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These are articles written by the editor or editorial team concerning the *MJM* or about issues relevant to the journal.

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The title page should state the brief title of the paper, full name(s) of the author(s) (with the surname or last name bolded), degrees (limited to one degree or diploma), affiliation(s), and corresponding author's address. All the authors' affiliations shall be provided after the authors' names. Indicate the affiliations with a superscript number at the end of the author's degrees and at the start of the name of the affiliation. If the author is affiliated to more than one (1) institution, a comma should be used to separate the number for the said affiliation.

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Acknowledgements:

Acknowledge grants awarded in aid of the study (state the number of the grant, name and location of the institution or organisation), as well as persons who have contributed significantly to the study.

Authors are responsible for obtaining written permission from everyone acknowledged by name, as readers may infer their endorsement of the data.

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MJM follows the Vancouver style of referencing. It is a numbered referencing style commonly used in medicine and science, and consists of: citations to someone else's work in the text, indicated by the use of a number and a sequentially numbered reference list at the end of the document providing full details of the corresponding in-text reference. It follows the guidelines provided in the Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals.

Authors are responsible for the accuracy of cited references and these should be checked before the manuscript is submitted.

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Ahmad Ibrahim KB, et al. Administration of tranexamic acid for victims of severe trauma within pre-hospital care ambulance services (PHCAS) in Malaysia. *Med J Malaysia* 2019; 74(4): 300-6.

NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in blood pressure from 1975 to 2015: a pooled analysis of 1479 population-based measurement studies with 19.1 million participants. *Lancet* 2017; 389(10064): 37-55.

Books and Other Monographs:

2. Personal Author(s)
Goodman NW, Edwards MB. 2014. *Medical Writing: A Prescription for Clarity*. 4th Edition. Cambridge University Press.
3. Chapter in Book
McFarland D, Holland JC. Distress, adjustments, and anxiety disorders. In: Watson M, Kissane D, Editors. *Management of clinical depression and anxiety*. Oxford University Press; 2017: 1-22.
4. Corporate Author
World Health Organization, Geneva. 2019. WHO Study Group on Tobacco Product Regulation. Report on the scientific basis of tobacco product regulation: seventh report of a WHO study group. WHO Technical Report Series, No. 1015. Institute for Public Health. National Health and Morbidity Survey (NHMS) 2017: Adolescent Health Survey 2017. Malaysia: Institute for Public Health, Ministry of Health Malaysia; 2017.
5. Agency Publication
National Care for Health Statistics. Acute conditions: incidence and associated disability, United States, July 1968 - June 1969. Rockville, Me: National Centre for Health Statistics, 1972. (Vital and health statistics). Series 10: data from the National Health Survey, No 69). (DHEW Publication No (HSM) 72 - 1036).

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Other Articles:

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Panirchellvum V. 'No outdoor activities if weather too hot'. *the Sun*. 2016; March 18: 9(col. 1-3).
8. Magazine Article
Thirunavukarasu R. Survey - Landscape of GP services and health economics in Malaysia. *Berita MMA*. 2016; March: 20-1.

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All original papers which are accepted for publication by the MJM, will be considered for the 'Best Paper Award' for the year of publication. No award will be made for any particular year if none of the submitted papers are judged to be of suitable quality.

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How to improve head and neck tumour services in developing countries

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ABSTRACT

Introduction: In 2001, the Indonesian ENT society decided to change the name of their society by adding: surgery of the head and neck. It became clear that there was a need for a curriculum in head and neck surgery to rectify this step. **Methods:** This presentation will highlight the author's personal experience in paving ways to improve head and neck tumour services in the South East Asian region. **Results:** In 2005 an international team of Head and Neck surgeons decided to put hands together to help Indonesia to build on a program to start education in the field of head and neck surgery and oncology. This has resulted in a group of doctors dedicated to head and neck surgery in Indonesia (Head and neck consultants), the establishment of the Indonesian multidisciplinary head and neck working group the "PERDOKLI" and in the end the membership of Indonesia of the IFHNOS in 2012. Since 2001 also a collaboration project between The Rajavithy Hospital in Bangkok and a team of Dutch Head and Neck surgeons covering a yearly head and neck program for Thai ENT residents was initiated. This program has grown into an international program with teachers and participants now from several Thai universities, Korea, Philippines, Indonesia, Malaysia, Taiwan and Israel. Especially the collaboration with the Khon Kaen University was unique because of their excellent facilities for cadaver dissection courses. Since 2005 collaboration with Malaysia was intensified with mutual head and neck conferences and several fellows from Thailand, Indonesia and Malaysia have been educated partly in the Netherlands. To further improve head and neck tumour services in developing countries it's mandatory to build on national training centres in combination with fellowships abroad and a solid curriculum including the Global On Line Fellowship of the IFHNOS. Digital patient records, cancer registration and data management are important to collect information about treatment results. Without knowledge of treatment results improvements are difficult. **Conclusion:** It is imperative to continuously improve the head and neck tumour services through curriculum development and monitoring, regional and international collaboration as well as empowering national training centres.

