharyngolaryngectomy continues to be the gold standard modality for locally advanced disease, and it can be used as primary treatment or as salvage option. This study aims to compare survival rates of patients with advanced hypopharyngeal tumours treated with pharyngolaryngectomy as primary or salvage option, and identify factors that may contribute for the prognosis of these tumours.

Material and methods

Retrospectively were reviewed all patients with advanced hypopharyngeal squamous cell carcinomas who performed pharyngolaryngectomy in a Portuguese tertiary centre, between 2007 and 2014.

Results

Eighty seven patients (87) fulfilled mentioned requisites, with a mean age of 57.2 years and a male predominance of 43:1. 81 tumours arose from pyriform sinus, 4 from the posterior pharyngeal wall and 2 from postcricoid region. 60 patients performed surgery as primary treatment option and 27 were submitted to salvage pharyngolaryngectomy after a previous treatment with CRT. Overall survival at five years was of 25.9%, five-year disease free survival was of 24.2% and disease specific survival was of 29.5%. Patients treated with pharyngolaryngectomy as primary treatment option revealed better five-year disease free survival (35.8%) than patients who performed salvage surgery (11.7%) (p<0.05). Histopathological criterious of capsular rupture of lymph nodes and vascular invasion reduced five-year disease free survival (p<0.05). During the follow up period, 26% of patients developed local recurrence and 14% presented distant metastases. Extra-organ spread was predictive of local relapse (p<0.05). Pharyngolaryngectomy as primary intent revealed less local recurrence than salvage surgery (p<0.05).

Conclusion
Hypopharynx carcinoma has one of the worst prognoses in head and neck cancer. Surgery constitutes the gold-standard treatment of advanced hypopharynx cancer and primary pharyngolaryngectomy reveals better survival rates than salvage procedure.
THE SURVIVAL OF PATIENTS UNDERWENT SALVAGE NECK DISSECTION WITH NECK RECURRENCE OF HEAD NECK CANCER: ONE CANCER CENTER EXPERIENCE

N.Suslu*(1)

(1)Hacettepe University Faculty of Medicine Department of Otorhinolaryngology Head and Neck Surgery, Ankara, Turkey

Purpose: To evaluate the factors that has an impact on survival of head and neck cancer patients with neck recurrence.

Material-Method: Between 2010-2015, 92 patients with recurrent squamous cell cancer in the neck who underwent salvage neck dissection were retrospectively reviewed for survival, in Hacettepe University Faculty of Medicine Department of Otorhinolaryngology Head and Neck Surgery.

Results: The 2-year and 5-year overall survival (OS) rates were 48.4% and 9.9%, respectively. The 2-year and 5-year disease free survival rates (DFS) were 38.1% and 5.6%, respectively. Primary site of tumor, primary treatment, isolated neck recurrence, time to neck recurrence, adjuvant therapy after salvage surgery, pathologic N stage of recurrent tumor were analyzed for the impact on survival. Re-irradiation after salvage neck dissection was found as a significant factor for the DFS, when compared with re-irradiation with concurrent chemotherapy (p=0.020). In multivariate analysis, rN stage revealed as a significant factor that affects OS and DFS with a p value of 0.001 and 0.046, respectively.

Conclusion: The survival of patients with neck recurrence is quite low which is in agreement with the literature. The N stage of the recurrent tumor is the only significant factor that has an impact on survival in these patients.


*Hacettepe University Faculty of Medicine, Department of Otorhinolaryngology Head and Neck Surgery

** Hacettepe University Faculty of Medicine, Department of Radiation Oncology

*** Hacettepe University Faculty of Medicine, Department of Medical Oncology

**** Hacettepe University Faculty of Medicine, Department of Biostatistics

*****Ankara Liv Hospital
Use of Transnasal Humidified Rapid-Insufflation Ventilatory Exchange (THRIVE) for managing the 'near-impossible' shared airway

R.Nouraei*(1), A.Patel(2)

(1)Auckland City Hospital, New Zealand, (2)Royal National Throat Nose and Ear Hospital, London, United Kingdom

Background: Managing long-term complications and squeal of treating pharyngolaryngeal cancers continue to challenges the head and neck surgeon and anaesthetist. Pharyngeal and oesophageal stenosis affect 5-7% of patients following chemoradiotherapy for head and neck cancer. The clinical presentation of patients with pharyngeal stenosis is often prompted by a combination progressive dysphagia with difficulty in managing oral secretions, and exertional dyspnoea due to pharyngeal airway compromise. In a small but growing subset of these patients, the highly unfavourable combination of distorted pharyngeal anatomy, restricted mouth opening, and fixed-flexion deformity of the neck makes clinical management exceptionally challenging. Transnasal Humidified Rapid-Insufflation Ventilatory Exchange (THRIVE) involves administration of high-flow (70-90L) warmed humidified oxygen and has been shown to enable apnoeic ventilation. The present report is of our experience in using this technique as the definitive method of airway management to enable treatment with flexible instrumentation.

Methods: Between 2014 and 2016, ten patients who presented with a combination of airway compromise due to pharyngeal stenosis, trismus, and fixed flexion deformity of the neck, underwent lumen-restoring pharyngeal surgery with THRIVE as the definitive airway for part or all of the procedure. Surgery consisted of intralesional injection of Triamcenolone acetonide (Kenalog®), laser incision of pharynx and Controlled Radial Expansion balloon dilation of the pharynx using Boston Scientific CRE™ pulmonary balloon system.

Results: There were seven males and three females and mean age at treatment was 56±11 years (range 32-69 years). Seven patients had ASA grades of 3 and three patients had ASA grades of 4. The aetiology of pharyngeal stenosis was previous treatment for tonsil cancer (n=1), tongue-base cancer (n=3), vallecula cancer (n=2) and piriform cancer (n=1). Treatments had been undertaken between 2 and 15 years previously. Two patients had poorly-characterised immune-related conditions causing fixed flexion deformity of the neck and supraglottic fibrosis. Mean apnoea time was 47±22 minutes (range 16-75). Mean follow-up was 15±9 months (range 2-24). Surgery led to significant improvement in airway symptoms and in the ability to manage oral secretions and no tracheostomy tubes needed to be placed. No new gastrostomy tubes needed to be placed but at the same time, no pre-existing gastrostomy tubes could be removed either.

Conclusions: THRIVE was successfully used to manage pharyngeal stenosis in near-impossible airway settings. We have not observed major surgical or anaesthetic complications, and particularly, no complications related to carbon dioxide retention. We would propose cautious application of the technique in this patient population.
Usefullness of pectoralis myofascial flap in salvage total laryngectomy

S.Kim*(1)

(1)Seoul St.Mary's Hospital, Catholic University of Korea, , Korea, South

Introduction: Ever since the landmark Veterans Affairs Laryngeal Cancer Study Group showed that the tumor response rate for radiation alone was equivalent to surgery with adjuvant radiation, total laryngectomy has fallen out of favor as an initial management strategy. This change has led to an increasing number of patients undergoing salvage total laryngectomy whose prior radiation exposure predisposes them to complications after the surgery. One of the most critical complication after total laryngectomy is pharyngocutaneous fistula. Recent paper from Patel et al. about fistula rate of salvage laryngectomy showed 34% of fistula rate after total laryngectomy with primary closure. So in our institution, we have used pectoralis major myofascial flap for salvage total laryngectomy to reduced the fistula rate and reviewed the data of fistula following salvage laryngectomy comparing with other type of closure.

Methods: A retrospective review of the medical record of the patients who had received total laryngectomy from January, 2004 to December, 2014. We reviewed charts for the pharyngocutaneous fistula rate, predisposing factor including smoking, alcohol consumption and the management of fistula according to the type of closure(primary closure/PMMCF(pectoralis major myocutaneous flap)/PMMF(pectoralis major myofascial flap)/Free flap).

Results: Totally, 48 patients were enrolled to this study and there were 20 patients who had received prior radiation before salvage total laryngectomy. There was no correlation between the fistula rate and predisposing factors including age/sex/margin status/BMI except prior radiation before surgery (p=0.04). The fistula rate of primary closure, PMMCF, PMMF was 19%, 25%, 0% for each other. In 5 cases of salvage total laryngectomy, we conducted surgery using pectoralis major myofascial flap and there was no fistula after surgery.

Conclusion: Pharyngocutaneous fistula is a frequent, morbid, and very costly complication after total laryngectomy, especially when this latter is performed after radiation. This study confirms that the adjunct of a prophylactic PMMF reduces the rate of pharyngocutaneous fistula. Adjunctive prophylactic coverage of the pharynx with nonirradiated tissue could be helpful in salvage total laryngectomy.
16 years experience of surgical management of thyroid cancer with regional and distant metastases

A.Polyakov*(1), A.Kaprin(1), V.Chissov(1), A.Golubzov(1), I.Reshetov(1), A.Riabov(1), O.Pikin(1), V.Karpenko(1), M.Ratushnyy(1), O.Matorin, O.Matorin

(1)P. Herzen Moscow Oncology Research Institute, Russia

Purpose of the study: to assess the results of the treatment of different groups of patients with regional and distant forms of thyroid cancer.

Materials and methods: The prospective study included 314 patients with different variants of surgical management of thyroid cancer with regional or distant metastasis from 2000 to 2016. It included papillary, follicular and medullar histological types (differentiated forms of cancer).

Group I (n=101) - patients with T4NoMo - T4bN0M0. Group II (n=120) - patients with regional metastasis of thyroid cancer (T3N1a-bMo; T4N1aMo; T4N1bMo). Group III (n=73) - patients with contralateral regional metastasis, mediastinal metastasis and regional recurrences (T3N1a-bM0-1, T4a-bN1a-bM0-1). Group IV (n=20) - different localisations of distant metastasis. (T3N1a-bM1, T4a-b N1a-bM1).

Results: Paresis of N. recurrence was noticed in 10,7% parathyroid inefficiency — 1,7%, post-operative death - 0,84%, 10-years surveillance in Group I was 85.7%; Group II-80.1%; Group III-83.3%, Group IV - 49.0%. 5- and 10- years general surveillance were 86.3% and 80.5%.

Conclusion: Surgical management of regional and distant metastasis except lungs metastasis improved 5 and 10-years surveillance and makes possible additional treatment. The assessment of oncological risk factors and prognosis is the main point in planning of high volume operations in patients with thyroid cancer.
A Molecular Signature to Distinguish Invasive from Non-Invasive Follicular Variant Papillary Thyroid Carcinoma
C.Pool*(1), D.Goldenberg(2), E.Washburn(2), J.Warrick(2)

(1)Penn State Hershey Medical Center, Hershey, United States, (2)Penn State Hershey Medical Center, , United States

BACKGROUND and OBJECTIVE
It has been well described that BRAF-driven thyroid tumors include classic-type papillary thyroid cancer (PTC), and RAS-driven tumors include follicular carcinoma and follicular adenoma. Follicular variant (FV) PTC is an interesting entity because its molecular profile shares homology with both BRAF- and RAS-driven thyroid tumors. It has been shown that invasive FV-PTC is capable of metastasis, while noninvasive FV-PTC is not. The term “noninvasive follicular thyroid neoplasm with papillary like nuclear features” (NIFTP) has thus been proposed to reclassify noninvasive FV-PTC as a benign neoplasm. The aim of our study is to identify molecular differences between invasive and noninvasive FV-PTC.

METHODS
65 cases of FV-PTC with available nodal data from The Cancer Genome Atlas (TCGA) database were identified. Digital slides were methodically re-reviewed (http://cancer.digitalslidearchive.net/) and designated as invasive, non-invasive, or cannot determine. TCGA RNA seq data were used to determine differential expression between invasive and non-invasive tumors using t-tests with false discover rate multiple test correction. A linear model to distinguish invasive from noninvasive neoplasia was created based on differentially expressed genes. Linear model performance was validated based on RNA-seq expression data from 26 patient samples from our institution (3 invasive FV-PTC, 7 noninvasive FV-PTC (NIFTP), and 16 follicular adenomas).

RESULTS
Of the 65 re-reviewed TCGA cases, 18 were invasive, 29 were noninvasive, and 18 could not be determined. As expected, invasive architecture was strongly associated with lymph node metastasis (odds ratio 22, p<0.001; Fisher test). Invasive tumors were enriched in BRAF V600E mutations (p=0.024, Fisher test). Expression analysis identified 699 genes differentially expressed between invasive and noninvasive tumors (q<0.05, FDR). Hierarchical clustering based on identified genes divided tumors into two distinct clusters: one contained all RET, BRAF, and NTRK3 rearrangements, and 82% of BRAF V600E mutants; the other contained all RAS mutants. A linear model constructed from these data separated invasive from noninvasive FV-PTC with optimized sensitivity of 100% and specificity of 72%. Model performance in the validation set identified invasive tumors with sensitivity of 100% and specificity of 83%.

CONCLUSION
Invasive and noninvasive FV-PTC appear qualitatively different. Invasive tumors tend to have a BRAF-like expression signature, while noninvasive tumors tend to have a RAS-like signature. A linear model separated invasive from noninvasive tumors reliably. The findings question the utility of the designation “follicular variant,” and corroborate the position that noninvasive FV-PTC should be reclassified as a benign neoplasm, separate from invasive FV-PTC.
Adenolipoma of thyroid gland an unusual tumor: a case report

H.Jaafoura*(1)

(1)Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia, Tunis, Tunisia

H.Jaafoura, A.Methneni, E.Chebil, I.Riahi, S.Mannoubi, K.Khamassi, R.Lahiani, M.BenSalah
Department of Otorhinolaryngology Charles Nicolle Hospital Tunis Tunisia

OBJECTIVE:
Adenolipoma of thyroid gland or thyrolipoma was first described by Schroder in 1984. Histologically, it is characterized by diffuse fatty infiltration of the thyroid stroma. It is a rare benign neoplasm and usually biologically inactive.

Here, we present a case of diffuse lipomatosis of the thyroid gland, and we briefly review the literature on this phenomenon.

Material and METHODS:
A retrospectively review of a patient treated for a nontoxic multinodular lipomatosis goitre at our hospital. Our patient underwent surgical treatment and the diagnosis confirmed by pathological examination.

RESULTS:
A 74-year-old female was referred to our department by her general practitioner with a midline neck swelling of several month duration. The patient's past medical history included hypertension, dyslipidemia, gout and hyperuricemia. She underwent a cholecystectomy, total hysterectomy, appendectomy and a removal calculus of Warton duct. Physical examination revealed a 2.5-cm mass in the left thyroid, which was confirmed by ultrasound examination, moving with deglutition and its inferior margin could be well identified. Blood tests were unremarkable, with normal thyroid function parameters. Left hemi thyroidectomy was then performed. Histopathologic study concluded to the diagnosis of thyrolipoma. No recurrence was observed.

Conclusion:
Thyrolipoma is an extremely rare histopathological condition who should be kept in mind in the differential diagnosis of diffuse fatty infiltration of the thyroid gland.
Administration of ablative dosage of I131 in differentiated thyroid carcinoma patients with increased levels of thyroglobulin. Accuracy and usefulness of diagnostic 131I scan and "empiric" ablation.

J.Carrillo*(1), L.Carrillo(2), M.Ramirez(3), E.Flores(1), K.Luna(1)

(1)Instituto Nacional de Cancerologia, Mexico city, Mexico, (2)Instituto Mexicano del Seguro Social, Monterrey, NL, Mexico, (3)Instituto Nacional de Cardiologia Ignacio Chavez, Mexico city, Mexico

Introduction.

Management of differentiated thyroid carcinoma patients with recurrence manifested only with thyroglobulin elevation (biochemical), has been performance of 5 mci 131I diagnostic scan and if positive, administration of a therapeutic I131 dosage. This could induce stunting and delay in recurrences treatment. Oncologic outcomes and uptake frequency with therapeutic dosages of 131I in patients with elevation of supressed thyroglobulin with and without performance of a diagnostic 131I scan are analyzed retrospectively.

Materials. Non-metastastic differentiated thyroid carcinoma patients, who had bilateral thyroidectomy and 131I ablation with 100mci, with normal serum thyroglobulin levels for one year and who developed an increase in serum thyroglobulin level higher than 2ng/ml. Patients treatment: Group I: direct ablation with 100-200mci dosage of 131I, and Group 2 diagnostic 131I scan with a 5mci dosage, if positive ablative dosage of 131I. If negative, patients were observed, till persistent elevation of thyroglobulin levels prompted a new diagnostic 131I scan with positive uptake, macroscopic recurrence occurred or had spontaneous decrease in serum thyroglobulin. Chi-Square test was applied for univariate analyses. Survival curves were constructed with the Kaplan-Meier method and differences calculated with the log rank test. Multivariate analyses models for recurrence (RR), and survival (OS) were constructed with logistic regression and Cox methods.

Results

129 patients were recruited. Group I: 30 patients, 10 men and 20 women; average age at diagnosis: 49 years (rank: 16-85); median follow-up: 12.4 years (± 7.4). T3, T4 tumors occurred in 12 cases (40%). Group II: 99 patients: 27 men and 72 women, mean age 53 years (rank: 17-84) median follow up 14 years, and T3, T4 tumors present in 37 cases (38%). Average ablation dose in group I: 175 mci ( 7.4 Bq); in group II: 150 mci (5.55Bq). Non diagnostic direct administration of 131I resulted in uptake frequency of 95% (28 cases). Recurrence and survival factors significant in univariate analyses were age, gender, thyroglobulin levels, "empiric administration of 131I", and T classification. Logistic regression analyses for RR showed age, T classification and empiric administration of 131I as significant for recurrence p<0.05. Age and "empiric" iodine administration were significant for OS p<0.05

Conclusion. “Empiric” therapeutic dosage of 131I in presence of biochemical recurrence of differentiated thyroid carcinoma has very high iodine uptake rate. This therapeutic modality is significant in multivariate analyses for RR and OS.
Aerogidestive tract involvement in well differentiated thyroid cancer (WDC – preoperative course, imaging sensitivity, recurrence and overall prognosis

N. Carmel Neiderman*(1), D. Amsterdam(1), M. Yehuda(1), A. Wengier(1), S. Abu-Ghanem(1), D. Fliss(1)

(1)TLVMC, , Israel

Introduction

Extrathyroidal involvement (ETI) is a poor prognostic factor, decreasing survival from 91% to 45% and in correlation to distant metastasis. ETI is largely underdiagnosed in the preoperative course. Surgical approach to tracheal involvement ranges from tracheal shaving to composite resections. Patients’ complication rate, morbidity and mortality as a result of the surgical approach is still controversial.

Aims

To investigate preoperative diagnosis of ETI in WDC by characterizing imaging sensitivity, recurrence and overall survival.

Material and methods

All Patients’ charts who underwent thyroid surgery between 2006-2016 in Tel Aviv Sourasky Medical Center (TASMC) were retrieved. Patients with malignancy were further investigated for sociodemographic data, intra-operative ETI and final pathological diagnosis. Patients with intra-operative ETI were investigated for pre-operative clinical presentation, pathological characteristics, post-operative complications, recurrence and survival.

Results

Our cohort included 1019 patients, of which 617 (60.54%) presented with malignancy. 137 (22%) presented with intra-operative ETI, of which 54 (8.75%) presented with tracheal involvement: 37% of patients were male, with mean age of 56.35±0.48 years. 51.8% of patients underwent total thyroidectomy and neck dissection, while 40.7% of patients underwent total thyroidectomy. 59.25% of ETI patients were diagnosed with lymph nodes metastasis at final pathology. All patients diagnosed with ETI underwent tracheal shave. One patient required tracheal resection.