PL-2

Endoscopic head and neck surgery

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ABSTRACT

Introduction: "Minimalism" is the art of modern head and neck surgery to preserve the function, ease the reconstruction and may improve the patients' quality of life. There is a paradigm shift from open to minimally invasive endoscopic approach in head and neck Surgery. **Methods:** This presentation will highlight the advantages, disadvantages, indications and contraindications of endoscopic head and neck surgery. **Results:** The endoscopic head and neck surgery shares similar principals of resection and reconstruction, with the open counterpart. Through endoscopic approach, a tumour can be targeted directly, or either through a natural or a created opening. Sometimes, no open procedure is required and no, or less later reconstruction is needed. However, the pursuit of oncological sound negative surgical margins should be still the same for either open or endoscopic approaches for head and neck tumors. Here are some potential merits of minimally invasive endoscopic approach: (1) Through natural or created opening (2) Mini-invasive (no destruction for approach) (3) Angular view, illumination, focus (4) Powerful instrumentation (5) Navigation, image guide (6) Bioglue material for reconstruction. Along the years, the endoscopic trend in the management of head and neck tumours is moving from skull base, nasopharynx, nose and paranasal sinuses, oral cavity, oropharynx, down to larynx and hypopharynx. However, as we practice the paradigm shift of surgical approach in head and neck, from open to endoscopic, the indications and contraindications of endoscopic approaches are still in evolution. **Conclusion:** The endoscopic head and neck surgery is recognized as the best practice of "Minimalism". Let's welcome a brand-new era of minimally invasive endoscopic head and neck surgery.

Laryngeal cancer: Perspective from a private ENT surgeon

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ABSTRACT

Introduction: Laryngeal cancer is the second most common head and neck cancer in Malaysia. There will be several occasions where the Ear, Nose and Throat (ENT) surgeons in the private hospitals are the first point of contact. It is important for the surgeons to know to what extent the role they play in the management of these patients. **Methods:** The private ENT surgeons can manage the entire array starting from the diagnosis, investigation, treatment and follow up. This depends on the expertise, special interest and facilities available at the various hospitals. After history and clinic examination, doing a direct laryngoscopy and taking a biopsy is very doable in almost all hospitals. If necessary, a CT scan evaluation could be done in private. This would greatly help even if the patient then decides to be managed in the government setting later. In the case of a smaller tumour, laser or even robotic surgery could be done in private. In Avisena specialist hospital, there is a mechanism already in place for visiting ENT surgeon to partake in head and neck surgery where indicated. Follow up and rehabilitation of laryngeal cancer patients should also be feasible in private practise. **Results:** Although there are very few reported cases of definitive treatment, Avisena has had several patients who underwent the initial diagnostic evaluation at its premises. The main restricting factor is cost. Hence, making the full treatment only feasible in the patients with full health insurance. **Conclusion:** The full array of treatment is feasible in private practise. It all depends on the availability of the expertise and the consent of the patient, bearing in mind of the cost of such a decision.

Autoinflammatory Disorders: Discovering the Role of Otorhinolaryngologist

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ABSTRACT

Introduction: Autoinflammatory disorders (AID) is comparatively a new disease entity being only recently established around 20 years ago. Often mistaken as autoimmune disease, AID is a group of disorder resulted from a defect or dysregulation in the innate immune system, clinically manifesting with chronic systemic inflammation. **Methods:** Based on the recently described systems-based classification of AID, searched on MEDLINE/PubMed Central were conducted for each classified AID disorder. Each disease entity was reviewed for presence of manifestations involving the ear, nose and throat (ENT), including the related management concerning to the field of otorhinolaryngology. **Results:** Some AID mainly presented with ENT manifestations, and patients' primary consultation shown to significantly involve visit to otorhinolaryngologist. In other AID, the affected lesion may include anatomical region within the interest of an otorhinolaryngologist, in which cases were referred to for further management. Additionally, most AID are involving inflammatory pathways that may chronically lead to manifestation in the ENT region, thus an understanding of the underlying pathology and early review may alleviate and preventing the possible clinical sequela. Accurate diagnosis of AID as the cause of the ENT manifestation shown to fine-tune the management and subsequently improve the patient outcomes, while reducing the sequela related to disease progression. **Conclusion:** Although generally considered to be rare, with the rapidly expanding identification of new different diseases, many of AID cases were misdiagnosed and inadequately treated. Awareness of AID as a disease entity among otorhinolaryngologist ensures a prompt and correct diagnosis is being made and the affected patients are managed appropriately.

Free flap reconstruction in hypopharyngeal tumour – The versatility of Anterolateral Thigh (ALT) Free Flap in hypopharyngeal reconstruction in primary and salvage surgeries

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ABSTRACT

Introduction: Reconstruction of hypopharyngeal defect is challenging as it involves creating a functional conduit that need to serve multiple purpose that include swallowing and rehabilitation of speech. The patient usually has already had radiation therapy as an initial treatment, which make the wound bed and surrounding tissue perfusion compromised. In the setting where primary surgery has had anastomotic complications, a salvage reconstruction is even more difficult in the face of overlying infection and microbial colonization. **Methods:** A two years retrospective review of all consecutive cases of hypopharynx reconstruction using free anterolateral thigh free flap in two institutions were conducted. Patients' basic demographic data were collected, including tumour and resulting defect characteristic at the time of surgery, early and delayed complications that include flap and its donor site. **Results:** Six patients were included in the series. All were Chinese men, except one Malay. In three of the patients, the surgery was done as a salvage of previously unsuccessful primary reconstruction (pectoralis major flap, gastric full up and primary repair in partial pharyngectomy). In 5 patients, additional skin was required for the neck coverage due to skin involvement and defect following the resection using multiple perforators and double skin paddle either as chimeric or sequential flaps. One patient has microvascular thrombosis that required exploration and redo of the anastomosis. Another patient had anastomosis ruptured and required multiple re-exploration and redo of the anastomosis (after 3 weeks of the initial operation). Two cases have minor lower anastomotic leaked that manage expectantly and one case has anastomotic junction stenosis that required endoscopic dilatation. **Conclusion:** The ALT flap is a safe and versatile option for the reconstruction of hypopharyngeal defect either in primary or in salvage situation with acceptable complication rates.

Static Reconstruction In Facial Palsy

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ABSTRACT

Introduction: A static facial nerve reconstruction mainly aims to give a symmetrical face at rest. **Methods:** This presentation will highlight the role of static reconstruction in facial palsy. **Results:** Though a dynamic reconstruction is superior to a static reconstruction following facial nerve palsy, static reconstructions may benefit certain patient where more extensive surgery is not feasible due to underlying medical conditions. Some area of reconstruction like eyelids works well with static reconstruction with the use of gold weight and lid tightening. There are many options available for static reconstruction, which include the use of slings (fascial, tendon or alloplastic materials), skin excisions, lifting procedures, botulinum toxin injection and etcetera. Some of these techniques will be discussed. **Conclusion:** The static reconstruction has a clear role in the management of facial palsy.

Cholesteatoma: How delayed diagnoses become morbidities?

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ABSTRACT

Background: Cholesteatoma is an abnormal, noncancerous skin growth than can develop in the external ear, middle ear, mastoid and petrous apex. It can be acquired or congenital. The aim of the study is to review cases of cholesteatoma with delayed diagnoses resulting in morbidity. **Methods:** A retrospective study conducted from 2010-2020. Patients with a delayed diagnosis of cholesteatoma from the Otorhinolaryngology clinic, Universiti Kebangsaan Malaysia Medical Centre (UKMMC) were evaluated. **Results:** We have 10 cases of delayed diagnosis of cholesteatoma resulting in morbidity. All of our patients underwent modified radical mastoidectomy and 3 needed to undergo craniotomy with neurosurgery. **Conclusions:** Patients presenting with severe otalgia and persistent ear discharge require urgent treatment especially children and the mentally challenged. High resolution computed tomography scan (HRCT) is imperative to diagnose cholesteatoma and its complications. Magnetic resonance imaging is indicated in patients with raised intracranial pressure or when the HRCT scan shows tegmen erosion. Those patients with intact tympanic membranes with a whitish mass medial to the tympanic membrane require urgent HRCT scan and hearing assessment.