Conclusion

ETI, emphasizing intra-operative tracheal involvement are challenging to diagnose preoperatively, however their consequences on surgical complications, recurrence and survival are major. Data regarding patients’ pre-operative imaging, intra operative findings, and outcome will be further presented and discussed.
Algorithm of choosing the way of reconstruction of head and neck covering tissues, according to prevalence of malignant skin tumors.

A.Polyakov*(1), M.Ratushnyy(2), O.Matorin(2), M.Filushin(2), I.Rebrikova(2), E.Zenkina(2)

(1)P. Herzen Research Oncology Moscow Institute, Moscow, Russia, (2)P. Herzen Research Oncology Moscow Institute, , Russia

Purpose of the study: To create the algorithm of choosing right way of reconstruction of different facial defects, which can provide the best aesthetic and functional outcomes.

Materials and methods: 2018 surgeries were performed for 1991 to 2016 in Microsurgery Department in P. Herzen Moscow Research Institute. All this surgeries were performed with simultaneous reconstruction of post-operative wound: in T1-T2 stages used (Limberg flap, nasolabial flap, Z-type flap, П-type flap, paramedial flap, slide swing skin flap (moree than 90%). In Т4 stage with high volume defects after tumors resections, which included skull base, pachymenix, orbital cavity, with tissue liability were treated by microsurgical reconstruction in 1,88% (38 patients). All patients filled in pre- and post-operative questionnaire by EORTC system.

Results: Basal cell carcinoma was finded in 1513 patients (75,0%), T1 (68,0%), T2 (27,0%), T3 (3,0%), T4 (2,0%); SCC – 443 (22,0%), T1 - (76,0%), T2 - (20,0%), T3 - (3,0%), T4 - (1,0%); melanoma – 62 (3,0%), T1- (58,0%), T2 - (38,0%), T3- (3,5%), T4 - (0,5%).

Conclusion: This type of treatment is impossible without individual approach in technique and reconstructive material choosing, according to the defect volume and surround tissues characteristic. Main way of treatment is still reconstruction with local tissues inclusion, which provides better cosmetic effects.
Anaplastic Thyroid Cancer: Data in Rajavithi Hospital, Bangkok, Thailand

T. Jittreetat*(1)

(1) Center of Excellence in Otolaryngology, Head and Neck Surgery, Rajavithi Hospital, Department of Medical Services, Ministry of Public Health, Thailand, Bangkok, Thailand

Abstract

Anaplastic thyroid cancer (ATC) is a rare type of thyroid malignancy and one of the most aggressive tumors in human. A median survival time has been reported with an average 6 months following diagnosis. Managing to improve the survival of ATC patients include surgical resection, external beam radiation and chemotherapy. The present paper describes the clinical experience of an ATC treatment in Rajavithi hospital, Thailand.

Background: Anaplastic thyroid cancer (ATC) is a rare type of thyroid malignancy and one of the most aggressive tumors in human. Treatment composed of surgery, external beam radiation and chemotherapy have been used to improve the survival rate. In this study, we retrospectively reviewed of our experiences in ATC patients who were treated at Rajavithi hospital.

Methods: A retrospective study reviewed of all ATC cases diagnosed in the Rajavithi hospital between 2008 and 2015.

Results: A total number of 20 patients were diagnosed as ATC (Female = 13, Male = 7). Median age at diagnosis was 70 years (15-84 years). All tumors were at least 8 cm in size upon diagnosis. An average duration of thyroid mass was 6 months. 10 patients presented with cervical lymphadenopathies. 12 of patients presented with sign of upper airway obstruction. Tracheostomy was done in 18 of cases.

All patients were treated with by surgery which are surgical debulking in 18 of cases or complete tumor removal with total thyroidectomy in 2 of cases. Postoperative radiation was selected in 8 of patients. There was no chemotherapy treatment in all patient. Most of patient die within 3 month from the diagnosis (Mean = 81.75 days). Only 2 patients who received total thyroidectomy still be alive during study period (252 and 852 days).

Conclusion: Patients with anaplastic thyroid cancer showed poor prognosis despite multimodality treatment. Most of the patient die within 3 months from diagnosis. In selected case surgery combine with radiation can prolong survival.
Anaplastic thyroid carcinoma in young patients.

A.Belazzouz*(1), B.Hanane(2), F.Dalila(2), M.Safia(2)

(1)centre de pierre et marie curie, , Algeria, (2)CPMC, , Algeria

Purpose: Little is known about the characteristics and treatment outcomes of anaplastic thyroid cancer (ATC) in young patients. The aim of this study is to define the clinical and therapeutic features of this subgroup and to determine whether a young age is a factor of good prognosis.

Material and methods: Retrospective study of 17 patients with ATC diagnosed between 2008 and 2016 at Pierre Marie Curie Center. 3 Patients aged 55 or younger with ATC were identified (group P1) and compared to 4 patients older than 55 whom were selected to serve as a control (group P2) and treated all by the same modality radio-chemotherapy (one patient operated in each group) to avoid any other factors that may have influenced survival.

Results: The median age was 44 years (two women and a man) in the younger group VS 66 years in older group (two women, two men). The median duration of symptoms was 6,5 months in group P1 vs 2,16 months in group P2. The mean tumor size at ultra sound imaging was 44mm in P1 vs 50mm in P2 and goiter volume was 59,66cc in P1 vs 69,5cc in P2. Stage UICC found in P1 were three cases 4C and one case 4A VS 4B, 4C equality in P2. Mean survival duration was 22 months in P1 vs 9,75 months in P2, wherein cause of death was local due to cancer in the majority of both groups P1 and P2.

Younger patient with ATC had similar median survival outcomes with older group of ATC (p: 0,411).

Conclusion: ATC is a rare disease, representing a diminishing proportion of thyroid carcinoma. Despite its rarity, however it remains one of the leading causes of thyroid cancer mortality. In line with the existing body of literature, age does not appear to be a significant prognostic factor. Taking into account the small sample size, despite the significant dose of chemotherapy and radiotherapy administered in the younger group compared to the older one, there is no significant difference elicited between the two groups.
Better consenting for thyroidectomy: which patients are increased risk for postoperative hypocalcaemia?

A.Harris*(1), E.Prades(2), O.Tkachuk(3), H.Zeitoun(3)

(1)Aneurin Bevan University Healthboard, Newport, United Kingdom, (2)Betsi Cadwaladr University Healthboard, Rhy, United Kingdom, (3)Betsi Cadwaladr University Healthboard, Rhyl, United Kingdom

Purpose of the study: The primary aim of this study was to ascertain the risk ratio for developing early postoperative hypocalcaemia following a completion or total thyroidectomy versus a hemithyroidectomy. The secondary aim was to establish the effect other factors have on risk of hypocalcaemia following thyroidectomy and present this information in a clinically useful form.

Materials and Methods used: All patients who underwent thyroidectomy under a single consultant during a five year period were included. A multivariate analysis was undertaken to ascertain which variables had the most effect on the risk of hypocalcaemia. A prognosis table was constructed to allow risk to be predicted for individual patients based on these factors.

Results: Included in the analysis were 210 procedures and 194 patients. Eighteen percent of patients had hypocalcaemia on day one. The multivariate analysis revealed total thyroidectomy (risk ratio 26.5, p<0.0001), diabetes (risk ratio 4.8, p=0.07) and thyrotoxicosis (risk ratio 3.1, p=0.04) as statistically significant variables for early postoperative hypocalcaemia. Gender as an isolated factor did not reach significance but was included in the model. The p-value for the model was p<1x10-12.

Conclusion: Total thyroidectomy increases risk of early hypocalcaemia when compared to hemithyroidectomy. Gender, diabetes and thyrotoxicosis were also been found to influence the risk. All of these factors are available pre-operatively and can therefore be used to predict a more specific risk for individual patients.
BRAFwild Papillary thyroid carcinoma has two distinct mRNA expression patterns which have different clinical behavior

D.Lee*(1), J.Kim*(1), H.Lee(1), J.Park(1), Y.Rho(2)

(1)Department of Otolaryngology-Head and neck Surgery, Kangnam Sacred Heart Hospital, Hallym University College of Medicine, Seoul, South Korea, Seoul, Korea, South (2)Department of Otolaryngology-Head and neck Surgery, Kangdong Sacred Heart Hospital, Hallym University College of Medicine, Seoul, South Korea, Seoul, Korea, South

Objectives: The BRAFV600E mutation is the most common genetic alteration in papillary thyroid carcinoma. Several studies reported that the presence of BRAFV600E mutation was associated with extrathyroidal extension, tumor size, and the number of metastatic lymph nodes in PTCs. However, as for PTCs without BRAFV600E mutation (BRAFwild), some tumors show indolent course while some tumors show very aggressive disease progress. Because not all the BRAFwild PTCs show good prognosis, discovery of some prognostic markers in BRAFwild PTCs which can predict clinical behavior is absolutely needed. In this study, using a large set of TCGA genomic data, we tried to classify BRAFwild PTCs into two subtypes which have distinct molecular pattern and different clinical behavior. Also, we tried to suggest gene signatures (RAS-score) which could predict the molecular subtype and clinical behavior of BRAFwild PTC

Methods: Integrated genomic analysis was done using all genomic data of papillary thyroid carcinoma in TCGA data portal (https://tcga-data.nci.nih.gov) and cancer browser (https://genome-cancer.ucsc.edu). Gene-level expression data from mRNA-seq (N = 505), copy number variation data (N = 493), somatic mutation data (N = 505), RPPA data (N = 375) and clinical information (N = 505) were included in analyses. Clinical data included age, gender, unifocal/multifocal, extrathyroid extension, TNM stage and BRAF mutation state. Using Gene Ontology (GO) and logistic regression test, we selected genes signatures (RAS-score) and applied this prediction model to validation cohort (GSE60542)

Results: When we performed unsupervised clustering, BRAFwild PTCs were divided into two molecular subtypes. Each subtype showed distinct molecular pattern (mRNA expression, CPN alteration, mutation profile and Reverse Phase Protein Array (RPPA) analysis). Also, each subtype showed different clinical behavior – cluster 1 showed indolent clinical behavior but cluster 2 showed aggressive clinical behavior. When we made prediction model and applied it to validation cohort (GSE60542), we could confirm the consistency of gene signatures as a predictive score.

Conclusion: We found that BRAFwild PTCs were divided into two molecular subtypes and each subtype showed distinct molecular pattern, different activated pathways and different clinical behavior. Also, with gene signatures (RAS-score) we suggested here, we could predict the molecular pattern and clinical behavior of BRAFwild PTCs in clinical setting.
Carotid body tumors associated to papillary thyroid cancer. Report of six cases.
L. Pacheco-Ojeda*(1)
(1)Centro Médico Oncológico, Quito, Ecuador

Carotid body tumor associated to papillary thyroid carcinoma. Report of six cases
Luis Pacheco-Ojeda, Andrés Ayala, Karla Salvador

ABSTRACT

Purpose of the study. Carotid body tumors (CBT) are rare benign neoplasms of neural crest origin arising from paraganglia cells located at carotid bifurcation. They are more frequently discovered at high altitude regions. On the contrary, incidence of papillary thyroid cancer (PTC) is steadily raising in the whole world. We report a series of cases of synchronous and metachronous association of both lesions, treated surgically.

Materials and methods. Among 242 clinically diagnosed CBT, 215, arising in 202 patients (13 bilateral), were operated in Quito, Ecuador. In 13 (6%) cases, a malignancy in other localization was associated to the CBT. A PTC was treated surgically in 6 of these patients, one previously, 3 after the CBT surgery and 2 simultaneously. These last two particular cases included a male patient operated for a CBT and homolateral cystic mass whose histological report was a cystic PTC in ectopic thyroid tissue; the other was a female patient who underwent a CBT resection and a total thyroidectomy and central and lateral neck dissection for a PTC.

Results. Five patients had an uneventful postoperative recovery of surgery of both tumors. Only one patient, whose PTC was treated after surgery oh the CBT, died later for local recurrence and pulmonary metastases of the CBT.

Conclusions. Synchronous or metachronous CBT and PTC associated in the same patient can be surgically treated of both lesion with success and minimal morbidity.
Clinical Significance of PET CT and CT in Patients with Recurrent Papillary Thyroid Cancer

G.Eui-kyung*(1), J.Kang*(2), B.Lee(2), S.Kim(2), S.Shin(2)

(1)Department of Otorhinolaryngology - Head & Neck Surgery, Pusan National University Hospital, South Korea, Korea, South, (2)Pusan National University Hospital, , Korea, South

Background : Fluorine-18 fluorodeoxyglucose positron emission tomography/computed tomography (18F-FDG PET/CT) has been widely accepted as an effective method for detecting recurrent papillary thyroid cancer (PTC) in patients with increased serum thyroglobulin (Tg) or Tg antibody (TgAb) levels and negative whole-body scintigraphy (WBS) results. The role of WBS as a diagnostic tool in detecting recurrence has relatively decreased recently. However, only a few studies have examined the usefulness of 18F-FDG PET/CT for evaluating patients with recurrent PTC, regardless of the WBS results. The aim of this study was to evaluate the diagnostic value and prognostic role of 18F-FDG PET/CT for patients with recurrent PTC, irrespective of their WBS results.

Methods : Sixty-six patients with locoregional recurrent PTC, who underwent 18F-FDG PET/CT and neck CT within 6 months before surgical treatment, were enrolled in this study. Imaging findings were compared with postoperative histopathologic results. The diagnostic values of 18F-FDG PET/CT and neck CT were compared according to the serum Tg and TgAb levels and cervical levels. Each patient’s status at the last follow-up was also reviewed, and survival probabilities were estimated using the Kaplan-Meier plot.

Results : The sensitivity, specificity, and diagnostic accuracy of 18F-FDG PET/CT for the entire patient group were 38.5%, 90.2%, and 58.3%, respectively. The corresponding neck CT values were 55.0%, 85.7%, and 66.7%, respectively. According to the serum Tg and TgAb levels, except for the specificity, most diagnostic values of 18F-FDG PET/CT were worse than those of neck CT, with or without statistical significance. For the high maximum standardized uptake value (SUVmax) group (SUVmax > 10) and the low SUVmax group, the median locoregional disease-free survival times were 33.3 months and 81.8 months, respectively (p < .001).

Conclusions : The diagnostic value of 18F-FDG PET/CT for localizing recurrent lesions was worse than that of neck CT, irrespective of the WBS results. However, patients with a higher SUVmax showed a significantly worse prognosis than did those with a lower SUVmax. Therefore, we suggest that in patients with recurrent PTC, 18F-FDG PET/CT should be considered for prognostication rather than diagnosis.
Comparative study of preoperative ultrasonographic elastography and computed tomography (CT) used for determining the nature of thyroid nodules

F. Liu*(1)
(1) Jiangsu Cancer Hospital, Nanjing, China, People’s Republic of

Objective: To study the accuracy of determining the nature of thyroid nodules by ultrasonographic elastography and CT examination through compare the clinical and pathological relationship between the preoperative ultrasonographic elastography and CT examination and postoperative pathologic results of thyroid carcinoma.

Methods: The examination data of 75 thyroid nodules from 62 patients admitted in Jiangsu Cancer Hospital between 2012 September and 2013 June were collected. The nature of these thyroid nodules were determined primarily by ultrasonographic elastography and CT before surgery and compared with the preoperative observation and the postoperative pathologic examination results of these thyroid nodules. The clinical data of thyroid nodule of ultrasonographic elasticity imaging examination, CT findings with clinical and pathological data were analysed retrospectively in our hospital between 2012. 9 and 2013. 6. According to the results of ultrasonographic elasticity classification and CT results, the character of thyroid neoplasm was preliminarily judged, and in addition, intraoperative observation of the nodule characteristics and postoperative pathological results were retrospectively analyzed.

Results: According to the pathologic diagnosis, 30 of the 75 thyroid nodules were benign and 45 were malignant. The misdiagnosis rate of ultrasonographic elastography was 24.0% (11/30) which was significantly lower than that by CT (38.67%, 29/75, P<0.05). The misdiagnosis rate of CT was especially high for tiny papillary carcinoma which was 57.14%. It was 67% of misdiagnosis rate in judging benign nodule, 15. 56% of misdiagnosis rate in judging malignant nodules, and total misdiagnosis rate was 24. 0%. However, It was 57. 14% of misdiagnosis rate of CT examination in judging thyroid nodule, and the total misdiagnosis rate was more than 50% in judging tiny papillary carcinoma. Conclusion: Ultrasonographic elasticity imaging is a relatively high sensitivity and specificity sensitive and accurate method for diagnosis of tiny papillary carcinoma of malignant tumor, especially in tiny papillary carcinoma, which is significantly higher than that compared to CT examination, therefore. For thyroid nodules, in order to increase the accurate rate of diagnosis, ultrasonographic elastography can be considered to be used as routine examination for thyroid nodules examination.

Key words: thyroid nodules; ultrasonographic elastography; CT; pathological diagnosis; Elastic ultrasound imaging
Comparison of differentiated thyroid carcinoma recurrence in children and the clinical features in different age groups

J.Lu*(1)

(1)Department of Otolaryngology-Head & Neck Surgery, Xinhua Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, China, People's Republic of

Purpose of the study: The prevalence of differentiated thyroid cancer (DTC) is increasing in children. However, the characteristics of DTC recurrence and its clinical features in children of all age groups, especially those less than 14 years old, are not well studied.

Materials and methods used: We retrospective investigated 73 children diagnosed with DTC in our hospital between January 1998 and July 2014. The data were reviewed for different age groups based on their age at initial diagnosis: 5-9 age group, 10-14 age group, and 15-19 age group. The mean age of the recurrence group was 10.6±4.1, which was lower than that of the non-recurrence group (P<0.01).

Results: The main symptom of the recurrence group at initial diagnosis was neck mass (P=0.02). Significant differences were not observed in the TNM stage and risk level between the recurrence group and non-recurrence group. According to age classification, the number of high-risk subjects in the 5-9 age group was significantly higher than that in the 10-14 and 15-19 age groups (P<0.05). The recurrence rate in each age group showed a decreasing trend as the age of the DTC children increased (P<0.05).

Conclusion: Altogether, our findings suggest that younger DTC children and those with neck mass as the initial symptom presented a higher risk of tumor recurrence. A high proportion of local invasion and a high risk of recurrence were observed in the low age group, which suggests that low age is an important risk factor for DTC recurrence in children.
Comparison of risk of malignancy in a subgroup with atypia of undetermined significance/follicular lesion of undetermined significance: A systematic review and meta-analysis

S.Ahn*(1), K.Kim(2), W.Jeong(2)

(1)Seoul National University College of Medicine, Seoul National University Bundang Hospital, Gyeonggi-do, Korea, South, (2)Seoul National University College of Medicine, , Korea, South

Objective As heterogeneous findings are included in the atypia of undetermined significance/follicular lesion of undetermined significance category of the Bethesda system for reporting thyroid cytopathology, differing risks of malignancy in atypia of undetermined significance/follicular lesion of undetermined significance have been reported in several papers. A systematic review and meta-analysis was performed to review the risk of malignancy per subgroup and suggest appropriate subgrouping based on risk of malignancy.

Design, setting and participants A systematic review of full-text publications written in English found in the Embase and PubMed databases was performed.

Major outcome measure The rate of diagnosis of atypia of undetermined significance/follicular lesion of undetermined significance from fine needle aspiration, definition of subgroup used, rate of diagnosis, and malignancy in each subgroup were screened.