Connecting the dots towards the diagnosis of ENT recurrent manifestation

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ABSTRACT

Introduction: Recurrent infections are among the common recurrent manifestations seen in the ENT practice. This could indicate underlying immunodeficiency including primary immunodeficiency diseases. **Methods:** The initial laboratory investigations that help to screen for the underlying causes include full blood count, serum immunoglobulins and lymphocytes immunophenotypes. Subsequently, further laboratory tests such as IgG subclass, vaccine-specific IgG (tetanus and pneumococcal), nitroblue tetrazolium (NBT) assay and cellular-mediated analysis maybe performed depending on the initial clue. **Results:** Primary antibody deficiency is perhaps the most common condition associated with this recurrent manifestation. Primary antibody deficiency diseases include agammaglobulinemia, selective IgA deficiency, common variable immunodeficiency, IgG subclass deficiency, and specific antibody deficiency among others. Other types of primary immunodeficiency diseases can also present with recurrent ENT infections particularly recurrent otitis media and sinusitis albeit not very common. **Conclusion:** It is important to accurately diagnose this condition because proper management could avoid adverse consequences such as irreversible organ damage.

Tips on nasopharyngeal carcinoma surveillance

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ABSTRACT

Introduction: The main objectives of post-treatment surveillance are to detect tumour recurrence or second primary tumours early. It is also essential to address the complications of treatment and to provide emotional support where necessary. **Methods:** There are several modalities of post-treatment surveillance, which include history, physical examination, nasoendoscopy, imaging studies (PET, MRI, CT, US) and serology (EBV DNA, TFT). Published data to support the use of these modalities and the optimum frequency that they should be carried out will be discussed. **Results:** There is no consensus in the literature on the optimum frequency of follow-up visits after treatment with curative intent. However, tumour recurrence is more common in the first 3 years after treatment and follow-up visits should be more frequent in the first few years after treatment. There is some evidence that PET-CT may be the most sensitive imaging modality for surveillance. **Conclusion:** It is unclear whether surveillance provides any survival advantage. Nevertheless, a structured surveillance protocol will provide the clinician some guidelines to adhere to.

SP-08

The ENT Conundrum in primary immunodeficiency: What are we missing?

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ABSTRACT

Introduction: Primary immunodeficiency (PID) causes recurrent infection including ear, nose and throat infection. The ENT manifestation in PID was not well studied before. The aim of the presentation is to highlight the ENT manifestation that may occur in PID patients and indication for referral to paediatric of the cases that suspected PID. **Methods:** PID patients were screened for any ENT manifestations by history and physical examinations. The results were tabulated and presented as descriptive result. **Results:** Majority of PID patients has ENT manifestation (83%) either as the presenting complaints, during the PID diseases progression or newly diagnosed by screening. The most common ENT recurrent infection in PID patients was otitis media and recurrent tonsillitis. Rhinosinusitis was also one of the manifestations in PID as well. From Jeffrey Modell Foundation, Primary Immunodeficiency Resource Centre, the 2 from 10 warning sign for PID were recurrent ear and nose infection (four or more new ear infections within 1 year and two or more serious sinus infections within 1 year). **Conclusion:** All patients with PID need to be screened for ENT manifestations and referral should be made accordingly. Patients with recurrent ENT manifestations and infections should be screened for PID and should be referred to paediatrician for further management.

Maxillofacial Perspective for the Management of Obstructive Sleep Apnoea in Paediatric Patients with Craniomaxillofacial Syndromes