Results The four-tiered subgroup proportion meta-analysis showed that the 95% confidence interval of the risk of malignancy in the nuclear atypia group did not overlap with the other three subgroups and demonstrated a significant difference. Two-tiered analysis using the atypia of undetermined significance and follicular lesion of undetermined significance showed that atypia of undetermined significance had a 2.64-fold increase in the risk of malignancy compared with the follicular lesion of undetermined significance group. Substantial heterogeneity in the nuclear atypia and microfollicular pattern group was observed.

Conclusion The atypia of undetermined significance group with nuclear or cytoplasmic atypia had a significantly higher risk of malignancy than the follicular lesion of undetermined significance group, and it should be considered as a separate category.
Correlation between the TIRADS score and the histological findings in the diagnosis of malignancy of thyroid nodules

I.Zgolli*(1), M.Tbini(2), S.Sameh(3), C.Halwani(3), R.Ben m’hamed(3), K.Akkari(4)

(1)military hospital in Tunisia, Tunis, Tunisia, (2)military hospital in Tunisia, Tunis, Tunisia, (3)military hospital in Tunisia, Tunis, Tunisia, (4)military hospital in Tunisia, Tunis, Tunisia

The aim of our work is to compare the ultrasound diagnosis and the histological result of the surgical specimen of the thyroid nodule and to find a correlation between them.

PATIENTS AND METHODS

Retrospective study of 159 thyroid nodules in 69 operated patients of a thyroid nodule. The series was collected over a period of 3 years from January 2014 to June 2016, in the department of head and neck Surgery of the Military Hospital of Tunis. Our study was based on the analysis of the TIRADS scores advanced preoperatively by cervical ultrasound in B modes and color Doppler and comparison of these data with the histological results of the surgical specimens.

RESULTS

The average age of our patients was 46 years [12 to 75] with a sex ratio was 0.189. The nodule was multiple in 37 cases. All patients had a cervical ultrasound. The average size of the nodules was 2.42cm ranging from 0.5cm to 7cm. All the nodules were classified according to the TIRADS classification, 18% Of the nodules were TIRADS II, 46% TIRADS III, 33% TIRADS IV a and 2.7% TIRADS IVb. The sensitivity of the TIRADS score in screening Of malignancy was 33,33% the specificity was 97%. The positive and negative predictive values were respectively of 42% and 96%

CONCLUSION

The nodular pathology of the thyroid is a frequent reason for consultation. The challenge for ENT practitioners is to detect nodules that may be malignant.

Only the anatomopathological examination of the surgical specimen makes it possible to give with certainty the histological nature of a thyroid nodule.

The TIRADS (Thyroid Imaging Reporting and Data System) system includes a standardized ultrasound report to detect suspicious nodules.

Without being totally reliable, the TIRADS score, is an interesting tool in the detection of malignant thyroid nodules. Being associated with fine needle aspiration, the TIRADS may avoid abusive surgical indications.
degenerated thyreoglosses Cyst tract: a case report and review of the literature

E.Beji*(1), I.Zgolli*(2), S.Mezri(1), C.Halouani(1), R.Benmhamed(3), K.Akkari(1)

(1)military hospital of tunisia, Tunis, Tunisia, (2)military hospital in Tunisia, Tunis, Tunisia, (3)military hospital in tunisia, Tunis, Tunisia

objectif : Report a rare case of degeneration of a cyst of the thyreoglossus tract and review of the literature

Methods :

Report a rare case of carcinomatous degeneration of a cyst of the tract Thyroglossus of the adult, discuss its therapeutic modalities and insist on The importance of prevention in the management of this entity.

results

This is a 45-year-old diabetic patient who was referred to us for Of an anterior cervical tumefaction accidentally discovered by His general practitioner. The Review Cervical note the presence of an ad-hyoid tumefaction of 5 cm, firm, painless and not very mobile with respect to the deep plane. We notice The freedom of the thyroid lodge, the absence of cervical adenopathies and the Normality of the rest of the ENT examination. Cervical ultrasound finds cystic mass 45 mm polylobed with central calcifications. The thyroid gland is the Two straight lobar micronodules of 5 and 6 mm, classified respectively TIRADS III and II. The patient was operated on an exploratory cervicotomy. He had a complete resection of the Cyst carried in monobloc with the hyoid bone according to the technique of sistrunk. The Review Extemporaneous conclusion of carcinomatous degeneration of a cyst of the tract Thyrogloss. The patient had a complement of total thyroidectomy. The patient was subsequently referred to nuclear medicine For supplemental irradiation.

Conclusion:

Excision in childhood of KTT is more practiced in preventing outbreaks Infectious than a malignant transformation. The risk of developing a carcinoma On this entity is certainly low but nevertheless remains undervalued due to surgery Of preventive excision very often carried out in childhood
Development of a novel detachable magnetic nerve stimulator for intraoperative neuromonitoring

E.Sung*(1), S.Kiim(1), H.Roh(2), B.Lee(3)

(1)Pusan National University Yangsan Hospital, Yangsan, Korea, South, (2)Pusan National University, Yangsan, Korea, South, (3)Pusan National University, Pusan, Korea, South

Objectives: Recurrent laryngeal nerve palsy is a serious complication of thyroid and parathyroid surgery. During intraoperative neuromonitoring of the recurrent laryngeal nerve in thyroid surgery, repeated shifting between surgical instrument and nerve stimulator is troublesome and time consuming. Therefore, we developed a simple detachable magnetic nerve stimulator that can be connected to all metallic surgical instruments. This study aimed to investigate the feasibility and efficacy of a detachable magnetic nerve stimulator for intraoperative neuromonitoring in porcine models before application in humans.

Study design: Prospective study with a porcine model and human.

Methods: Eight recurrent laryngeal nerves in four pigs and thirteen recurrent laryngeal nerves in nine patients that underwent thyroidectomy were tested. We developed a detachable nerve stimulator that combined the surgical instrument and nerve-stimulating probe. We evaluated the electromyography amplitudes of the eight recurrent laryngeal nerves at pig and thirteen recurrent laryngeal nerves at patients using conventional nerve probes and surgical instruments with the novel detachable magnetic nerve stimulator.

Results: The amplitudes of the electromyographic recordings of the eight recurrent laryngeal nerves at pigs and thirteen recurrent laryngeal nerves at patients were analyzed. The detachable magnetic nerve stimulator was feasible and safe in all cases. There was no significant difference in the amplitude of the electromyography of the recurrent laryngeal nerve between instruments (P=0.423 at animal, P=0.446 at human).

Conclusion: The application of stimulating dissection using a detachable magnetic nerve stimulator during thyroidectomy with intraoperative neuromonitoring is simple, convenient, and effective. It provides surgeons with real-time feedback of the electromyographic response during intermittent intraoperative neuromonitoring. We believe that this novel device could be an essential guide for most surgeons, especially for less experienced head and neck surgeons.
DIAGNOSIS AND TREATMENT OF ADVANCED LOCALLY INVASIVE THYROID CANCER

Z.Limani*(1)

(1)Department of ENT&HNS, University Clinical Center Of Kosovo, Prishtina, Albania

Purpose of the study:
Locally invasive advanced thyroid cancer extends beyond the thyroid capsule, invading adjacent soft tissue structures and organs. Thyroid cancer consists about 1.5% of all cancers and extra thyroid local invasion occurs in about 5%. Treatment modality consist of radical surgery and postoperative radioiodine treatment.

The aim of this study is to discuss the importance of preoperative correct diagnosis in cases with advanced local invasion and treatment decision making.

Material and Methods:
Retrospectively we reviewed 22 cases of well differentiated thyroid cancer with extra thyroid invasion of adjacent tissues and organs. All cases were surgically treated at the ENT&HNS Clinic, UCC of Kosovo, between 2006-2015. Postoperatively invasion was histopathologically confirmed.

Results:
Out of 22, in 17 cases correct preoperative diagnosis of extra thyroid invasion was set. Adjacent thyroid tissue fixation, swallowing obstacles and dispnea were among the clinical sings. In two cases there was massive bleeding from the local invasion of blood vessels. Meticulous ultrasound and CT examinations were used to confirm the diagnosis in patients with above mentioned clinical sings.

In 5 cases due to the lack of clinical signs we were unable to determine preoperative extra thyroid invasion and the diagnosis was set intraoperatively and confirmed by histopathology.

They were all treated with radical surgery by resecting infiltrated structures and at least including prophylactic central compartment neck dissection. Reinterventions were of palliative nature.

Infiltrated structure were cricothyroid membrane or thyroid cartilage (11), strap muscles 8 and, Piriform sinus (3).

Conclusions:
Preoperative detection of local invasion in well differentiated thyroid cancer is of a significant benefit for proper surgical treatment.

Treatment aims to ensure respiration, food passage, prevent bleeding and improve the overall survival time period.
Drains into total thyroidectomy: Are they all the same?

F. Perez Alisedo*(1), M. Chalup Ilendo(2)

(1) Hospital F. Abete, , Argentina, (2) Hospital F Abete, Pablo Nogues, Buenos Aires, Argentina.

Purpose of the study: To describe the differences between patients undergoing total thyroidectomy with aspirative drainage or laminar drainage, taking into account the immediate complications and the days of hospitalization.

Materials and methods used: Design: Descriptive, retrospective. Population: Patients underwent total thyroidectomy in the Malvinas Argentinas health system due to thyroid disease in the period between April 2013 and October 2014. Method: The variables evaluated for each of the included patients were: Name, surname, sex, age, DNI, indication of thyroidectomy performed, type of drainage placed, days of hospitalization, post-operative treatment, postoperative complications, and diagnosis of pathological anatomy. All variables were dumped on a chart and then analyzed by the authors.

Results: Of the 55 patients included, 53 were women (96.36%) and 2 men (3.64%). The ages ranged from 22 to 83 years with an average of 58.87 years. Patients with aspiration drainage were 29 (52.73%), while laminar patients were 26 (47.27%). The mean number of days of hospitalization was 2.08 days for laminars, and 3.55 days for aspirators (70.67% more for aspirators). Postoperative complications were 10 transient hypocalcemias (3 with laminar drainage and 7 with aspiration), 2 seromas (1 aspiration and 1 laminar) and 3 hematomas requiring reoperation (2 with aspiration and 1 with laminar).

Conclusions: The reason to place a drainage after a total thyroidectomy is to prevent hemorrhagic complications. The aspiration drainage would be according to several authors more effective for this objective. However, in our study, three hematomas with a need for reoperation were presented, of which two were with laminar drainage. In addition, the group of patients with aspiration drainage presented a 70.67% greater stay than the group of laminar drains. Therefore, we believe that it is important to develop a prospective experimental study to establish the indications of placement of each of the drains.
Early diagnosis and surgical treatment of medullary thyroid carcinoma in multiple endocrine neoplasia type 2A. Study of a Senegalese family with a mutation of the RET gene.

A.Sy*(1)

(1)Hôpital Militaire de Ouakam, Dakar, SENEGAL, Dakar, Senegal

Multiple endocrine neoplasia (MEN) type 2 is a rare autosomal dominant hereditary disorder characterized by the constant occurrence of medullary thyroid carcinoma (MTC). Patients with MEN 2A developed MTC, pheochromocytomas and parathyroid tumors. The purpose of this study was to clarify through the investigation of the only Senegalese family known to date with a mutation of the RET gene, early diagnosis and surgical treatment in order to improve the survival of the patients.

Material and method

After identification of the index case, the patient's family tree has been studied and genetic screening was performed by the study of the RET gene. In the case of mutation of this proto-oncogene, we performed dosage of calcitonin, calcemia, blood and urinary metanephrines, and radiological explorations.

Results

Four generations were studied, 22 individuals. There were 11 men and 11 women. Twelve consented to genetic screening. Seven had a gene mutation, of which 6 developed the disease. The following phenotypes were observed: an isolated MTC in 2 cases, a MTC associated with hyperparathyroidism (HPT) in 1 case, a MTC associated with an HPT and pheochromocytomas in 3 cases. Four patients underwent surgical operations: total thyroidectomy with lymphadenectomy associated with parathyroidectomy and / or cure of a pheochromocytoma. Two deaths were recorded, one in relation to the evolution of a MTC (non-operated patient) and the other of undetermined cause.

Conclusion

With the development of molecular biology, the dosage of calcitonin and advances in genetics, screening for families at risk, early diagnosis and surgical treatment (or even prophylactic surgery) have become possible, thus improving survival of patients with MEN 2A.

Sy A1, Sy SL1, Palou EJR2, Ndiaye M2, Léye A3.

1) ENT Department, Military Hospital of Ouakam, Dakar, Senegal

2) ENT Department, Children’s Hospital of Diamniadio, University of Thiès, Senegal

3) Department of Internal medicine Endocrinology, Hospital of Pikine, University of Dakar, Senegal
EARLY DIAGNOSIS OF RECURRENT DIFFERENTIATED THYROID CANCER USING PET/CT VS RAI WHOLE BODY SCAN AND USG NECK AFTER THYROID SURGERY

S.Baral*(1), J.Bakshi(2), N.Panda(3)

(1)Chitwan Medical College, Bharatpur, Nepal, (2)Postgraduate Institute of Medical Education and Research, Chandigarh, India, Chandigarh, India, (3)Postgraduate Institute of Medical Education and Research, Chandigarh, India

Purpose of the study:
Differentiated Thyroid cancers are primarily managed by surgery followed by radio-iodine ablation for any remnant disease. The recurrence rate of DTCs after primary management is around 30% and 60% of these recurrences occur in the first 10 years. Post treatment surveillance for recurrence is crucial and is done with routine USG neck, RAI-WBS and serum thyroglobulin monitoring. PET/CT is a useful tool to detect the recurrences with precise anatomical location and also to look for any distant metastasis. The purpose of this study is to evaluate the effectiveness of PET/CT versus RAI-WBS and USG neck to diagnose early recurrence of DTC following thyroidectomy and also to study the incidence of early recurrence and factors contributing to recurrence.

Materials and methods:
A prospective study was conducted in the Department of Otolaryngology, Head & Neck Surgery, PGIMER, Chandigarh, India from July 2013 to December 2014. 24 patients with differentiated thyroid neoplasm diagnosed with FNAC were randomly divided into two groups: group A of 13 patients and group B of 11 patients. All patients underwent detailed history taking, physical examination and routine hematological and biochemical tests. CECT and fused PET/CT imaging were done for all patients prior to surgery and surgeries were accordingly performed as total/subtotal thyroidectomy +/- neck dissection. Serum thyroglobulin levels were recorded preoperatively and at 4 weeks, at 8 weeks and at 12 weeks following surgery. USG Neck and RAI-WBS were done at 6 weeks of surgery to detect residual disease and radio-iodine therapy was given when indicated. PET/CT in Group A and RAI-WBS and USG neck in Group B were done at 24 weeks following surgery. Management of any locoregional recurrence and distant metastasis were dealt with surgery and/or radio-iodine ablation. The comparison between the efficacy of PET/CT vs. USG neck and RAI-WBS was done using nonparametric tests like Chi-Square Test and Fisher’s Exact Test.

Results:
Incidence of early recurrence of DTC was 29.17 %. No significant advantage of PET/CT over RAI-WBS and USG neck (p> 0.4) was observed. PET/CT has lower sensitivity and specificity than RAI-WBS and USG neck (sensitivity-80% vs. 100%, specificity-87.5% vs 88.9%) for early detection of recurrence of DTC.

Conclusion:
PET/CT did not act as better diagnostic tool than conventional methods to detect the early recurrence of DTC after surgery that is USG neck and RAI-WBS. Further studies with larger sample size are needed.
Ultrasound guided fine needle aspiration cytology is one of the main investigations of thyroid nodules. For reporting thyroid cytology classification system proposed by Royal College of Pathologists (THY 1 to THY5) is used in the United Kingdom. In the modified classification THY3 further sub divided into THY3a and THY3f.

The aim of this study is to evaluate the incidence of frank malignancy in THY3a and THY3f thyroid cytology from fine needle aspiration.

A retrospective analysis of data of all patients with thyroid nodules who underwent ultrasound guided FNAC between January 2013 till December 2015 were evaluated.

A total of 215 cases of thyroid nodules were investigated. 42 patients (20%) were THY3. Of the THY3, 25 patients (60%) were THY3a and 17 patients (40%) were THY3f.

Total of 34 patients out of 42 underwent diagnostic hemithyroidectomy. Seven patients out of 34(20%) had evidence of micro carcinoma. Two out of 17 patients (12%) had microcarcinoma in THY3a category and five out of 17 patients (30%) had microcarcinoma.

Considering the high incidence of micro carcinoma in THY3f, diagnostic hemithyroidectomy seems mandatory as compared to THY3a, where low risk patients can be monitored. Further prospective study is being carried out to obtain larger sample size and more meaningful results.

Ghaffar.S(1), Cornelia.S(1), Nandapalan.V(1), Santosh.S(2) Dept of ENT(1), Dept of Pathology (2), St Helens & Knowsley NHS Trust
Background: Follicular thyroid carcinomas (FTC) comprises less than 10% of differentiated thyroid cancers. A limited number of studies specifically examine this type of cancer. The aim of this study was to investigate the epidemiologic characteristics and prognostic factors of follicular thyroid cancers. In addition, we examined more precisely the two subtypes of this cancer: classical follicular carcinomas and Hürtle cell carcinomas.

Patients and methods: a retrospective cohort of 125 patients treated for FTC (73 patients with a classical follicular cancer and 52 patients with a Hürtle cell cancer) from 2000 to 2015 was analysed. These 125 patients were extracted from a population of 1713 patients who went through surgery for a thyroid carcinoma over the same period.

Results: Demographic profiles for FTC are the same as papillary thyroid carcinomas: more women than men (69.6% of women versus 30.4% of men in the study), and the mean age at the diagnosis was 51.8 years old. Unlike conclusions frequently published in the literature, we found in our study that patients with a Hürtle cell thyroid cancer present a better node metastasis rate (0.8%) and distant metastasis rate (0%) than patients with a classical follicular thyroid carcinoma (4% of nodal metastasis, 6.4% of distant metastasis). However, the two types of follicular cancers present the same disease-specific survival rate (91.1%). Prognosis factors of the two subtypes of FTC and papillary thyroid cancer are mostly the same (patients older than 45 years, tumor size larger than 4cm), with an additional feature: the significance of microscopic aggressiveness criteria (large capsular and/or vascular invasion, p<0.015).

Conclusion: Overall, follicular and Hürtle cell thyroid carcinomas have good long-term survival expectations. The main difference with papillary thyroid cancers lies in the lower rate of nodal metastases. In our study, only classical follicular carcinomas lead to distant metastasis or specific deaths.

Hürtle cell carcinomas and minimal invasive follicular carcinomas, less aggressive, could be studied for a therapeutic de-escalation protocol.
G-CSF and/or EGFR expressions of anaplastic thyroid cancer cells - clinical implication -

H. Kawauchi*(1)

(1) Shimane University, Faculty of Medicine, Izumo city, Japan

Background & Summary: Overall prognosis of patients with anaplastic thyroid cancer (ATC) is very poor among those of patients with malignancy in head and neck regions, because of its clinicopathological features. We have recently experienced 8 cases of patients with ATC, and 4 cases of them were diagnosed as G-CSF producing tumors by an immunostaining and RT-PCR. On the otherhand, immunohistological analysis revealed that EGFR expression was highly demonstrated in all cases of anaplastic thyroid cancer, as reported by Fisher KE et al (J Surg Res 2013). Our treatment regimen to control the metastatic foci in the lung was set up to employ monthly administration of cetuximab 600mg + paclitaxel 120mg in those patients. A patient with good response to this therapy is introduced in detail with monitoring G-CSF activity, and the availability of EGFR-molecular targeting regimen together with chemotherapy is also discussed for patients with ATC.