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ABSTRACT

Introduction: Obstructive sleep apnoea is one of the major functional discrepancies secondary to structural abnormality among paediatric patients with craniomaxillofacial syndromes. The airway obliteration can be due to severe midface hypoplasia such as in Crouzon or Apert syndromes or secondary to severe micrognathia in Nager or Treacher Collins syndromes. **Methods:** This presentation highlights the maxillofacial interventions in various paediatric craniomaxillofacial syndromes presenting with obstructive sleep apnoea. **Results:** The primary aim of maxillofacial intervention for the treatment of OSA is to achieve adequate airway opening via midface advancement or mandibular lengthening which can be achieved with traditional surgical procedures such as Le Fort osteotomy or mandibular sagittal split osteotomy, respectively. The advancement of tissue engineering in medical field has made distraction osteogenesis applicable in craniomaxillofacial diseases. This technique provides superior bony lengthening through controlled traction and simultaneously expands the surrounding soft tissues thus minimizing relapse. Nevertheless, maxillofacial interventions would involve comprehensive planning and appropriate case assessment tailored to each patient as these procedures carry the risk of serious morbidities and require technical precision. Apart from reducing morbidity and optimizing the surgical outcomes, the integration of technology advancement in complex maxillofacial interventions such as tissue engineering and 3D printing has significantly contributed to the promising success in this reconstructive field. **Conclusion:** Various maxillofacial interventions aimed at midface advancement or/ and mandibular lengthening play a vital role in the multidisciplinary management of paediatric craniomaxillofacial syndromes presenting with obstructive sleep apnoea.

SP-10

Management of obstructive sleep apnea in children

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ABSTRACT

Introduction: Treatment approaches to paediatric obstructive sleep apnea (OSA) continue to evolve as the underlying causes are complex. Adenotonsillectomy has been recommended as the first line of treatment in majority of the cases. However, there are cases where residual or persistent OSA may occur due to severe OSA, obese, those with concurrent asthma or allergic rhinitis (AR), or children with predisposing oropharyngeal or maxillomandibular factors. The co-existence of AR has long been considered as a risk factor for OSA. Other important factor which is obesity is associated with an increase in the prevalence and the severity of OSA. It may play an important role in the persistence and aggravation of OSA over time. **Methods:** A retrospective study on paediatric adenotonsillectomy was carried out from November 2011 until October 2016 at UKM Medical Centre. Medical record of patients aged 2 to 12 years old who underwent adenotonsillectomy was retrieved for data collection. **Results:** Recurrent tonsillitis either with or without obstructive symptoms were the main of indication (60%), followed by SDB (29%) and OSA (7%) for adenotonsillectomy. At six months post adenotonsillectomy, all patient no longer had recurrent sore throat but five patients still has snoring (3.5%) and twenty-two complained of partial snoring (15.4%). Allergic rhinitis was found to be the commonest co-morbidity (40%) in cases with snoring and SDB. Almost 10 % had con-comitant medical problem including asthma. Another study carried out in 2013 on quality of life amongst paediatric patients with OSA who underwent adenotonsillectomy at our center reported that those with allergic rhinitis had lesser improvement on quality of life score post-operatively followed by obesity. **Conclusion:** There is no single approach will fit all patients. Those with residual OSA need to be pro-actively identified and managed comprehensively using individualized strategies that address the possible underlying risk factors.

Comprehensive rehabilitation after total laryngectomy

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ABSTRACT

Introduction: Since the first total laryngectomy by Billroth in 1873, the treatment of laryngeal cancer has improved considerably. Radiotherapy, chemo-radiation protocols, partial laryngectomies with or without laser surgery and even robot surgery have been introduced during the last decades, but preserving the larynx not always implies preserving the function. Unfortunate, despite all these advances in the conservative treatment of laryngeal cancer there will always remain a role for the total laryngectomy, so efforts to optimize the rehabilitation after this surgical procedure are of utmost importance. **Methods:** This presentation will highlight the evidence supporting comprehensive rehabilitation of not only the voice, but also pulmonary, swallowing and olfaction rehabilitation after total laryngectomy. **Results:** The larynx is more than just a 'voice box': due to its central position in the respiratory tract, its removal requires rehabilitation of all three 'systems' depending on respiratory airflow, i.e. the voice, the pulmonary system and the olfaction. Also swallowing after the total laryngectomy remains a point of attention since due to the damage caused by previous treatments to for instance the muscles of the oropharynx and upper esophageal sphincter, undisturbed deglutition is not always evident. Voice rehabilitation has been boosted by the introduction of the voice prosthesis. In 1988 a new low resistant indwelling voice prosthesis was developed in the Netherlands Cancer Institute. This prosthesis, known as the Provox, has become a worldwide accepted and widely used voice rehabilitation tool with favorable success rates of >90%. Pulmonary problems after TLE are inevitable since the upper airway is disconnected from the lower respiratory system with influence on the heating, moistening and filtering of the inhaled air. Also the olfaction is influenced by the disconnection of the upper airway. Swallowing after TLE can be cumbersome. It's difficult to draw conclusions from a meta-analysis on swallowing disorders after TLE, mainly because of the many outcome measures, the lack of validated questionnaires for TLE patients, the lack of guidelines for swallowing investigations for TLE patients and a big heterogeneity in study designs. **Conclusion:** Rehabilitation of various functions after total laryngectomy requires a dedicated team of clinicians, speech, swallowing and physical therapists working collaboratively to improve patient's outcome.