Discussion & Future Goal: EGFR expression was highly demonstrated in all cases of anaplastic thyroid cancer (ATC), as reported by Fisher KE et al. (J Surg Res 2013). G-CSF producing character is found in 4 out of 8 recently experienced ATC cases. Our treatment strategy of chemotherapy employing with cetuximab & paclitaxel can be promising to downregulate lung metastasis post surgical intervention of patient with ATC. Maintenance chemotherapy of patients with ATC for lung metastasis with our treatment protocol in out-patient clinic might improve QOL of patients and elongate survival time without exacerbation of lung metastatic foci, but we have to mount much more experiences to manage those patients.

Authors: Hideyuki Kawauchi, Takafumi Fuchiwaki, Noriaki Aoi, Yasuhiko Shimizu, Ichiro Morikura, Yukie Hotta

Shimane University, Faculty of Medicine, Izumo city, JAPAN
Hypothyroidism following pediatric partial thyroidectomy

J.Chen*(1), Y.Wang(2)

(1)shanghai children's hospital, China, People's Republic of, (2) shanghai children's hospital, Shanghai, China, People's Republic of

Purpose of the study: Diagnostic and therapeutic processing of a thyroid nodule in children and adolescents may require thyroid lobectomy. Hypothyroidism following lobectomy can carry significant morbidity and should be recognized when present. Very few data in the literature report the long-term evolution of the remaining thyroid lobe in a defined pediatric population and risk factors of hypothyroidism following partial thyroid lobectomy. We sought to identify the incidence, as well as risk factors, of hypothyroidism after pediatric partial thyroidectomy and whether a post-operative thyroxine treatment necessary.

Materials and methods used: This is a retrospective chart review of 39 patients age 18 years or younger who underwent partial thyroidectomy at Shanghai Children's Hospital and RenJi Hospital of Shanghai Jiaotong University School of Medicine from 2009-2016. Twelve of them were lost to follow up, 27 patients met inclusion criteria. All patients benefited of postoperative regular thyroid ultrasonography, The incidence of postoperative of hypothyroidism was based on thyrotropin values and clinical symptoms. The following data was analysed: emergence of new thyroid nodules, occurrence of postoperative hypothyroidism. The relationship between hypothyroidism and lymphocytic infiltration on pathology was investigated.

Results: The mean age at the time of surgery was 11.3±1.9 years, 21 female (77.8%); mean age 13.2±1.7 years; mean follow up 45±21 months). Six of 27 patients (22.2%) became biochemically hypothyroid postoperatively needed thyroxine treatment for post-operative hypothyroidism, half of these patients displayed clinical symptoms of hypothyroidism in the immediate postoperative period.

Conclusions: In this children and adolescents population, a post-operative thyroxin treatment is necessary in 22.2% of cases after partial thyroidectomy. The presence of lymphocytic infiltrates may increase the risk of hypothyroidism.
Interest of thyroidectomy in the treatment of degenerated thyroglossal duct cysts. About a case (9 years old) and review of literature

C.Adel*(1), S.Benlahreche(2), N.Abes(3), F.Belbekri(3), K.Messaoudi(3)

(1)CHU constantine algerie, , Algeria, (2)CHU constantine, Constantine, Algeria, (3)chu constantine, , Algeria

Purpose of the Presentation

The thyroglossal duct cysts TGDC are the most frequent congenital neck mass.

Malignant degeneration is rare and accounts for only 1% of the cysts, its diagnosis is almost always postoperative, and it is often papillary adenocarcinoma (75 to 85%)

We discuss the value of total thyroidectomy in the management of papillary carcinomas on the thyroglossal duct cysts.

MATERIAL AND METHODS 9 years old patient, operated for an ad-hyoid cyst which diagnosis’ Papillary carcinoma was confirmed with the histopathological examination following the surgery.

Results The degeneration of TGDC is rare 1%, it is seen mostly in adulthood, which is not the case for our patient (09 years old), the necessity or not of a surgical intervention (thyroidectomy) divides the authors , Between those who think that cancer develops de novo within the cyst, and those who think that the thyroglossal duct is a natural channel for the spread of thyroid-originated carcinomas.

The former opt for surveillance without thyroidectomy, if thyroid is unharmed. The latter opt for total thyroidectomy, followed by internal radiotherapy with iodine.

For our patient we opted for a total thyroidectomy and an iratherapy, this decision was motivated by the early occurrence of degeneration (09 years), the difficulty of long-term monitoring, and the demand of the parents.

Conclusion The carcinogenesis of these cysts is sometimes premature, which leads us to propose, as the majority of authors, preventive and early surgical excision, and to discuss the need to develop a consensus with regard to the thyroid.
Intraoperative Neuromonitoring (IONM) during Retroauricular endoscopic or robotic thyroidectomy vs conventional open thyroidectomy: a multi-center prospective case-control study

Y.Koh*(1), S.Shin(1), J.Na(1), J.Nam(1), D.Kim(1), J.Kim(1)

(1)Yonsei University College of Medicine, Seoul, Korea, South

Background: This study compares the association between the intraoperative loss of neuromonitoring signal (LOS) and the postoperative vocal cord function following retroauricular endoscopic or robotic thyroidectomy (RAT) versus conventional open thyroidectomy (COT).

Materials and Methods: A prospective case series study was performed. A total of 153 patients who received either RAT or COT from May 2014 to September 2015 were enrolled. The RAT and the COT groups consisted of 111 and 42 patients respectively. The international standardized evaluation of LOS using the NIM 3.0 system for the intraoperative neuromonitoring (IONM) of recurrent laryngeal nerves (RLNs) and the, pre- and postoperative vocal cord assessments using a flexible laryngoscope were used to analyze and determine the RLN at risk during thyroidectomy.

Results: The accuracy of IONM in predicting postoperative vocal cord function was 98.25% in our case series. The LOS rate, the early and permanent vocal cord palsy rates were compared between the two groups. The RAT group showed a trend towards a lower risk of postoperative RLN palsy when compared to the COT group, but no statistically significant difference was achieved.

Conclusions: Similar risk of injury to RLN was found between the RAT and the COT based on our IONM data.
LIMITATION OF INTRAOPERATIVE FROZEN SECTION DURING THYROID SURGERY

S. Estebe*(1)

(1) CHU Rennes, Rennes, France

Objectives: To determine the impact of frozen section analysis on the strategy of thyroid nodule surgery.

Materials and Methods: A retrospective analysis of 312 consecutive patients operated for thyroid nodules between 2014 and 2015 was conducted. One hundred and ninety-three patients underwent US, fine needle aspiration cytology (FNAC), and frozen section (FS) and definitive pathological analysis were included. Se, Sp, VPP and VPN of FNAC and FS were calculated and compared (McNemar test). Multivariate analysis was performed to identify independent factor of good results.

Results: Se of FS and FNAC were respectively 86.1% and 81% with significant superiority of FS (p=.0352). Sp of FS and FNAC were respectively 100% and 72% with significant superiority of FS (p= .0156). A strategy based only on FNAC would have lead to a 3.6% rate of unnecessary total thyroidectomy vs. 0% using FS. Overall rate of second procedure after lobectomy would have been significantly greater without (28,9%) than with (10.3%) FS (p=.018). Overall rate of undone one stage central neck dissection concurrent to total thyroidectomy for MNG would not have been significantly different without (9.4%) and with (2.1%) FS (.058).

Conclusion: FNAC alone is unable to determine the extent of thyroid nodule surgery whatever the Bethesda subtype. FS significantly decreases the risk of two-stage procedure. For one stage total thyroidectomy for MNG, the gain with FS is limited.

Management of papillary thyroid carcinoma according to BRAF status


(1)P. Herzen Moscow Oncology Research Institute, , Russia, (2)P. Hertzen Moscow Oncology Research Institute, Moscow, Russia, (3)P. Herzen Moscow Oncology Research Institute, , Russia

Purpose of the study: The aim of this study was to investigate the association between PTC presentation (according to clinicopathological prognostic factors) among patients with BRAF mutations. Based on this data patients with PTC were selected for surgery management.

Material and methods:
The prospective study included 60 patients with PTC, who were treated at the Department of Microsurgery of P. Herzen Moscow Oncology Research Institute between 2015 and 2016.Clinicopathological features were compared between patients with and without the BRAFV600E mutation. Group I (with BRAFV600E mutation) – 45 patients. Group II (without BRAF mutation) – 15 patients. BRAFV600E mutation was detected by real-time PCR. Received data was assessed according to following prognostic factors: histologic subtype of PTC (papillar/follicular), capsule invasion (without and with intergrowth), lymph node involvement, distant metastasis, stage (TNM), frequency of recurrence and multifocality.

Results: Papillar subtype- 40%, follicular subtype - 60% in both groups. Capsule invasion: Group I (G I) -88%, Group II (G II) - 40%; capsule intergrowth: G I - 26%, G II - 10%, multifocality: I - 20%, II - 10%. Microcarcinomes (0,3-1 см): I - 57%, II - 60%, lymph node involvement - G I - 40 %, G II - 30%. Distant metastasis: G I - 5%, G II - 10 %. In Group I 51% of patients with pT1 have a capsule invasion. In 9% of patients of Group I stage T1-T2 was changed to pT3 after postoperative histology. Only capsular invasion has demonstrated the correlation with the mutation activity level (p0,05).

Conclusions:
Capsular invasion shows the strongest correlation with the presence of mutation, thus a more aggressive local surgery management in patients with PTC might be advisable (f.e. thyroidectomy instead of hemithyroidectomy).
MEDULLARY THYROID CANCER (MTC): IMPROVED SURVIVAL WITH NEW IMAGING.

G. Andry*(1), E. Willemse(2), A. Digonnet(2), M. Quiriny(2), C. Garcia(2), M. Delmelle(2)

(1) Institut Jules Bordet, Bruxelles, Belgium, (2) Institut Jules Bordet, Bruxelles, Belgium

INTRODUCTION: Surgery is the main step of treatment of MTC. Calcitonin: specific marker in the serum, other marker: carcinoembryonic antigen (CEA). MRI and PET CT to localize occult recurrence and treat patients more selectively.

METHOD: 54 consecutive Patients (PTS) (36 women, 18 men) treated for MTC (1969-2010).
Analysis: treatment results, complications, prognostic factors (TNM/Stage (St), calcitonin, CEA) recurrences and survival. PTS had a total thyroidectomy and central neck node dissection + lateral if suspicious nodes (sonography or MRI). Postoperative external radiation was for incomplete resection or capsular rupture of lymph node(s).

RESULTS: Median age: 54.5 yrs. St I: 6; St II: 16; St III: 26; St IV: 4; unknown: 2. Fourteen PTS referred after incomplete surgery: additional surgery in 4 PTS leading to total thyroidectomy in 53 PTS; 42 PTS: lymph node dissections; postop. complications: recurrent unilat. nerve paralysis (4); hypoparathyroidism (3); others (3). Postop. radiation to 18 PTS, chemotherapy to 3 PTS.

26 deaths: 11 DOD, 6: other causes, 9 unknown. Median F.U. for PTS alive: 12.3 yrs (0.4 to 21.7). Overall survival at 5 and 10 yrs: 74% (C1: 95%: 62-86%) and 55% (C1: 95%: 40-70%) respectively. Predictive factors for worse survival: ST > II (HR = 3.10, CI 95%: 1.28 – 7.51), lymph node invasion (HR = 2.98 , CI 95%: 1.22 – 7.26), postop. external radiation (HR = 5.23, CI 95%: 2.21 – 12.39). Ten PTS with normalised calcitonin (< 15) 9 are alive NED, 1 died of other cause, whereas in 38 PTS with persistently elevated calcitonin the survival was compromised (logrank test on survival curves: p = 0.02). 21 PTS survive for long periods (median 12.4 yrs, r: 4 to 22 yrs) with persistently elevated calcitonin levels. For 5 of them: 18-FDG PET or octreotid PET could localize tumoral tissue, 2 of those PTS had successful salvage surgery, 3 other PTS had disseminated metastases.

CONCLUSIONS: MRI and PET provide localization of tumoral deposits, tailored treatment improves survival and lessens morbidity in PTS with elevated calcitonin.
Micro anatomy of the central compartment of the neck - key to minimising post-total thyroidectomy complications

A.Shenoy*(1), A.Shivappa(2), P.Chavan(3)

(1)KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, Bangalore, India, (2)FORMER FELLOW, KIDWAI MEMORIAL INST OF ONCOLOGY, Bangalore, India, (3)kidwai memorial inst of oncology, Bangalore, India

The author has detailed his experiences over the last 4 years with respect to intra operative findings of recurrent laryngeal nerve (RLN), Inferior thyroid artery (ITA), position of the parathyroids – superior and inferior with respect to the RLN and the end artery of the ITA based on his dissections with 70 consecutive cases of thyroid cancers. He has listed the common sites of parathyroids and has described the micro vascular technique to delineate the end artery to the glands so as to prevent ischemic damage and resultant hypo calcemia. With this technique, the author supports a predominantly lateral approach to the TO groove in all but the smallest of lobes. In his opinion he has virtually minimized the incidence of transient hypocalcemia to 23/70 (32 %). The method to predict parathyroid ischemia in these vulnerable patients is supported by drawing a slope between the serum calcium at extubation and repeating the same at 6 hours at the same lab. Hypocalcemia is never seen when there is an upward slope or a plateau and often seen when the slope is downwards. The use of serum calcium as an indirect predictor serves as a surrogate for serum parathormone levels which has a half life of 3.5 hours and is an expensive investigation not available universally.
Minimally invasive video-assisted versus conventional open thyroidectomy: a matched cohort study.

J.Lage Fernandez*(1), A.Fuertes carballeira(2), E.Pablos buitrón(1), M.Fernández fernández(3), P.Parente arias(4)

(1)Complejo Hospitalario Universitario A Coruña, A coruña, Spain, (2)Complejo hospitalario Universitario Arquitecto Marcide, Ferrol, Spain, (3)Hospital Universitario del Henares, Madrid, Spain, (4)Complejo hospitalario universitario de A Coruña, A coruña, Spain

Title: Minimally invasive video-assisted versus conventional open thyroidectomy: a matched cohort study.

Authors:

Lage Fernandez, J 1; Fuertes Carballeira, A 2; Pablos Buitrón, E 1. ; Fernández Fernández, M 3; Parente Arias, P 1

1 ENT Department, Complejo Hospitalario Universitario de A Coruña.

2 ENT Department, Complejo Hospitalario Universitario Arquitecto Marcide, Ferrol.

3 ENT Department, Hospital Universitario Del Henares, Madrid.

Introduction: The minimally invasive video-assisted thyroidectomy (MIVAT) is an alternative to open surgery that entails less postoperative issues and better aesthetic results. Few studies have been capable to compare the differences between techniques in terms of surgical time, postoperative complications and hospitalization time, regarding the same population and surgical indications.

Objective: To compare surgical outcomes and postoperative complications of classic unilateral lobectomy with the MIVAT technique in an academic university hospital where both techniques are currently performed.

Materials and methods: A retrospective analysis of all unilateral lobectomies (open and MIVAT) performed in our hospital between 2007 and 2015 was conducted. We compared operative time, postoperative complications (laryngeal nerve injury, bleeding, infection), length of incision and duration of hospital stay.

Results: From a total of 852 thyroidectomies performed, 212 open surgeries and 54 MIVATs met matching criteria. The average surgical time was significantly minor in conventional thyroidectomy than in MIVAT (109 min Vs 135 min, p<0.05). There were 4 postoperative bleeding that required surgical management in the open surgery group and none in MIVAT group (1.8% vs 0%, p>0.05). Mean length of incision was 18 mm in MIVAT group and 52 mm in open surgery group. The average length of hospital stay was 1.17 days in MIVAT compared to 1.65 days in the open surgery group (p>0.05).

Discussion: The minimally invasive video-assisted thyroidectomy is a surgical technique feasible and reliable. Results show an increase in surgical time comparing to the open technique, but it is a less aggressive technique that allows less complications, no need of drainages and less hospitalization time. Although scar is shorter, an objective study about aesthetic result are advisable and it is currently developing in our institution. This technique must substitute the open procedure in cases of thyroid nodules not exceeding 35 mm in maximum diameter, although endoscopic technique and the learning curve force some surgeons to stay in a classical model.
INTRODUCTION: Differentiated thyroid carcinoma (particularly papillary carcinoma) frequently involves cervical lymph nodes. Recommended treatment is mainly based on surgery over the primary tumor and its macroscopic metastases. Avoiding lymph node dissection in patients without cervical lymph node metastasis (cN0) is almost the rule in T1-T2 carcinomas. However, there is still controversy in T3-T4 tumors.

The main objective of this study was to determine the prevalence of central structural recurrences to assess if an elective central neck dissection would improve the prognosis of these patients.

METHODS: A retrospective review of all subjects diagnosed of cN0 papillary thyroid carcinoma between 2005 and 2010 at our institution was performed. Total thyroidectomy (followed by RAI treatment and TSH suppressed or kept at low reference range) was performed in every patient. During the follow-up, an excellent response was defined as a negative result in both imaging tests and biochemical markers. Having just positive biochemical markers was considered as an incomplete biochemical response. Cytological evidence of disease at central or lateral compartments implied an incomplete structural response. Survival rates were estimated using Kaplan Meier curves.

RESULTS: 131 patients were recruited. The median follow-up was 7 years. Follicular variant of papillary carcinoma was the most frequent histologic finding. 89% of tumors were classified as T1-T2, and only 6% of tumors had macroscopic extrathyroid extension.

Excellent response was seen in 70% of patients during the follow-up. On the other hand, 9% of the patients presented incomplete structural responses, even if only 3% were central.

Disease-specific survival rate was 99.2% in 10 years. Cervical structural disease-free survival rate was 89% in 10 years. When taking into consideration only the central compartment, the structural disease-free survival rate was 96.7% in 10 years.

CONCLUSIONS: Elective central neck dissection would not have supposed any improvement in the prognosis of 96.7% of our patients. Besides, these patients would have been exposed to complications such as vocal cord paralysis or hypocalcemia. This data lead us to avoid elective central neck dissection in cN0 papillary thyroid carcinomas.
Phonetic characteristics of voice in patients with total thyroidectomy before and after radioisotope therapy

K. Hong*(1)

(1) Chonbuk National University Hospital, Korea, South

Background and Objectives: The larynx is an end-organ target for hormones, and thyroid hormone may act on the larynx. We objectively compared and analyzed the phonetic characteristics of patients with hypothyroidism and who underwent thyroidectomy before and after radioiodine therapy (RIT). In this study, raw data on patients who had undergone total thyroidectomy and high-dose RIT after surgery were used for their voice therapy and rehabilitation. Vocal changes in these patients before and after high-dose RIT were investigated through phonetic analyses. Voices were evaluated to enhance patient quality of life, and changes in their functional, physical, and emotional handicap indices were investigated. Subjects and Method: Fifty patients who had undergone a total thyroidectomy participated. Voice samples were obtained postoperatively (Post-OP), before high-dose RIT (Pre-RIT), and after high-dose RIT (Post-RIT). An acoustic analysis, maximum phonation time, and the voice handicap index (VHI) were used for the subjective evaluation. Results: Pitch-related parameters (mFo, Fhi, and Flo) decreased significantly after hormone administration. Perturbation-related parameters (APQ, sAPQ, and vAm) increased significantly during the Pre-RIT period. Maximum phonation time remained unchanged. The emotional index in the VHI decreased significantly during the Pre-RIT period. Conclusion: Thyroid hormone receptors in the larynx in patients with hypothyroidism may affect phonation. Our results suggest that stopping thyroid hormone administration is related to changes in vocal range, vocal intensity, and noise. Factors responsible for voice disorders decreased significantly in patients with a vocal handicap.
PITS AND PEARLS IN THE MANAGEMENT OF MONSTER GOITRES

A.Subash*(1), P.Panda(1)

(1)PGIMER, Chandigarh, India

Purpose: Goitres are classified based on the size as Giant (6-10 cm) and Monster (>10 cms). Invariably these patients have neglected the goitre and allowed them to grow to humungous sizes before seeking medical attention. Usually these as slow growing and are not troublesome, hence they are ignored by the patients. The treatment of such goitres is surgery. However when these become >10 cms they become challenging, both for the patient, the anaesthetist and the surgeon.

Materials and methods: We present here a single institutional experience of managing 12 monster goitres, who underwent either Total thyroidectomy, Subtotal thyroidectomy or Hemithyroidectomy, our experience and key factors affecting successful outcomes.

Results: 10 patients had benign lesion and 2 harboured malignancy. One patients had preoperative vocal cord palsy. All patients were mad euthyroid prior to surgery except one in whom the indication for surgery was thyrotoxicosis. All patients underwent awake fibreoptic intubation. Four patients underwent Total Thyroidectomy, two underwent hemithyroidectomy and remaining underwent subtotal thyroidectomy. All patients were given a single shot of antibiotics preoperatively. Harmonic scalpel and bipolar cautery was used intraoperatively. Surgical loupes were used in all cases for identification of the nerve. In all cases RLN was identified. Two patients developed transient vocal cord palsy which recovered completely postoperatively. Two patients developed permanent postoperative vocal cord palsy. Tracheomalacia was noted in two patients and only one of them had to be tracheostomised postoperatively.

Conclusion: Anatomy was found to be distorted in all our cases. Internal jugular vein abnormally compressed in most of the patients. Carotid vessels were displaced. Identifying the nerve was difficult due to distorted anatomy. Majority of patients had stretching of the nerve due to the enormous size of the gland. In spite of preservation of the nerve few patients develop transient vocal cord palsy which recovers with post operative steroids. Transient hypocalcemia is a consistent feature in spite of identifying the parathyroids and preserving its blood supply. A preoperative consent for tracheotomy post procedure should be obtained. Cases with tracheomalacia and bilateral vocal cord palsy can pose challenge for extubation and tracheostomy needs to be considered in them. Thoracotomy needs to be considered in patients with retrosternal extension.

Authors: Dr Anand S (Junior Resident), Prof Naresh K Panda (Professor and Head)

Department of Otolaryngology Head and Neck Surgery

PGIMER
Predicting Hypocalcemia after Total Thyroidectomy: A Risk Classification with Parathyroid Hormone Values

H.Lara sanchez*(1), S.Fernandez cascon(2), E.Gil-carcedo sañudo(2), L.Cuellar olmedo(2), A.Mayo iscar(2), L.Vallejo valdezate(2)

(1)Rio Hortega University Hospital, Valladolid, Spain, (2)Rio Hortega University Hospital, Valladolid, Spain

Purpose of the study: Measurement of intact parathyroid hormone (PTHi) is considered to be the most practical and effective regimen for the detection of hypocalcemia after Total Thyroidectomy (TT) or Surgery to Complete Thyroidectomy (SCT). PTHi could detect hypocalcemia earlier than the traditional serum calcium measurements. The aim of this study is to confirm the reliability of the pre and post-surgical PTHi measurements as a predictor of postsurgical hypocalcemia and to make the results obtained reproducible to other health institutions.

Materials and methods used: A prospective analytic study of patients undergoing TT or SCT from November 2013 to August 2016 was performed. PTHi, total calcium, ionic calcium, magnesium, albumin and total proteins were measured as baseline and in the morning after TT or SCT. Patients were hospitalized at least 48 hours for clinical follow-up and measurement of serum calcium every 10 hours. The follow up was made at 10 days, 1 month and 3 months after surgery. Grade I hypocalcemia was defined as total calcium value <8mg/dl and grade II 65% (sensitivity 80.6%, specificity 97.1%), Moderate Risk Hypocalcemia with a decrease between 65 and 45% (sensitivity 83.9%, specificity 91.4%) and Low Risk Hypocalcemia with a decrease <45% (sensitivity 90.3% and specificity 82.9%). In addition, ROC (Receiver Operating Characteristic) curves revealed that the combination of the reduction of the percentage of PTHi combined with the reduction of the percentage of total serum calcium the morning after surgery give us a greater sensitivity and specificity than the measurement of PTHi alone.

Conclusion: A hypocalcemia risk classification has been developed according to the decrease in the percentage of PTHi. This classification with a single measurement of pre and postsurgical PTHi is a reliable predictor of the development of clinically significant hypocalcemia and it can be reproducible in other institutions. Early identification of these patients at risk will facilitate a rapid replacement therapy with calcium and vitamin D supplements and an early and safe hospital discharge.
Predictive factors for occult contralateral lateral lymph node metastases (LNM) in N1b Papillary Thyroid Carcinoma (PTC)

H. Diaz bohec* (1)

(1) Gustave Roussy Cancer Campus Grand Paris, Paris, France

AUTHORS

Hélène Bohec, Nathalie Badois, Elisabeth Mamelle, Haïtham Mirdani, Ingrid Breuskin, Sophie Lebouleux, Dana Hartl

BACKGROUND

Therapeutic lateral neck dissection is recommended for N1b PTC, while prophylactic contralateral lateral neck dissection is not, in the absence of data regarding occult contralateral nodes.

OBJECTIVE

We investigated the risk factors for occult LNM in the contralateral lateral neck for N1b patients who had total thyroidectomy, therapeutic central dissection, homolateral lateral neck dissection and prophylactic contralateral lateral neck dissection.

METHODS

This retrospective study enrolled 63 patients treated in comprehensive cancer center between 1997 and 2016. Inclusion criteria were: unilateral PTC confirmed by ultrasound and fine-needle aspiration biopsy, and with homolateral lateral metastases. Patients with contralateral lateral metastases or bilateral tumor at diagnosis were excluded.

RESULTS

Occult contralateral lateral LNM were found in 23/63 patients (36.5%) and were significantly associated with the number of metastatic nodes in the central compartment ipsilateral to the tumor (p=0.02) and with microscopic tumor foci in the contralateral thyroid lobe (p=0.017). Using receiver operating characteristic analysis, a cutoff of 5 or more metastatic nodes in the ipsilateral level VI optimized sensitivity and specificity for predicting contralateral lateral nodal metastases, with a sensitivity of 74%, specificity of 65%, positive predictive value of 55%, a negative predictive value of 81% for an overall accuracy of 68%.

CONCLUSION

This study suggests that occult LNM in the contralateral lateral neck can be predicted. Five or more ipsilateral central lymph node metastases were correlated with a risk of contralateral lateral lymph node metastasis, as were the presence of microscopic contralateral tumor foci.
Predictive gene signatures of nodal metastasis in papillary thyroid carcinoma

J.Kim*(1), D.Lee*(1), H.Lee(1), J.Park(1), Y.Rho(2)

(1) Department of Otolaryngology - Head and neck Surgery, Kangnam Sacred Heart Hospital, Hallym University College of Medicine, Seoul, South Korea, Seoul, Korea, South, (2) Department of Otolaryngology - Head and neck Surgery, Kangdong Sacred Heart Hospital, Hallym University College of Medicine, Seoul, South Korea, Seoul, Korea, South

Objectives: Cervical lymph node metastases (LNM) in PTCs are common and develop in approximately 30-80% of PTCs. The presence of cervical LNM significantly increases the rate of locoregional recurrence in PTCs. Several studies reported the clinicopathologic variables such as extrathyroidal extension (ETE), BRAF mutation and multifocality of primary tumor which could predict cervical LNM in PTCs. However, there is no study which suggest the gene signatures as a predictive marker of nodal metastasis in PTCs.

Methods: In this study, we used unsupervised clustering with unbiased manner to compare the molecular profiles between PTCs with nodal metastasis and PTCs without nodal metastasis using mRNA-seq of TCGA data. We performed IPA analysis using differently expressed genes to find altered pathways between two groups. Using gene ontology (GO) and logistic regression test, we generated 12-predictive genes for nodal metastasis in PTCs. Also, we applied these gene signatures to another validation cohort to confirm the consistency of these gene signatures in prediction of nodal metastasis using ROC curve.

Results: Unsupervised clustering of mRNA-seq (training set, N=158) revealed two distinct molecular subtypes. PTCs with nodal metastasis showed different gene expression pattern when compared to PTCs without nodal metastasis. When we used Ingenuity Pathway Analysis (IPA), PTCs with nodal metastasis showed altered pathway in GABA receptor signaling, Wnt/β-catenin signaling, LXR/RXR activation signaling, and Dendritic cell maturation signaling. We generated 12 predictive genes using gene ontology (GO) and logistic regression test. These 12 gene signatures showed consistency of predicting nodal metastasis when we applied to validation set (N=80). When using logistic regression with univariate analysis, ETE, multifocality and 12 gene signatures showed statistical correlation with nodal metastasis. When we performed multivariate analysis, 12 predictive gene signatures showed more significant Odds ratio when compared to other variables.

Conclusion: In this study, we suggested 12-gene signatures which can predict nodal metastasis of PTC. With this gene signature, we can predict the chance of nodal metastasis in PTCs in preoperative evaluation using FNAB and can make an appropriate plan including central neck dissection.
Predictors of extracervical approach for intrathoracic goitres

T. Tikka*(1)

(1) Queen Elizabeth University Hospital, Glasgow, United Kingdom

Purpose of the study

Multinodular goitre is an enlargement of the thyroid gland that may require surgical removal for diagnostic and/or therapeutic purposes. Sternotomy is rarely required to remove an intrathoracic goitre (ITG). Only few studies have tried to explore the need of sternotomy for ITG. Results are limited due to the small number of events. Our aim is to identify predictors of sternotomy for ITG.

Materials and Methods

A prospective study including all patients who underwent operation for ITG between 2004 and 2016 performed by the same principal surgeon in a large tertiary referral hospital in the UK. Patients’ demographics, pre-operative characteristics, intra-operative features and post-operative outcomes were recorded. Univariate and logistic regression analysis was performed to identify factors associated with sternotomy.

Results

A total of 237 patients underwent operation for ITG. Of those 29 required sternotomy (12%). Majority of patients were females (72%) and had the operation due to compressive symptoms (96.6%). Mean age was 59 (95% CI, 57 – 61). 19 patients had thyroid cancer (8%) The lower limit of the ITG, the shape of the goitre and revision surgery had a statistically significant association with sternotomy. ITGs below the aortic arch were over 10 times more likely to require sternotomy (OR 10.8, p=0.0043). Revision surgery increased the risk of sternotomy more than 4 times (OR 4.8, p=0.02). Iceberg shaped ITG greatly increased risk for sternotomy (OR 59.3, p<0.0001).

Conclusion

In our cohort the ITG shape, the intrathoracic extension in relation to the aortic arch and revision surgery were independent risk factors of sternotomy for ITG. Careful pre-operative assessment taking these factors into consideration is recommended for optimal surgical management of ITGs.

Authors

Theofano Tikka, Iain Nixon, Karen Harrison-Phipps, Ricard Simo

Affiliations

Department of Otolaryngology - Head and Neck Surgery, Guy’s and St Thomas’ Hospital, NHS Foundation Trust, London, United Kingdom
Pre-operative Characteristics that Predict a Malignant Diagnosis on Intra-operative Frozen Section for Cytologically Atypical Thyroid Nodules

M.Mak*(1), W.Fu(2), M.Lim(2), H.Li(2)

(1)Tan Tock Seng Hospital, Singapore, Singapore, (2)Tan Tock Seng Hospital, Singapore

Introduction and Aim

Intra-operative frozen section (FS) of thyroid nodules is frequently used to guide operative decisions during thyroidectomies. However, the benefit of FS in those with a low probability of malignancy is low. Atypia on thyroid fine needle aspiration cytology (FNAC) is a common reason for ordering intra-operative FS. We hypothesize that routine use of FS in this Bethesda category has low value and aim to define the pre-operative characteristics that improve the benefits of FS in this patient group.

Methods

FS results of all patients who underwent thyroidectomy in our department between 2011 and 2015 were analysed. A pilot sample of all patients who had a FNAC classified as atypia in 2014 were selected to explore the clinical, radiological and cytological factors that were associated with a malignant FS result.

Results

Between 2011 and 2015, 121 patients received a diagnosis of atypia on FNAC; 70% (85) had FS during thyroidectomy. Seven percent (6 out of 85) received a diagnosis of malignancy or suspicious for malignancy on FS. In total, 20.6% (25 out of 121) were diagnosed with malignancy (excluding papillary microcarcinoma) on paraffin histology. Our pilot sample of 21 atypia cases in 2014 showed that suspicious ultrasound features were univariately associated with a malignant diagnosis on FS (p=0.002), whereas male gender and cervical lymph nodes on imaging might be associated (p=0.116 and 0.247 respectively). After multivariate logistic regression, suspicious features on ultrasound still had a strong tendency towards a malignant diagnosis on FS (p=0.068, OR 27.2).

Conclusion

Our preliminary study suggests that when considering intra-operative frozen section for a thyroid nodule categorised as atypia on cytology, pre-operative suspicious ultrasonographic features are most prognostic of a malignant diagnosis. Selecting nodules with such features for frozen section will likely improve its benefits.
Primary thyroid lymphoma

I.Zgollii*(1), I.Beji(2), C.Halouani(3), S.Mezri(3), R.Benmhamed(2), K.Akkari(2)

(1)military hospital in Tunisia, Tunis, Tunisia, (2)military hospital of tunisia, Tunisia, (3)military hospital of tunisia, Tunisia

The symptomatology and imaging are not specific but the rapid evolution with signs of compressions often lead to a differential diagnosis problem with anaplastic cancers.

METHODS: We report two cases of thyroid lymphoma treated at the ENT and CTF service of the Tunis military hospital. the first was an 80-year-old patient known to have Haschimotomal thyroiditis. She consults for recent and rapid increase of her goitre with installation of signs of compression. Cytology was in favor of a lymphomatous process. The development was marked by the appearance of a poorly tolerated dyspnea. An emergency tracheotomy was performed.

The second was a 79 year old patient followed for hypothyroidism. It has been addressed to us for the appearance of an anterior mass basbasicervical for 20 days increasing rapidly of volume, painful associated with dysphagia and dysphonia. The clinical examination supplemented by an CT scan objective a tumor mass at the expense of the left lobe of the lathyroid, encompassing the homolateral vascular axis with endo-tracheal and endo-laryngeal extension and deflection of the aerodigestive axis. In per operative, the mass was non-redecidable and a tracheotomy was satisfied with a biopsy concluding to a large cell lymphome B.

CONCLUSION: The primary malignant lymphoma of the thyroid is a rare tumor that must be evoked in front of any rapid increase in the volume of the gland, a fortiori in case of pre-existing autoimmune disease. The anatomopathological study makes it possible to make the diagnosis and to differentiate the histological types. Radiotherapy, immunotherapy and chemotherapy are the reference treatments.
Reconstruction of laryngeal functions for papillary thyroid cancer extensively invading the upper aerodigestive tract by modified VAF kimono flap and free jejunum flap. Consideration on the necessary minimum for laryngeal preservation.


(1)Shin-yurigaoka General Hospital, Kawasaki, Japan, (2)Stella Clinic, Akita, Japan, (3)Keio University, Tokyo, Japan, (4)Saiseikai Central Hospital, Tokyo, Japan

(Purpose) Based on a vascular anatomy-proven concept, authors developed a conservation strategy for various types of intraluminal laryngotracheal invasion of thyroid cancer using combined pedicled local island flaps named veno-accompanying artery fasciocutaneous (VAF) kimono flap. However, the limit of resection of the upper aerodigestive tract still remains to be measured. We had treated a patient of recurrent differentiated thyroid cancer with extremely extensive invasion of the upper aerodigestive tract by combined reconstruction. Through the reconstructive efforts, we were brought to consider on the necessary minimum for reconstruction of laryngeal functions. To report the consequence of the treatment and to estimate its long term result in terms of functional and oncological outcome.

(Patient and Method) 70 year-old lady presented with insidiously progressed right sided extensive laryngo-pharyngeal invasion of recurrent papillary thyroid cancer. She underwent conservation surgery comprising unilateral hemicricolaryngectomy / total pharyngectomy /reconstruction of laryngo-pharyngeal septum by plied VAF kimono flap/pharyngeal reconstruction by free jejunum flap. Laryngeal elevation by thyromandibulopexy and insertion of auricular cartilage was required by second stage setting to yield the patient normal deglutition and decannulation. She died of heart attack at the age of 78 year old.

(Results) The patient had survived the rest of her life free of disease with laryngeal functions preserved with no serious complication such as aspiration pneumonia. She had been neither annoyed by problems stemmed from silent aspiration.

(Conclusion) It was proved that reconstruction of laryngeal functions by scaffolding on a single set of functional cricoarytenoid unit was possible, which might be the essential minimum structure for preservation of laryngeal functions. However, laryngeal elevation and reconstruction with a hard tissue was required to realize normal deglutition and non aided respiration.
Rerosternal Goitre- our experience

S.Varshney*(1)

(1)ALL INDIA INSTITUTE OF MEDICAL SCIENCES, Dehradun, India

Background and Objective: Retrosternal goiter (RSG) is a term that has been used to describe a goiter that extends beyond the thoracic inlet. Retrosternal goitre is defined as a goitre with a portion of its mass ≥ 50% located in the mediastinum. Surgical removal is the treatment of choice and, in most cases, the goitre can be removed via a cervical approach. Aim of this retrospective study was to analyse personal experience in the surgical management of retrosternal goitres, defining, in particular, the features requiring sternotomy.

Setting and Design: Retrospective study, teaching hospital-based.

Methods: Retrospective analysis of 687 thyroidectomies performed between 2001 and 2015. The 47 (6.84 %) patients with RSG were analyzed further, with regard to demographics, presentation, indications, and outcome of surgical treatment.

Results: There were 47 patients (6.84 %) with RSG, [ 34 females (72.34%), 13 males (27.66%)] (mean age: 52 years, range: 34-76]), out of 687 thyroidectomies, in a 14 -year period. The most common presentation was neck swelling (68%), followed by respiratory symptoms (46.8%) and the surgical procedure predominantly used was total thyroidectomy. The RSGs were removed by collar incision in 43 (91.5 %) of the cases, only 4 cases (8.5 %) required sternotomy, (residual thyroid in mediastinum after cervical approach in one case and due to very large thyroid reaching the main bronchial bifurcation in the other three). The final histological diagnosis revealed malignancy in 8.5 % of the thyroid specimens. There was no mortality and minor complications occurred in nine patients (19.1%).