SP-12

Drug induced sleep endoscopy directed surgery in paediatrics obstructive sleep apnoea

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ABSTRACT

Introduction: Drug Induced Sleep Endoscopy (DISE) directed surgery in children with obstructive sleep apnoea has provided an alternative diagnostic option for more comprehensive management of their condition. **Methods:** Results of a systematic review on DISE directed surgery in children will be discussed. **Results:** Seven clinical research articles were identified. Seven studies were of level III evidence: retrospective, case-control and prospective series. Altogether, there were 996 patients with male predominance of 61%. Surgical decision was changed in 295 patients (30%) following DISE. Most patients (86%) underwent a multilevel surgery based on DISE. Complications were documented in 3 studies. **Conclusions:** Analysis of the results indicated that DISE directed surgery was an effective and safe therapeutic approach to treating paediatrics obstructive sleep apnoea.

Comprehensive treatment for locoregionally advanced nasopharyngeal carcinoma

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ABSTRACT

Introduction: The optimal treatment mode for locoregionally advanced nasopharyngeal carcinoma (NPC) remains controversial. **Methods:** This topic will help summarize current evidences and ongoing trials to direct future development of the comprehensive treatment for NPC. **Results:** First, we stressed the importance of precision therapy to minimize toxicities and avoid overtreatment while maximizing survival benefits. It was confirmed that adjuvant chemotherapy following concurrent chemoradiotherapy with a conventional regimen did not provide additional benefits to NPC patients. This may be mainly due to the low compliance after radical chemoradiation (about 50 ~ 60%). On this basis, a multicentre phase 3 trial to evaluate the efficacy of metronomic capecitabine as adjuvant chemotherapy in NPC was initiated to assess whether this high-efficiency, low-toxicity treatment mode can further improve the benefit of patients with NPC. In addition, it was demonstrated that induction chemotherapy with TPF reduces the risk of patients with distant metastasis and improves survival. To further optimize the induction regimen and seek for drugs with low toxicity, another multicentre phase 3 trial to evaluate the efficacy of GP induction chemotherapy was conducted. It was confirmed that GP was an equivalent low-toxicity induction regimen. Finally, as lymphocytes are abundant in NPC, immunotherapy has a promising prospect in this disease. A number of trials have confirmed that the efficacy of anti-PD-1 drugs in advanced NPC. Therefore, several trials evaluating the efficacy and toxicity of anti-PD-1 drugs are being conducted in locoregionally advanced NPC. **Conclusion:** Through the above work and efforts, we hope to make NPC history with collaborations and supports of colleagues all over the world.

SP-14

Basic view of current immunotherapy approaches in allergic rhinitis

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ABSTRACT

Introduction: Allergic rhinitis (AR) is an IgE-mediated allergic disease that is triggered by the inhalant allergens that affects the upper airways. Mild AR is treated using pharmacotherapy, while allergen immunotherapy (AIT) is recommended for patients having moderate to severe allergic rhinitis (AR) that cannot be controlled using pharmacotherapy, or who experience unacceptable side effects due to medical therapy. **Methods:** This presentation highlights the role of allergen immunotherapy in the treatment of allergic rhinitis. A detailed account of the different types of allergen immunotherapy will be presented. **Results:** Allergen immunotherapy (AIT) is the only disease-modifying therapy for the treatment of allergies. It provides rapid symptomatic relieve, improves the patient's quality of life and has demonstrated to have long-term relief of symptoms even after the immunotherapy period has ended. Current AIT approaches include subcutaneous (SCIT) and sublingual (SLIT) administration methods. SCIT and SLIT preparations are available for house dust mite, tree pollens and grass pollens. The mechanisms of AIT can be broadly classified into rapid desensitization, where effector cells are less responsive to allergen, early tolerance with the generation of T- and B- regulatory cells and specific 'blocking' IgG antibodies, and sustained tolerance. While AIT has been beneficial for the majority of patients that it is prescribed to, it has the potential to result in adverse effects, as current AIT preparations are based on natural extracts that contain allergens with intact IgE-epitopes. Due to the nature of AIT which requires high doses to induce the tolerance response, IgE-mediated adverse effects are observed in some AIT receivers. New AIT approaches that are being tested in experimental setting are based on purified allergen molecules or peptides that are devoid of the IgE epitope, but still contain immunogenic portions to stimulate the immune system. Other routes of immunization such as intralymphatic and epicutaneous immunotherapies are also being tested as another means to reduce adverse reactions to AIT preparations. **Conclusion:** AIT modifies the disease progression and has been shown to be clinically effective in allergic rhinitis.