Conclusions: The presence of an RSG is an indication for surgery owing to the lack of effective medical treatment, the higher incidence of symptoms related to compression, low surgical morbidity, and the risk of malignancy. Surgical removal of a retrosternalgoitre is a challenging procedure; it can be performed safely, in most cases, via a cervical approach, with a complication rate slightly higher than the average rate for cervical goitre thyroidectomy, especially concerning hypoparathyroidism and post-operative bleeding. The most significant criteria for selecting patients requiring sternotomy are computed tomography features, in particular the presence of an ectopic goitre, the extent of the goitre to or below the tracheae carina. If retrosternal goitre thyroidectomy is performed by a skilled surgical team, familiar with its unique pitfalls, the assistance of a thoracic surgeon may be required only in a few selected cases.
response to sorafenib for a locally advance insular carcinoma of thyroid

H.Fawzi*(1), N.Mersaoui(1)

(1) SERVICE D'ORL ET DE CCF DU CHU DE SETIF, Setif, Algeria

Thyroid Differentiated Thyroid Carcinoma (PDTC) is a rare and independent histotype of thyroid cancer, recognized as a separate entity since 2004 by WHO.

Despite its rarity, PDTC represents the leading cause of deaths from a follicular thyroid cancer derived from non-anaplastic cells.

Surgery followed by irradiation (RIT) remains the treatment of choice, chemotherapy and external radiotherapy remain poorly established.

Sorafenib inhibits the MAPK pathway, it is possible that another pathway, such as the AKT pathway, may be activated instead. Activation of the AKT pathway is known to be associated with anaplastic carcinoma.

we report a case of a woman aged 52 years sent in October 2014 for severe dyspnea on massive recurrence of a thyroid neoplasia for which a subtotal thyroidectomy in 2011, followed by RIT for papillary carcinoma. There is a large mediocervical mass without signs of cutaneous infiltration. CT: lateral-cervical mass of 80/55 mm with ascending development, infiltrating the subglottic trachea, left ventricular cord and vocal cord, Esophagus and multiple adenopathies.

The biopsy carried out at the end of the tracheotomy concluded with a insular carcinoma of thyroid.

The patient was treated with sorafenib from October 2014 to June 2015 or only two lateral tracheal masses of 22 and 23 mm persisted.

After PAN ENDOSCOPY we performed a totalization of the initial thyroidectomy and weaned the tracheotomy.

The patient is still alive with a follow-up of 17 months without signs of recurrence.

The purpose of this case presentation and to further support the work but also the applications and introduction of targeted therapies in the management of locally advanced forms of thyroid carcinoma.
Right upper paraesophageal lymph node as a prognostic factor of lateral neck lymph node metastasis in right side PTC

S.Kim*(1), B.Lee*(2), S.Shin(2), E.Sung(2), J.Lee(3), S.Wang(2)

(1)Department of Otorhinolaryngology - Head & Neck Surgery, Pusan National University Hospital, South Korea, Busan, Korea, South, (2)Pusan National University Hospital, Korea, South, (3)Pusan National University Yangsan Hospital, Korea, South

Background: Central lymph node metastasis is associated with prognostic factors for locoregional recurrence and distant metastasis. Right upper paraesophageal lymph nodes (UPELNs) are often overlooked during central-compartment lymph node dissection (CLND) for papillary thyroid carcinoma (PTC) patients. Therefore, we investigated the related factors and the clinical implication for right UPELN metastasis in a large group of right-side PTC patients.

Methods: Records from 763 patients with PTC who underwent total thyroidectomy with CLND including right UPELNs were reviewed retrospectively between January 2007 and March 2015.

Results: 127 of 763 patients (120 males and 643 females; mean age 49.04 years) with right-side PTC exhibited nodal metastasis in right UPELNs. In univariate analysis, Right UPELN metastasis was significantly associated with gender, tumor size (>10mm), T stage, extrathyroidal extension (ETE), lateral neck lymph node metastasis (p<0.05, respectively). In multivariate analysis, central compartment lymph node (CLN) metastasis (OR 5.203, 95% CI 2.864-9.453), lateral neck lymph node (LLN) metastasis (OR 3.668, 95% CI 2.375-5.667) were independently correlated with right UPELN metastasis. Furthermore, when evaluating the distribution of LLN metastasis in right-side PTC, CLN metastasis and right UPELN metastasis predicted significantly right LLN metastasis (OR 3.777, 10.325, respectively, p<0.001). To date, 3% of patient revealed locoregional recurrence. Comparing the recurrence rate in the group with CLN metastasis and the group with right UPELN metastasis, the recurrence rate was significantly higher in the group with right UPELN metastasis (p<0.001).

Conclusions: These results indicate that right UPELNs dissection should be performed during dissection for patients with gender, tumor larger than 1cm, extrathyroidal extension, central or lateral compartment lymph node metastasis. Especially, the dissection of right UPELNs may be valuable for patients with right central lymph node metastasis and lateral neck lymph node metastasis and these findings may be more helpful to determine right UPELN dissection. Furthermore, this study suggested that right UPELN metastasis should be considered as prognostic factor for locoregional recurrence and distant metastasis and should be gave better attention.
Salvage surgery for advanced papillary thyroid cancer

V.Kuchava*(1)

(1)Institute of Clinical Oncology, Tbilisi, Georgia

Purpose of the study: Surgery is main method for treatment of thyroid cancer. In most of the cases this approach is not complex and according to indication conducted as thyroidectomy with lympho dissection. Sometimes especially in elderly patients malignant process is locally advanced and/or there are distant metastases which need non-standard approach and have salvage purpose.

Materials and Methods: 5 patients with advanced papillary thyroid cancer was operated at Institute of Clinical Oncology, (Georgia, Tbilisi); in 2 cases tumor was invaded in trachea and/or in larynx, in 2 patients invasion was in larynx and neck lymph node metastases bilaterally or ipsilaterally. In 1 case tumor invasion in trachea and larynx and neck lymph node metastases was accompanied by metastases in sternum and both lungs.

Results: Three types of salvage surgery was performed: 1. Thyroidectomy with laryngectomy; 2. Thyroidectomy, tracheal resection and neck lymph node dissection in one patient; 3. Thyroidectomy laryngectomy tracheal resection fascial fultral bilateral lymphadenectomy in 2 cases; 4. thyroidectomy, laryngectomy tracheal resection krail type surgery, atypical resection of lung.

After conducted surgeries lethality was not seen. Two patients needed continuous artificial pulmonary ventilation; 4 are on follow up from 3 months to 1.5 year, after 8 months from surgery due to disease progression one patient died.

Conclusion: Salvage surgery can be considered as alternative treatment approach during advanced papillary thyroid cancer.
Signs of presumption of malignancy of nodular goiters.

Youssef DAROUASSI, Mohamed MLIHA TOUATI, Amine ENNOUALI, Brahim BOUAITY, Haddou AMMAR.

Ear, Nose and Throat department of Avicenne military hospital in Marrakech

Purpose of the study:

Thyroid nodules are very common but less than 10% of them are malignant. They pose a real diagnostic and therapeutic problem especially in regard of their benign or malignant nature. The study of certain clinical and paraclinical signs of malignancy presumption allows codifying good therapeutic strategy. The purpose of this study was to investigate predictors of malignancy of nodular goiters and compare our results with those of the literature.

Material and methods:

This is a retrospective study of 500 cases of nodular goiter operated in the Ear, Nose and Throat department of Avicenne military hospital in Marrakech between 2006 and 2012.

Results:

The percentage of cancers was 6.8%. The average age of our patients was 46 years with a sex ratio of 5 (F / H). At neck palpation; hard nature of the nodule was found in 94.4% of cases of cancer, with irregular boundaries in 64.70% of cases of cancer. Three nodules were fixed and they were all malignant. Neck lymphadenopaties were observed in 8 patients, among them 7 had cancer. At ultrasound examination, 61.8% of malignant nodules showed a hypoechoic appearance, with soft edges in 88.24% of cases. Intra nodular vascularization was present in 35.3% of cases of cancers with microcalcifications in 55.9% of them. The hypoechoic perinodular halo was incomplete in 73.5% of cases of cancer. Our patients were euthyroidien in 84.6% of cases. Predictors of malignancy of a nodular goitre were in our first clinical study: age over 60 years, the hard consistency of the nodule, its fixity, its irregular and poorly limited character at palpation and the presence of lymph nodes; and in ultrasound examination: hypoechoic character, fuzzy boundaries, the presence of microcalcifications and visualization of intranodular vascularization.

Conclusion:

Although some of these factors are remarkably predictive of malignancy, only the final histopathology provides certainty of diagnosis. The clinician should rely on a range of arguments in order to adopt an adequate medical care.
Small size Thy3 thyroid lumps

I. Garlea-robu*(1)

(1)Betsi Cadwaladr University Health Board - Glan Clwyd Hospital, United Kingdom

I Robu, E Prades, O Tkachuk, M Paramalingam, H Zeitoun

Introduction: There is an open debate about the management of indeterminate fine needle aspirations (Thy 3). Publications have shown prevalence of thyroid carcinoma following a Thy 3 result to be higher than 20%. The balance between unnecessary surgeries and the risk of missing a carcinoma is still unsolved issue. We have assessed our own practice during last 2 years using retrospective review in patient undergone surgery in 2015 and 2016.

Results: A total of 99 thyroid surgeries were performed. 90 patients received one surgery and 9 patients needed completion thyroidectomy. 28 of these 90 patients were identified as Thy 3 on cytology (31%). There was no difference in the mean age of Thy 3 patients (x0=56.2) versus other patients who underwent thyroid surgery (x1=56.3). The mean size for transverse, antero-posterior and longitudinal section were x= 25.5 mm, y= 20.5 mm and z=38 mm. On the USS examination 60% of them were isoechoic and 25% were hypoechoic. From the composition perspective, 64% were solid nodules and 29% were solid with partial cystic component.

A sum of 24 (86%) individuals had benign lesions of which 6 were colloid, 13 follicular lesions and 5 dominant nodules on a background of multi-nodular goitre. The other patients (14%) had malignant pathology resulting 2 patients with follicular carcinoma and 1 papillary carcinoma and one follicular variant of papillary carcinoma.

Thyroid Multidisciplinary Team was in charge of decision making of those patients with cytological features of a follicular neoplasm (Thy 3).

Conclusions: The incidence of malignancy among our patients with Thy 3 cytology on fine needle aspiration is smaller than other reports by other institutions. Differences resided in the unexpected small average size of the lesions that were FNA when compared to other series. It is known that size is related to risk of malignancy and that could explain the differences. However, the average size of the nodules that came back as malignant was smaller as well (x=21.3 mm). The results can be weighted as further recommendation for surgical intervention following a confirmed Thy3 cytology independently of the size of the nodule.
Supramaximal neurostimulation with laryngeal palpation to predict postoperative vocal fold mobility

W.Cha*(1), S.Wang(1), D.Jung(2)

(1)Pusan National University Hospital, Korea, South, (2)Pusan National University Hospital, Busan, Korea, South

INTRODUCTION

Recurrent laryngeal nerve (RLN) injury during thyroidectomy or parathyroidectomy is a challenging issue and causes significant morbidity. Neurostimulation with laryngeal palpation (NSLP) has been suggested as a useful adjunct to continuous EMG monitoring during thyroid and parathyroid surgery, and its results correlate well with simultaneous laryngeal EMG activity. According to the guideline for IONM, NSLP may be a useful confirmation tool when loss of signal (LOS) occurs during IONM. researchers reported high NPV (>95%) with low PPV. Prediction of the degree of RLN injury (temporary/permanent) by this method has not been achieved, and it was ultimately concluded that NSLP alone may not be sufficient for predicting postoperative VF function or for guiding the decision for staged thyroidectomy. It was recently reported that supramaximal stimulation may be useful for IONM during parotid surgery and other surgery involving the facial nerve. we hypothesized that supramaximal NSLP could provide more accurate feedback on the functional status of RLN compared to previous results. Herein, we report the result of a prospective consecutive study to evaluate the predictive value of supramaximal NSLP for immediate postoperative VF mobility.

METHODS:

Prospectively, 293 patients who underwent thyroid and parathyroid surgery and 542 RLNs at risk were enrolled in this study. During NSLP, the current was escalated to 3 mA until definite laryngeal twitch was observed. Immediate postoperative VF mobility was evaluated using flexible laryngoscopy.

RESULTS:

In 533 RLNs, there were negative responses of supramaximal NSLP in the end of surgery. Respectively, definite laryngeal palpations at the minimal currents of 0.3 mA, 0.5 mA, 1 mA, 1.5 mA, and 2 mA were elicited in 5, 52, 452, 12, and 12 RLNs, respectively. Diagnostic accuracy of NSLP is calculated according to cutoff values of minimal current intensity (1 mA, 1.5 mA, and 2 mA). At 2mA, sensitivity was 81.82%, specificity 100%, positive predictive value 100%, and negative predictive value 99.62%.

CONCLUSIONS:

Supramaximal NSLP might be a simple and reliable method to predict immediate postoperative VF mobility in open thyroid and parathyroid surgeries when intraoperative neuromonitoring is unavailable.
Surgical Management of Differentiated Thyroid Carcinomas: Experience in a Low-Income Country

R. Deguenonvo*(1)

(1) UNIVERSITE CHEIKH ANTA DIOP, Dakar, Senegal

Objective: To share our surgical experience in the management of differentiated thyroid carcinomas in a low income country.

Materials and Methods: We performed a retrospective study in our department where 21 cases of differentiated thyroid carcinomas were recorded from February 2001 to December 2010.

Results: We performed 334 thyroidectomies for 326 patients. Of this group, 21 differentiated thyroid carcinomas were diagnosed. Differentiated thyroid carcinomas represented 6.4% of all thyroid neoplasm managed during the same period (n=326). Median age was 44 years (range 13 - 75 years). Male to female ratio was 1:20. Six (6) patients underwent primary hemithyroidectomy in other institutions while the fifteen left were entirely managed in our clinic. Of them, one patient was referred with positive fine needle aspiration cytology for papillary thyroid carcinoma (incidental detection by fine needle aspiration biopsy) and another had history of sinus pyriform fistula. Pathology of surgical specimens showed 13 cases of papillary thyroid carcinomas and 8 cases of follicular thyroid carcinomas with association to Hashimoto thyroiditis and Grave’s disease in respectively in 1 case. Twenty cases were incidentally discovered by thyroid surgery and undergone completion thyroidectomy with prophylactic central neck dissection, completion thyroidectomy alone, modified lateral neck dissection alone and surveillance respectively in 13, 1, 1 and 6 cases. Complications of thyroid surgery were bilateral recurrent laryngeal nerve paralysis and hematoma respectively in 1 case. Median hospital stay was 5 days ranged from 3 to 15 days. During the follow-up period, most of our patients were lost of follow-up.

Conclusion: Management guidelines of differentiated thyroid carcinomas are well established but not applicable to low income country for several reasons. National guidelines, based on further researches, must then be implemented to improve our practice.

Keywords: Differentiated thyroid carcinoma; Thyroid; Thyroidectomy; Lobectomy; Papillary thyroid carcinoma; Follicular thyroid carcinoma; Central neck dissection
Surgical management of mediastinal lymph node metastasis of well-differentiated thyroid cancer

M. Park*(1)

(1) Ilsong Memorial Head and Neck Thyroid Cancer Hospital, Hallym University Medical Center, Seoul, Korea, Seoul, Korea, South

PURPOSE:

Management of mediastinal lymph node metastasis (MLNM) of well-differentiated thyroid cancer (WDTC) is not yet established. Mediastinal dissection for metastatic mediastinal lymph node is not considered to be standard procedure because of the high morbidity and the difficult anatomical treatment area. The objective of this study was to evaluate the clinical outcomes of mediastinal dissection for MLNM of WDTC.

METHODS:

We conducted a retrospective review of 23 patients who underwent therapeutic mediastinal dissection for the treatment of MLNM of WDTC. Mean age was 61.3 years and median follow-up duration was 66 months. 18 patients had papillary thyroid carcinoma and 6 patients had follicular thyroid carcinoma. Fifteen patients received surgery as initial treatment, and 8 patients had salvage surgical treatment for recurrences. The demographics, tumor characteristics and follow-up data were analyzed to identify the factors related to recurrence.

RESULTS:

Mediastinal dissection was performed in 12 patients by transcervical approach, in 8 patients by sternotomy approach, and in 3 patients by combined approach with transclavicular and sternotomy approach. The one perioperative mortality was developed due to mediastinitis. All patients underwent adjuvant radioactive iodine treatment and 6 patients underwent postoperative radiation therapy. Of 10 patients who had recurrence, 3 patients occurred mediastinal recurrence. The cumulative 5-year disease free survival rates (DFSR) and overall survival rates were 38.7% and 83.5%, respectively. 5-year DFSR was significantly higher in non-transcervical approach, preoperative recurrent laryngeal paralysis and inferior mediastinal metastasis.

CONCLUSION:

Surgical treatment of MLNM of WDTC in selected patients can provide locoregional control and the possibility of prolonged disease-free survival.
The 2015 American Thyroid Association risk stratification system: a tool for predicting the tumor burden of persistent/recurrent disease in patients with differentiated thyroid cancer

R.Ciappuccini*(1), D.Blanchard(1), D.De raucourt(1), N.Heutte(3), E.Babin(2), S.Bardet(1)

(1)Centre François Baclesse, Caen, France, (2)Centre Hospitalier Universitaire, Caen, France, (3)Centre Baclesse, Caen, France

Purpose of the study In patients with differentiated thyroid cancer (DTC), the goal of risk-stratification systems is to predict the likelihood of persistent/recurrent disease (PRD) after surgery, and in particular to select patients for radioiodine (RAI) ablation. In a perspective of individualized risk assessment and personalized therapy, it would also be interesting to predict the tumor burden of PRD. We aimed to assess whether such tumor burden could be predicted by the new 2015 American Thyroid Association (ATA) risk-stratification system.

Materials and methods This retrospective cohort study included 460 consecutive and unselected DTC patients referred for RAI ablation. Patients were risk-stratified using the revised 2015 ATA guidelines according to data available after surgery and before RAI ablation. Tumor burden of PRD was assessed using post-RAI whole-body scintigraphy with SPECT/CT, 18F-FDG-PET/CT in case of RAI-refractory lesions and conventional radiology (ultrasound, CT scan or MRI). We distinguished small-volume and large-volume PRD. Small-volume disease was defined by the presence of abnormal scintigraphic foci, in or outside the neck, without any abnormality on conventional radiology. Conversely, large-volume disease was defined by locoregional or distant lesions clearly evidenced on conventional radiology, whatever the presence of scintigraphic abnormalities.

Results Among 460 patients, there were 67%, 30% and 3% of low, intermediate and high-risk patients, respectively. During a mean follow-up of 49 months, PRD was found in 75 patients (16%). PRD was evidenced in 5%, 34% and 92% of patients at low, intermediate and high-risk, respectively. The proportion of large-volume PRD significantly increased from low, intermediate to high-risk patients (31%, 62% and 100% respectively, P=0.02).

Conclusion This study shows that the 2015 ATA risk-stratification system also enables to predict tumor burden in patients with PRD.
The contribution of Computed Tomography to localize Recurrent Laryngeal nerve in a congenital or acquired abnormal position

J.Sichel*(1)

(1)Shaare Zedek Medical Center, Jerusalem, Israel

Introduction

The surgical anatomy of the recurrent laryngeal nerve (RLN) and the anatomical landmarks to find it during surgery are well known to experienced thyroid surgeons which explains the low incidence of nerve injury.

However, in rare cases, there may a greater risk involved because of an aberrant location, which can be either congenital or acquired.

Method and Result

We report the use of preoperative computed tomography (CT) to minimize the risk in such cases.

Congenital abnormal location: 2 patients with a non-recurrent laryngeal nerve and a preoperative CT are presented. CT was performed preoperatively because of a large substernal goiter in one case, and for a non-thyroid related reason in the second case.

Acquired abnormal location: it consisted mainly of a ventrally displaced recurrent laryngeal nerve associated with a posterior mediastinal substernal goiter. We present 2 cases of posterior mediastinal substernal goiter with ventrally displaced recurrent laryngeal nerve and compare them with other cases of posterior mediastinal substernal goiter without ventrally displaced recurrent laryngeal nerve to see if CT can predict the anterior location of the nerve.

In conclusion

CT can be helpful in the case of a retrosternal goiter/tumor.

The presence of a retroesophageal right subclavian artery is pathognomonic for a non-recurrent laryngeal nerve on the right side. If a CT was performed for a non related reason, it is important to review it for a possible anatomical anomaly.

In the presence of a posterior mediastinal goiter, an anteriorly (ventrally) displaced recurrent laryngeal nerve is suspected but cannot be determined with certainty.

In these cases, we recommended the use of nerve monitoring.
The Cosmetic Efficacy of Radiofrequency Ablation to Treating Benign Thyroid Nodules: A Prospective Clinical Study

S.Lee*(1), K.Park(2)

(1)Soonchunhyang University College of Medicine, Bucheon, Korea, Bucheon, Korea, South, (2)Soonchunhyang University College of Medicine, Bucheon, Korea, South

Objectives: The aim of this study was to demonstrate ultrasonographically (USG) guided radiofrequency ablation (RFA) effectively treated benign thyroid nodules in patients with cosmetic concerns.

Methods: This prospective clinical study (SCHBC_IRB_2011-21) ran from July 2012 to February 2016; 37 consecutive RFAs were performed on patients with solid or predominantly solid non-functioning benign thyroid nodules creating cosmetic problems; the minimal follow-up time was 12 months. All RFAs were performed by the single surgeon (SW Lee) using the moving shot technique under local anesthesia. All patients underwent ultrasonographic evaluation before RFA, and 6 and 12 months thereafter; nodule volumes, cosmetic scores, symptom scores, Wong-Baker FACES Pain Rating Scale scores, and related complications were recorded.

Results: The nodule volume fell significantly from 8.1 ± 5.9 mL pre-RFA to 2.3 ± 2.8 mL at 6 months post-RFA, and this reduction was maintained at 12 months (P<0.05). The mean post-RFA volume reductions were 68.0 ± 23.3% at 6 months and 75.6 ± 23.9% at 12 months. The cosmetic and symptom scores also improved significantly both 6 and 12 months after RFA (P<0.05). In terms of complications, 8.1% (3/37) of the patients developed minor neck hematomas and 8.1% (3/37) experienced temporary vocal fold paralysis during follow-up.

Conclusions: USG guided RFA significantly improved cosmetic problems and reduced thyroid nodule volumes; no serious complication was noted over at least 12 months post-RFA.

Key words: Thyroid nodule, radiofrequency, ablation
The management of trachea in differentiated thyroid cancers
A. Shenoy*(1)

(1) KIDWAI MEMORIAL INSTITUTE OF ONCOLOGY, Bangalore, India

Advanced thyroid cancers can invade secondarily laryngotracheal framework as well as the trachea-esophageal groove and important structures therein. Experience with 30 consecutive laryngotracheal resections are detailed by the author highlighting the importance of airway evaluation, assessment for surgery, induction of general anesthesia, high points of tumor resection and tracheal reconstruction (if needed). Laryngotracheal resections with excision of circumferential invaded tracheal lumen was undertaken in 23 cases. Less than 4 rings could be managed without any tracheal or laryngeal mobilization, 4 to 8 rings needed laryngeal drop procedure along with tracheal mobilization prior to tracheal anastomosis without tracheotomy in all but 1. More than 8 rings resection needed a planned elective low tracheostomy over a montgomery T tube. 3 patients out of 23 died on the 2nd, 6th and 10th day due to respiratory obstruction. MI, and septicemia associated with uncontrollable chylorrhoea. And one patient laryngotracheal resection had to be converted to a total laryngectomy owing to extensive involvement of bilateral tracheoesophageal groove. The instructional course is designed to highlight the issues of judicious case selection, intra operative highpoints, post surgery convalescence and care of complications to promote a complete restoration of speech, swallowing and airway. The institution of adjuvant treatment in the form of radio iodine ablation as well as indications for external beam radiotherapy and monoclonal antibodies in dedifferentiated varieties of thyroid cancers is critically discussed.
The use of a metallic harpoon placed under ultrasonography guided in the treatment of the neck in thyroid carcinomas.

E.Gil-carcedo sañudo*(1), P.De las heras florez(2), S.Fernández cascón(3), D.Herrero calvo(3), H.Lara sánchez(3), M.Menendez argüelles(3), L.Vallejo valdezate(3)

(1)Hospital Universitario Rio Hortega. Facultad de Medicina. Valladolid. España, Valladolid, Spain, (2)Hospital Universitario Rio Hortega, Valladolid, Spain, (3)Hospital Universitario Rio Hortega, , Spain

PURPOSE: Neck management happens to be highly controversial in thyroid carcinomas. Property removing sub-centimetre disease in an adequate fashion turns into a dilemma for the operating surgeon.

The purpose of this study comes to our experience description in the utility of US-guided implantation using a metallic marker in patients with a new thyroid carcinoma lymph node, after a neck dissection.

METHODS: Firstly, the first 2 patients using harpoon to mark a new lymph node, after a primary neck treatment. Besides, a review of medical literature focused on the harpoon use in other pathologies. Finally, the resulting images of both cases were displayed.

RESULTS:
- A 47-year-old man presented with left thyroid mass. An Ultrasonography-guided-fine-needle aspiration biopsy (USGFNA) was performed, and 3 lesions into thyroid were noted, nothing about lymph nodes. The biopsy result was high suspect to papillary carcinoma. A total thyroidectomy was performed. 2 years follow up, the thyroglobulin increase. US showed many lymph nodes no one greater than 1 cm but with micro-calcifications inside. A therapeutic neck dissection included lymphadenectomy of levels II, III, IV, V and VI was realized. The next 2 years follow up, the thyroglobulin increase again and the PET show a new hypercaptain node at the lower limits of left VI level. The radiologist marked the lymph node less than 0.8 mm with a metallic harpoon under US guidance. This manoeuvre facilitated our surgical intervention with success and without recurrent nerve damage.

- A 48-years-old woman with a history of total thyroidectomy 20 years ago for medullary thyroid carcinoma in the context of Multiple Endocrine Neoplasia Syndrome 2a. The patient rejected prophylactic neck dissection at that time. In the follow-up the calcitonin levels began to rise and in the imaging tests several right lymph nodes are observed. A therapeutic right neck dissection and a prophylactic left neck dissection was realized. The patient has a satisfactory postoperative period. Calcitonin levels hover around normal. During 2 follow-up years the calcitonin levels increased. A new left node on VI level was found. The radiologist marked the node with a metallic harpoon under US guidance. The harpoon facilitates the location of a lymph node approximately 5-8 mm in a 2-fold intervened neck. The postoperative course was uneventful.

CONCLUSION: In patients undergoing various neck surgeries, the placement of a metallic harpoon under US guidance is a safe, simple and inexpensive technique for locating nodules smaller than 1 cm.
The Utility of Intraoperative Frozen Section for the Evaluation of Extrathyroidal Extension in Papillary Thyroid Cancer

J.Hong*(1), J.Seo(1), Y.Roh(1), H.Park(1)

(1) Dong-A University, , Korea, South

Purpose: This study is designed to evaluate the usefulness of intraoperative frozen section for the evaluation of extrathyroidal extension (ETE) in papillary thyroid cancer (PTC).

Materials and methods: Three hundred sixty-four patients who underwent thyroid surgery from January 2000 to December 2010, with PTC confined to one unilateral lobe as diagnosed using preoperative ultrasonography were enrolled. The patients who had ETE on frozen section were classified into ‘group A’, and those who did not have ETE on frozen section were classified into ‘group B’. Clinicopathologic factors including age, gender, size of the tumor, extent of operation, ETE, multifocality, bilaterality, lymph node metastasis and recurrence were compared between the two groups.

Results: Of the 364 patients enrolled, ETE was confirmed in 100 patients (group A, 27.5%) on frozen biopsy. The nodule size in group A (0.94 ± 0.87 cm) was larger than that in group B (0.86 ± 0.79 cm) (p=0.042). In group A, 15 patients (15%) showed multifocality and 11 patients (14.47%) showed bilaterality. In group B, 37 patients (14.02%) showed multifocality and 7 patients (43.35%) showed bilaterality. They did not differ significantly between the two groups (p=0.811, p=0.182). There was a higher frequency of lymph node metastases in group A (52/86, 60.47%) than in group B (7/16, 43.75%, p=0.214). Recurrence was observed in only two patients who had received thyroid lobectomy as the initial surgery in group A.

Conclusions: Intraoperative frozen biopsy can be an useful tool in identifying the presence of ETE. It can also help the surgeon to decide the extent of the surgery and central neck dissection in patients with PTC.
The value of fine-needle aspiration in evaluating large thyroid nodules

T. Raguin*(1), A. Dupret-bories(2)

(1) Hopitaux Universitaires de Strasbourg, Strasbourg, France, (2) Institut universitaire du cancer, Toulouse, France

Introduction

In over half of the world population aged 60 years or older, thyroid nodules are detected either clinically or by imagery. The American Thyroid Association recommends a diagnostic examination with an ultrasound in association with a fine needle aspiration in case of a potentially suspect subcentimeter thyroid nodule. The risk of mistake in the diagnosis by fine needle aspiration combined with the increase in the prevalence of malignancy with nodules over three centimeters may compromise the interest of fine needle aspiration before surgery.

Material and methods

This is a retrospective, monocentric study based on patients operated for a thyroid nodule over 3 centimeters between June 2004 and June 2014. The inclusion criteria were the size of the nodule, a fine needle aspiration coupled with an ultrasound measurement prior to surgery and a final postoperative histopathology.

Results

Of the 6393 patients who attended thyroid surgery, 843 were included in this study. The average size of the nodules was 42.2 mm. The fine needle aspiration was informative for 42.6% of the cases (type II, V et VI of the Bethesda classification). The correlation between fine needle aspiration and the final postoperative histopathology analysis was 94.82% for benign nodules and 70.97% for malignant nodules.

In our study, fine needle aspiration had a positive predictive value of 71%, a negative predictive value of 95%, a specificity of 97% and a sensitivity of 56% (with an error rate of 0.07). The risk of having a thyroid cancer is 44.72 times more important in case of malignant fine needle aspiration rather than benign (Odds Ratio 44.72) (IC : 0,14-0,39).

Conclusion

These results indicate that fine needle aspiration improves the diagnosis for nodules over 3 cm in only 42.6% of the cases, with a sensitivity of 56%. The fine needle aspiration should not delay surgical indication for potentially suspect thyroid nodules over 3 centimeters.

Raguin T1, Jr, Schneegans O2, MD, Rodier JF3, MD, FACS, Volkmar PP3, MD, Debry C1, MD, PhD, Ghnassia JP4, MD, Dupret-Bories A1,5*, MD, PhD

1 Service ORL et Chirurgie Cervico-faciale, CHU de Strasbourg, France
2 Service de Médecine Nucléaire, Centre Paul Strauss, Strasbourg, France
3 Service de Chirurgie Viscérale et Thyroidienne, Clinique Saint-Anne, Strasbourg, France
4 Service d’Anatomopathologie, Centre Paul Strauss, Strasbourg, France
5 Service d’Otorhinolaryngologie et Chirurgie Cervico-faciale. Institut Universitaire du Cancer Toulouse, France
Thyroglobulin antibodies as a potential predictive marker of papillary thyroid carcinoma in patients with indeterminate cytology

Ioannis Vasileiadis (1), Georgios Charitoudis (1), Theodore Karatzas (2)

1. Department of Otolaryngology/Head and Neck Surgery

PURPOSE: The incidence of indeterminate thyroid nodules, evaluated with fine-needle aspiration biopsy (FNAB), ranges from 15% to 30%. Our purpose was to investigate the efficacy of thyroglobulin antibodies (TgAb) in detecting malignancy in indeterminate thyroid nodules and evaluate the possible association between TgAb and autoimmunity in papillary thyroid carcinoma (PTC).

MATERIAL AND METHODS: This retrospective, nonrandomized study included 1646 patients who had undergone preoperative FNAB to evaluate their thyroid nodules, and then standard total thyroidectomy. Of 194 patients (11.8%) with indeterminate nodules, 61 (31.4%) had PTC and 133 (68.6%) had benign nodules at the final histological examination. The clinical characteristics, preoperative thyroid-stimulating hormone (TSH), and TgAb of the patients and the histopathological characteristics of the tumors were examined.

RESULTS: Patients with indeterminate nodules who were diagnosed with PTC had significantly positive TgAb (p < 0.001) and preoperative TSH levels (p = 0.001) compared with patients with benign nodules. Additionally, the presence of Hashimoto thyroiditis was associated with significantly increased risk of PTC in the histopathological diagnosis (p=0.013). The univariate analysis showed that multifocality (p=0.002), bilaterality (p=0.003), lymph node metastasis (p=0.030) and capsule penetration (p=0.003) were significantly associated with positive TgAb in patients with indeterminate cytology and histopathological diagnosis of PTC. The multivariate analysis showed that TgAb positivity (p=0.001) and preoperative TSH levels (p=0.022) were independent predictive factor for PTC diagnosis in patients with indeterminate cytology.

CONCLUSIONS: Preoperative TgAb could be a marker for PTC in patients with indeterminate thyroid nodules, increasing diagnostic accuracy. TgAb positivity should also influence the clinical assessment and subsequent selection of total thyroidectomy.
Thyroid dysfunction in diabetic pregnant women

M. Sánchez Torices*(1), R. Corrales(2), M. Jurado(3), J. Hijona(4)

(1) Complejo Hospitalario de Jaén, Jaén, Spain, (2) Hospital Virgen de la Salud, Toledo, Spain, (3) Complejo Hospitalario de Jaén, Jaén, Spain, (4) Complejo Hospitalario de Jaén, Jaén, Spain

Purpose of the study: Normal thyroid function is crucial for adequate maternal and fetal development in pregnancy. There is solid evidence of the pernicious effects of thyroid dysfunction in pregnancy for both mother and fetus. One of these effects is miscarriage and recurrent pregnancy losses.

On the other hand, some prevalent pathologies like mellitus diabetes, have direct and strongly been linked to thyroidal dysfunction.

Nevertheless, there is no general agreement on the advisability of screening for thyroid dysfunction in pregnant women, even when there is a previous history of pregnancy loss or a gestational diabetes has been diagnosed. This study aimed to determine the prevalence of thyroidal pathology, organic and dysfunctional, including anti-thyroid autoimmunity without abnormal T3/T4/TSH level,) in patients with gestational diabetes mellitus.

Materials and methods used: T3-T4-TSH and antithyroidal-antibodies were determined and cervical ultrasound scan was performed in 431 consecutive women with gestational diabetes at the moment of diagnosis.

Results: 24.82% of the patients had undiagnosed and untreated thyroid disturbance. 6.54% of them had an abnormal ultrasound scan and near half of them did not suffer an analytic disturbance.

Conclusion: Prevalence of thyroid disturbances in patients with gestational diabetes is higher than previously reported in our environment. Most cases were dysfunctional but near 1.5% of diabetics had abnormal ultrasound thyroidal scans.
Thyroid-glossus tract cyst degeneration: should the larynx be sacrificed?

S.Jbali(1), S.Mahfoudhi(2), S.Kedous(2), S.Dhambri(2), Z.Attia(2), S.Touati(2), S.Gritli(2)

(1) Institut Salah Azaiez de Tunis, Tunis, Tunisia, (2) Institut Salah Azaiez, Tunis, Tunisia

Les kystes du tractus thyéro-glosse (KTT) sont les plus fréquentes des dysembryoplasies cervicales. La dégénérescence maligne sur reliquats du tractus représente 1 % des kystes opérés. Le carcinome développé aux dépens de reliquats de tissu thyroïdien du tractus thyéro-glosse paraît être histologiquement comparable au carcinome papillaire développé sur le corps thyroïde lui-même.

A travers une observation, Nous tenterons de monter les difficultés qui peuvent se poser en termes de décision thérapeutique. Outre la nécessité d’une thyroïdectomie, retenue par la plupart des auteurs, l’extension tumorale peut imposer le sacrifice d’autres structures, notamment le larynx.

Notre patiente était âgée de 60 ans, non tarée et sans habitudes particulières. Elle était explorée pour une masse cervicale antérieure dure adhérente aux plans profonds. L’imagerie notait que cette masse était en continuité avec l’isthme thyroïdien. Elle atteignait les 3 étages du larynx, les structures pré-laryngées et latéralement les espaces para-laryngés. La cytologie évoquait une tumeur à cellules rondes. La biopsie sous anesthésie générale était en faveur d’un carcinome papillaire de la thyroïde. Le bilan endoscopique trouvait un larynx mobile indemne de lésions suspectes. Après consentement de la patiente, une chirurgie radicale emportant le larynx, la thyroïde et la tumeur était faite ; associée à un curage conservateur bilatéral. Cette chirurgie n’a été décidée qu’après tentatives de chirurgie laryngée partielle. L’arc antérieur du cricoïde était, en effet, massivement atteint. Les suites opératoires étaient simples. La patiente était, par la suite, irradiée.

Le cas présenté ici est l’exemple type des formes invasives localement des carcinomes papillaires de la thyroïde et des structures qui lui sont liées. Le larynx “non coupable” se trouve enlevé en vision d’un traitement curateur.

En somme, il ne s’agit pas ici de discuter la thyroïdectomie totale dans le cas de KTT dégénéré. Il s’agit d’une chirurgie plus mutilante emportant le larynx et qui impose avant tout le consentement du patient.
Transoral Endoscopic and Robotic Removal of Retropharyngeal Node Metastasis in papillary thyroid carcinoma

Y.Koh*(1), J.Kim(1), D.Kim(1), J.Na(1), S.Shin(1), S.Kim(1)

(1)Yonsei University College of Medicine, Seoul, Korea, South

Introduction: Papillary thyroid cancer (PTC) is commonly associated with a significant incidence of central or lateral node metastases. Whereas metastasis to retropharyngeal lymph node (RPLN) have been considered rare. It induces that PTC commonly progresses in a defined pathway from the paratracheal region to the lateral compartment. When this unusual RPLN metastasis is identified, a surgical approach is required at most times. Transoral removal of RPLN has been introduced as a safe and low morbidity approach compared to the traditional transcervical approach. Therefore, this study aims to investigate an incidence and risk factors of this uncommon RPLN metastasis in PTC and to access the feasibility and oncological outcomes of transoral surgical approach.

Material and Methods: This study was conducted on patients who underwent transoral surgical removal for metastasis of RPLN in PTC at the Yonsei University Health System between March 2011 and August 2016. All patients had a history of total or subtotal thyroidectomy. The clinical and operative data of the patients were retrospectively reviewed and analyzed. The analyzed factors were tumor size, multifocal occurrence, angioinvasion, extracapsular growth, presence of central or lateral node metastases, distant metastases, local recurrence, and medical history of thyroid disease.

Results: There were a total of 12 patients who identified metastasis of retropharyngeal lymph node among 837 patients underwent total or subtotal thyroidectomy (12/837, 1.4% incidence). Age, tumor size, presence of central or lateral node metastases, and local recurrence were significantly associated with retropharyngeal node metastases (p<0.05). All patients successfully underwent transorally retropharyngeal node dissection without complications.