P16-positive oropharyngeal squamous cell carcinoma: Multi-institutional observation study based on head and neck cancer registry in Japan

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ABSTRACT

Introduction: Involvement of human papillomavirus (HPV) as a carcinogenic factor for oropharyngeal squamous cell carcinoma (OPSCC) has become widely known. **Methods:** With the aim of developing optimal treatment strategies, we have conducted a nationwide retrospective cohort study based on the Head and Neck Cancer Registry operated by the Japan Society for Head and Neck Cancer. In this study, 688 patients newly diagnosed as having p16-positive OPSCC from 2011 to 2014, who had clinical information and follow-up data after curative-intent therapy, were enrolled from 35 institutions. **Results:** Regarding the initial treatment modalities, chemoradiation (CCRT), induction chemotherapy, and surgery groups showed similar relapse free survival (RFS) and overall survival (OS). Of note, 8th TNM classification along with 7th TNM accurately predicted RFS and OS. In T1N0 (n=23) and T2N0 (n=56) patients, 3-year OS and RFS rates of CCRT and RT groups were 100%, 3-year OS rates of the surgery group were 94.4% (Stage I) and 92.9% (Stage II), respectively. In the patients with 8th stage I-II treated by CCRT, 5-year RFS and OS rates of the patients treated with CDDP $\geq 160\text{mg/m}^2$ (n=114) were 91.4% and 92%, whereas those treated CDDP $< 160\text{mg/m}^2$ (n=17) were 74.3% and 69.5%, respectively. The 5-year RFS and OS rates were significantly different between these two groups. **Conclusions:** These results suggest that at least 160mg/m^2 of CDDP should be administered during CCRT for the treatment of p16-positive stage I-II OPSCC (8th TNM classification).

Evaluation of laryngopharyngeal reflux using reflux finding score

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ABSTRACT

Introduction: Laryngopharyngeal reflux (LPR) is a condition where there is regurgitation of gastric contents into the laryngopharynx and it is often associated with many laryngeal disorders. The signs and symptoms of LPR are nonspecific, making diagnosis of LPR difficult. Reflux finding score (RFS) comprises assessment of laryngeal findings (presence of subglottic edema, ventricle obliteration, vocal fold edema, posterior commissure hypertrophy, diffuse laryngeal edema, laryngeal erythema, thick endolaryngeal mucus and granulation tissue) was developed in order to standardize the evaluation of laryngeal findings of LPR. However the assessment of the laryngeal findings using RFS is limited by the nature of subjective evaluation that also dependent on the clarity of images captured by endoscopy systems. Therefore, the aim of the study is to investigate the reliability of RFS assessment using a high definition endoscopy system. **Methods:** 46 participants of LPR group and 20 participants of healthy group were recruited. The LPR group was recruited when the reflux symptom index (RSI) was more than 13 with absence of obvious nasal symptoms. Examination of the larynx was performed using a video laryngostroboscopy (Pentax Medical) utilizing white light. The videos were saved in the system's digital capture module which were then anonymized and the audio was muted. Two raters comprise a laryngologist (R1) and a non-laryngologist ORL surgeon (R2) evaluated the video laryngeal findings using RFS independently. The assessment was repeated two weeks after the first evaluation. The inter- and intra-rater reliability of raters in evaluating RFS was assessed using intraclass correlation. **Results:** Of 66 participants, there were 42 females and 24 males with mean age of 38.32 (13.05) years old. The inter-rater reliability of R1 and R2 for the first and second evaluation was strong with ICC of 0.86 and 0.83, respectively. For the intra-rater reliability, the ICC was 0.97 for R1 and 0.91 for R2. **Conclusion:** This study showed that excellent agreement can be achieved in evaluating RFS in possible LPR and healthy participants when a high definition endoscopy system is used. Further study on the use of enhanced laryngeal imaging in assessing laryngeal findings of LPR and the correlation with results of reflux tests is recommended.