Conclusions: Although metastases of RPLN in papillary thyroid carcinoma are rare, careful preoperative assessment of RPLN should be considered for patients with metastases of central or lateral node, and local recurrence. With appropriate patient selection, transoral surgical dissections of RPLN metastasis are a safe and oncologically great procedure.
Treatment outcomes and prognostic factors in patients undergoing surgery for locally invasive differentiated thyroid cancer

M.Chung*(1), J.Choi(2)

(1)Department of Otorhinolaryngology-Head & Neck Surgery, Sungkyunkwan University School of Medicine, Samsung medical center, Seoul, Korea, South, (2)Samsung medical center, , Korea, South

Objective : The aim of this study is to present treatment outcomes and prognostic factors of surgical managements of locally advanced well differentiated thyroid cancer.

Method : By retrospective analysis, total 70 patients with T4a stage were enrolled from 1995 to 2016 in single institution. Overall survival rate and loco-regional recurrence-free probability were investigated as treatment outcomes, and clinic-pathological characteristics were analyzed to investigate prognosticators for recurrence.

Result : Mean age was 56.5 years old, and 61.4% was female. Most commonly involved structure was recurrent laryngeal nerve (n=35), followed by the trachea (n=34), the larynx (n=10), and the esophagus (n=5). At the mean follow-up of 81.7 months, 5-yr disease specific survival rate was 92.3%, and loco-regional recurrence rate was 28.7%. By univariate analysis, microscopic clearance of tumor (R0 or R1) was not associated with increased risk of recurrence, on the contrary, advanced age, involvement of recurrent laryngeal nerve, increased tumor size, higher level of stimulated serum thyroglobulin level at pre and post-ablation state were associated with higher rate of loco-regional recurrence. By univariate analysis, lateral node dissection was prognostic factor for decreased rate of loco-regional recurrence (HR 0.08, 95% CI 0.01-0.48, P=0.006).

Conclusion : Operative management followed by proper adjuvant therapy for locally advanced, differentiated thyroid cancer can achieve acceptable outcomes, regardless of the type of involved organs or R status. Also, further studies to modify neck management strategy are needed.
Unilateral laryngeal paralysis in the adult and thyroid tumor.

L. Alciato*(1), O. Laccourreye*(2), F. Rubin(3), P. Bonfils(4)

(1) Université Paris Descartes Sorbonne Paris Cité, Service ORL, HEGP, APHP, Paris, France, (2) Université Paris Descartes Sorbonne Paris Cité, Service ORL, HEGP, APHP, Paris, France, (3) Université Paris Descartes Sorbonne Paris Cité, Service ORL, HEGP, APHP, Paris, France, (4) Université Paris Descartes Sorbonne Paris Cité, Service ORL, HEGP, APHP, Paris, France

Unilateral laryngeal paralysis in the adult and thyroid tumor.

Paralysie laryngée unilatérale de l’adulte et pathologie tumorale thyroïdienne.

Purpose: To analyse unilateral laryngeal paralysis in the adult with an ipsilateral thyroid tumor.

Materials and Methods: Retrospective analysis of a cohort of 34 adult patients with unilateral laryngeal paralysis related to an ipsilateral thyroid tumor (Group A) and comparison (clinical data, evolution of the paralysis, management) with a cohort of 168 patients in whom the unilateral laryngeal paralysis was related to a non thyroid tumor ailment. Results: Group A consisted of 64.8% of women with a mean age of 68 years together with severe dysphonia, swallowing impairment and respiratory difficulties in 35.2%, 20% et 2.9% of cases, respectively. Three of the variables tested differed significantly between both groups. The female gender was more frequently noted in Group A (p < .0001). The incidence for swallowing impairment varied from 20% in Group A to 40.1% in Group B (p = .03). The underlying tumor was more frequently malignant in Group B (90.4% vs 50% in Group A). Within Group A, the incidence for recovery of laryngeal motion varied from 0% for malignant tumor to 50% for benign tumor. Within the subgroup of patients with a benign thyroid tumor in whom recovery of laryngeal motion did not occur, the watch policy initiated allowed to detect a pathology (malignant tumor or neurological) explaining for the persistent unilateral laryngeal paralysis in more than 50% of cases. Conclusion: The current study provides data for precise information of the adult patient with unilateral laryngeal paralysis related to an ipsilateral thyroid tumor and underscores the need for a watch policy in patients with benign thyroid tumor in whom no recovery of the paralysis occurs.
What differences exist in the manifestations of anaplastic thyroid carcinoma in females and in males?

A.Belazzouz*(1), F.Moussa(2), B.Hanan(2), B.Mbarek(2), F.Dalila(2), M.Safia(2)
(1)centre de pierre et marie curie, , Algeria, (2)CPMC, , Algeria

Purpose: Anaplastic thyroid carcinoma (ATC) is a very rare variety of thyroid carcinoma but the most important cause of death by thyroid carcinoma. Predicting the prognosis is a useful tool for deciding on the proper therapeutic strategy in individual patients.

Several scores have been identified to assess the prognosis of this tumor based on unfavorable prognostic factors present within patients with ATC. Some of these did not include sex as a prognostic factor. The aim of this study is to distinguish the presenting mode of this tumor in both sexes and to determine if gender is a prognostic factor.

Methods and materials:

We have retrospectively diagnosed 17 patients between 2008 and 2016 at Pierre Marie Curie Center, Algiers, Algeria. Variables noted in both sexes include the median duration of symptoms, the size parameters of goiter and nodule/s prominent on ultrasound, the length of survival and the causes of death.

Kaplan-Meier survival analysis and log-rank analyses were performed to evaluate the influence of gender factor on median survival.

Results: A total of 17 patients’ data were analyzed. Those patients comprised 7 men and 12 women. Mean age was 67,14 year in men and 61,26 year in women. The mean duration of symptoms was 5 months (range: some days --12 months) in men and 2,78 month (range: 1 month -- 3 months) in women.

Distal metastases were found in 57,14% in men and 80% in women.

Median survival 9,37 months in men and 9,6 months in women. That is, no significantly higher median survival was demonstrated. The most frequent cause of death was local compression in both sexes.

Conclusion: This comparative study illustrates that sex influences the frequency of ATC and age of diagnosis but not median survival. Literature depicts that the female sex was associated with improved median survival, so this study’s divergence can be explained by the small sample size. In order to efficaciously decide the therapeutic management in all patients with ATC, one must take into account sex alongside other prognostic factors.
What is the Role of Hashimoto’s Disease in Association with Sporadic Medullary Thyroid Ca?: a Case Presentation with Review of the Literature

O.Ozdamar*(1), G.Acar(2), T.Zenginkinet(3)

(1)Istanbul Medeniyet University Goztepe Training and Research Hospital Department of Otorhinolaryngology Head and Neck Surgery, Istanbul, Turkey, (2)Istanbul Medeniyet University Goztepe Training and Research Hospital, Department of Otorhinolaryngology Head and Neck Surgery, , Turkey, (3)Istanbul Medeniyet University Goztepe Training and Research Hospital, Department of Pathology, Istanbul, Turkey

Although controversial studies are present, strong association of thyroid papillary carcinoma with Hashimoto’s disease, an autoimmune lymphocytic thyroiditis, is well established. Such an association with undifferentiated thyroid carcinoma, medullary thyroid carcinoma(MTC), is still unclear. MTC is derived from parafollicular C cells in the thyroid gland with familiar (hereditary) and non-familiar (sporadic) forms.

A single, 23 year-old young woman was applied to our clinic with a complaint of a swelling on the right side of her neck developed in a few months in otherwise healthy. A non-tender, semi-solid mass that was freely moving upward and downward with swallowing was palpated on the right side of the thyroid gland. A 29x17 mm sized nodule with calcification on the right lobe of the thyroid gland was detected on ultrasonographic (USG) examination, and no nodule was detected on the left side with a heterogeneous thyroid parenchyma in both lobes of the thyroid gland. Fine needle aspiration (FNA) biopsy of the thyroid nodule revealed non-specific atypia without malignant cells. It was not detected lymphadenomegaly (LAM) on the neck magnetic resonance imaging (MRI). The patient’s medical history was unremarkable, and there is no patient with a known thyroid disease in her first degree relatives. The patient underwent right – sided hemithyroidectomy with postoperative pathology result of MTC. Then, It is performed complementary total thyroidectomy and elective neck dissection for central compartment of the neck (VI), although there was no methastatic LAM. Histopathologic examination disclosed lymphocytic thyroiditis (Hashimoto’s disease) in the left thyroid lobe without malignant cell and also no malignant cell was detected in the neck dissection material. The patient was diagnosed as non familiar MTC which was associated with Hashimoto’s disease. The patient is free of the disease for more than two years. In this paper, we discuss the association of MTC and Hashimoto’s disease with review of the literature.
A 4 Year Review of Endoscopic Stapling of Pharyngeal Pouch

V.Rotte*(1)

(1)Royal Free London NHS Trust, , United Kingdom

Purpose of Study-
To assess our complications, recurrence rate, length of hospital stay and efficacy of endoscopic stapling as a treatment for pharyngeal pouch.

Materials and Methods Used-
Retrospective study of 4 years between July 2010 and July 2014 including 23 patients who had undergone endoscopic stapling of pharyngeal pouch. A number of details were collected including age, gender, symptoms, procedures undertaken, time to commencement of diet and length of stay. Barium swallow was used as a main diagnostic procedure which facilitated in assessing the size of the pharyngeal pouch as well. Data collected from medical notes was analysed and compared with NICE guidelines and previous studies for endoscopic stapling of pharyngeal pouch.

Results-
The majority of the patients were elderly males. Minor complications were seen in 2 patients (8.6%) including tooth loosening and secondary regurgitation. The average hospital stay was 24 hours. Recurrence of pouch was observed in 3 patients (13%) who required revision endoscopic stapling of pharyngeal pouch. There were 3 cases with small sized pharyngeal pouch so the endoscopic stapling was abandoned.

Conclusion-
Compared with open surgery, endoscopic stapling is a safe, effective procedure with short hospital stay, rapid recovery, reduced complications and early resumption of oral intake. Complications were in the expected range as compared with previously published studies with no major morbidity and no mortality.
Endoscopic Treatment of Zenker's Diverticulum: Initial Report

L.Cabezas*(1), A.Ortega*(2), F.Cardemil(2), F.Krause(2)

(1) Clínica Las Condes, Santiago, Chile, (2) Clínica Las Condes, Santiago, Chile

Luis Cabezas, Andres Ortega, Felipe Cardemil, Francisco Krause

Departament of Otolaryngology/Head and Neck Surgery, Clínica Las Condes, Santiago, Chile

Purpose of the study: Endoscopic surgery has become a modern and validated alternative for the surgical treatment of Zenker's diverticulum, as opposed to open surgery. Several therapeutic modalities have been described, such as stappler, CO2 laser, or ligasure. The aim of this report is to describe the results of treatment with endoscopic surgery in patients with Zenker's diverticulum treated in Clínica Las Condes.

Material and Methods: Report of cases of Zenker's diverticulum treated in the otolaryngology/head and neck surgery Department at Clínica Las Condes.

Results: The first case corresponds to a 73-year-old male with no known diseases, with a history of 2 years of regurgitation of food, without weight loss. He had a nasopharyngolaryofibroscopy shown no obvious alterations. FEES showed a stop in the passage of food and severe residues, without aspiration. Videofluoroscopy reports a saccular formation of 25 mm in the long axis, 7 mm anteroposterior and 25 mm transverse, above the level of the cricopharyngeal muscle. There was retention of the bolus at the level of the sac and in the pyriform sinuses, producing an episode of regurgitation. Endoscopic diverticulectomy was performed with ligasure, without any incident. Patient was discharged the next day, starting progressive feeding from day 2 postoperative. In controls, he evolved with complete disappearance of the symptoms. The second case is a 41-year-old woman with no other diseases, with a history of 1 year of progression of progressive dysphagia without weight loss. Nasopharyngolaryofibroscopy and FEES without alterations. Videofluoroscopy reports a cricopharyngeal diverticular formation of 35 mm in the long axis and 15 mm in the short axis, compatible with Zenker's diverticulum. Endoscopic diverticulectomy is performed with CO2 laser, separating the septum from the diverticulum, without incident. He was discharged the next day, starting from day 2 postoperatively. Patient evolves with complete remission of symptoms.

Conclusion: Endoscopic surgery is a valid and safe alternative for the treatment of Zenker's diverticulum. It is important to publish and widespread this technique, in order to form part of the therapeutic armamentarium of the otolaryngologist.
Endoscopic Zenker Diverticulotomy – A Single Institution 10 Year Experience

O.Ben-ari*(1), Y.Oestreicher(2), O.Wasserzug(2), D.Fliss(2), D.Zikk(2)

(1)TEL-AVIV SOURASKY MEDICAL CENTER, , Israel, (2)Department of Otolaryngology Head and Neck Surgery and Maxillofacial Surgery, Tel Aviv Sourasky Medical Center Affiliated to Sackler School of Medicine, Tel Aviv University, , Israel

Background:

Zenker’s diverticulum (ZD) is a pulsion hypopharyngeal false diverticulum. It often causes dysphagia, regurgitation, aspiration and halitosis. Treatment of symptomatic ZD has traditionally included a transcervical diverticulectomy with cricopharyngeus myotomy. In recent years, however, the Endoscopic Zenker’s Diverticulotomy (EZD) approach has regained popularity.

Objective:

The goal of this work is to evaluate the safety and efficacy of EZD in a patients with ZD.

Design and Setting:

This is a retrospective record analysis, held at a tertiary medical center in Israel.

Methods:

We reviewed the records of 80 patients who underwent EZD between 2002 and 2012.

Results:

Male to female ratio was 2:1 (54 vs. 26). Average patient age was 60 years, average operative time was 23 minutes and the average hospitalization time was 3 days. EZD was technically feasible in 95% of patients and for those patients - success rate was 90%. Patients with recurrent ZD underwent EZD with a similar success rate. Major complications (esophageal edema, pneumomediastinum, perforation) were observed in three patients (3.75%). They were treated successfully conservatively.

Conclusions:

EZD appears to be both safe and effective. It can be performed in the majority of patients with ZD, with high success and low complication rates. Cases of recurrent ZD can also be treated with EZD effectively. EZD should be considered as the treatment of choice for the majority of patients with ZD.
Endoscopic Zenker's Diverticulotomy - A simplified technique with long term outcomes.

B. Gaylis*(1)
(1) Scripps Clinic, United States

The surgical management of Zenker's Diverticulum has undergone tremendous evolution over the past 20 years. Whilst the traditional "open" transcervical approach still plays an important role in certain circumstances, the less invasive "endoscopic" technique has evolved into the preferred approach.

Much of this evolution has come about as a result of advances made in instrument design and video technology.

A less invasive but equally effective procedure is ideal for these patients who tend to be elderly and often suffer significant co-morbidities.

The purpose of the study is to perform a retrospective review of 46 patients treated with a "simplified" endoscopic approach by a single surgeon between 2006 - 2016. The procedure is felt to be "simplified" when compared to the Weerda scope/GIA staple technique.

Materials and Methods: The preferred endoscopic technique used combines the use of the Dohlman Endoscope (Karl Storz) with the Harmonic Enseel (Ethicon Endosurgery-off label).

A Hopkin's Rod Telescope (0 degree) was used for visualization and displayed using a standard video-monitor.

A retrospective chart review coupled with the completed post operative "Eat-10" questionnaire (6 months -10 years post op) provided the data outcomes for this presentation.

Results - Of the 46 patients 33 (71%) were successfully treated with an Endoscopic alone technique. 13 patients (29%) required an open transcervical cricopharyngeal myotomy with sac excision or diverticulopexy. Almost all of the open procedures were performed early in the series as the surgeon was gaining experience with the endoscopic technique. 2 patients (4.3%) developed an esophageal perforation, both of these complications occurring early in the series. There were no other major complications.

21 patients completed the questionnaire (45%). 20/21 (95.2%) experienced symptom improvement. The mean overall improvement in symptom score was 61.7%. The mean preop score was 19.3 and post op 7.4.

Of the patients successfully treated by the "Endoscopic Only" technique the mean improvement in score was 78.2% (357 preop score vs 78 post op).

Conclusion - The Dolman/Enseel Endoscopic Cricopharyngeal Myotomy is a simplified and effective technique in the management of Zenker's Diverticulum.
Long-term results using LigaSureTM 5 mm instrument for treatment of Zenker’s diverticulum

P. Homøe*(1)

(1) Dept Otorhinolaryngology and Maxillofacial Surgery, Zealand University Hospital, Køge, Denmark

ABSTRACT

The purpose of the study was to evaluate the long-term results and patient’s satisfaction of a new approach using the LigaSureTM 5 mm instrument for treatment of Zenker’s diverticulum (ZD) and to compare with other long-term results using traditional treatment modalities. Participants and Methods: Between December 2011 and August 2013, a total of 23 patients with ZD underwent endoscopic surgery using the LigaSureTM technique in our department. A retrospective evaluation of the surgery was based on medical records and additionally a long-term follow-up was performed using a standardized questionnaire that was send to all patients. The questions dealt with complaints according to a visual analog scale (VAS) and was send a minimum of one year after the surgery (mean time 22 months, range: 12-32 month). The overall response rate was 91%. The mean age of the patients was 69 years (range: 37-89 years).

Results: The patients reported eight for overall satisfaction on the VAS (range 0-10: 10 being very content and 0 very uncontent, SD +/-3) regarding the final outcome of their surgery, although several of the patients had continuous symptoms within the first postoperative year. Eight patients (38%) reported no symptoms at all. Conclusions: Our results suggest that endoscopic management of ZD with the LigaSureTM 5 mm instrument is a minimally invasive, fast and safe method with solid long-term outcome with relief of symptoms and patient satisfaction. This new operative instrument was not found inferior to traditional endoscopic techniques and is now the standard treatment method for ZD in our departments.

AUTHORS

Andersen MF1, Trolle W2, Anthonsen K3, Nielsen HU3, Homøe P1.

1Department of Otorhinolaryngology and Maxillofacial Surgery, Zealand University Hospital, Denmark

2Department of Otorhinolaryngology, Nordsjaellands University Hospital, Denmark

3Department of Otorhinolaryngology, Head and Neck Surgery & Audiology, Rigshospitalet, Denmark
Transoral laser surgery for Zenker's

C. Joseph*(1)

(1) Sandton Head and Neck Forum, Johannesburg, South Georgia & South Sandwich Islands

Purpose of study:
Assess outcomes and complications of transoral laser surgery for Zenker's.

Materials and methods:
Retrospective analysis of 89 patients with Zenker's diverticulum treated with transoral laser surgery.
Outcomes, recurrences and complications assessed.

Results:
20% of patients had undergone previous surgery (2/3rd previous open technique and 1/3rd previous closed technique).
Complications occurred in 6.7%. 1 major complication from wall tear prior to laser (laser abandoned) occurred which required open surgery for recovery. 1 patient died from an unrelated cause (stomach carcinoma). Other complications included minor leak and damage to crowned tooth. 1 patient bled on day 5 from a duodenal ulcer, controlled endoscopically.
Hospital stay 1 day in all patients without complications.
Recurrence rate post transoral laser was 8.9%. Half of these patients received repeat laser surgery and half declined further surgery. Most recurrences occurred in less than 12 months.

Conclusion:
Endoscopic approach (by laser or stapling) has replaced open surgery as the treatment of choice for Zenker's diverticulum. Laser is a safe alternative to stapling with results similar to those reported for stapling. Complications in this series resulted from endoscopic instrumentation. There were no complications related to the use of the laser. The cost of laser use is significantly less than staples in South Africa resulting in this method being more cost effective than stapling.