Office-based procedures in laryngology

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ABSTRACT

Introduction: The practise of applying local analgesia to the vocal folds as an in-office procedure in the clinic setting has been done decades ago, since 1969. The practise has made a comeback for the past few decades using local anaesthesia with short half-life and wide margin of safety, such as lidocaine. **Methods:** Discussion and demonstration of office-based laryngotracheal procedures such as tracheoscopy, bronchoscopy, biopsy of suspicious airway pathologies, intralesional steroid injections as treatment for vocal fold granulomas, usage of lasers to treat benign or even precancerous laryngeal lesions and balloon dilatation for laryngotracheal stenosis will be presented. **Results:** Many diagnostic and therapeutic laryngotracheal procedures can be done with ease in the clinic without subjecting patients to general anaesthesia. This definitely saves time and cost for both patients and our health service. In addition it is a safe option to treat patients with multiple comorbidities at high risk for general anaesthesia. **Conclusions:** Office-based procedures in laryngology have numerous benefits to both patient and surgeon. The technique is reproducible, able to be done by any ORL surgeon trained to perform them with the right technique taking the right precautions.

 SP-18

Upper airway anaesthesia

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ABSTRACT

Introduction: The sensory receptors of the nasal passages, tongue base, supraglottis and glottis protect the lower airway from offending particles by initiating gag and cough. Obtunding these reflexes by applying local analgesia to these passages can potentially allow visualization and intervention to the supraglottis, glottis and subglottis. **Methods:** This review will highlight the techniques described in the literature for in-office upper airway anaesthesia. It will compare the different techniques and highlight our local 10-year experience (2008-2018) in its efficacy in performing various office interventions in laryngology. **Results:** Data confirms that upper airway anaesthesia is safe with no life-threatening complications. It is given to have better visualization of the lower airway, making the need for examination under anaesthesia obsolete. Additionally, it has been used locally for several office interventions including botulinum toxin and steroid laryngeal injections as well as vocal fold medialization. **Conclusion:** Upper airway anaesthesia is a prerequisite in office laryngological interventions.

Non-surgical treatment in laryngeal cancer

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ABSTRACT

Introduction: Radiation Therapy (RT) is an important modality in the non-surgical management of laryngeal cancer for both early and locally advanced disease. **Methods:** This presentation will highlight the evidence supporting the use of RT. It will compare the outcomes of RT with robotic and laser surgery for T1-2 disease as well as the outcomes for laryngeal preservation with chemo-RT. **Results:** Data confirms that voice quality is acceptable with RT for early stage disease and still has a role in selected patients despite the increasing use of robotic and laser surgery. Where laryngeal function remains preserved at diagnosis, randomised data supports the role of chemo-RT for locally advanced disease. The data comparing chemo-RT to surgery and post-operative RT remains limited. **Conclusion:** RT maintains an important role in the management of laryngeal cancer.

SP-20

Clinical experience in Endoscopic Endonasal Transpterygoid Nasopharyngectomy (EETN) in local residual or recurrent nasopharyngeal carcinoma

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ABSTRACT

Introduction: Endoscopic endonasal transpterygoid nasopharyngectomy (EETN) has emerged as a viable treatment option for local residual or recurrent NPC. Multidisciplinary discussion is needed to determine patient's eligibility for EETN. The factors that exclude patients from EETN surgery include extensive involvement of parapharyngeal space, internal carotid artery, cavernous sinus with multiple cranial nerve palsies, extension into brain parenchymal and presence of distant metastasis. The surgery is purely via endoscope with four hands technique. Adequate sinonasal corridor with extended medial maxillectomy and posterior septectomy is crucial to have panoramic view of the field of surgery. **Methods:** A retrospective clinical record review was carried out for EETN cases done in Sarawak General Hospital from June 2013 till May 2017. **Results:** A total of 55 locally recurrent NPC patients (rT1–rT4) underwent EETN with curative intent performed by single skull base surgeon, with postoperative adjuvant chemotherapy but without postoperative radiotherapy. There were no major postoperative complications. During a mean follow-up period of 18-month post-surgery, five patients (9.1%) had residual disease or recurrence at the primary site. All five patients underwent re-surgery. One patient at rT3 passed away 6 months after re-surgery due to distant metastasis complicated with septicaemia. The 1-year local disease-free rate was 93% and the 1-year overall survival rate was 98%. **Conclusion:** EETN is an emerging treatment option for locally recurrent NPC, with relatively low morbidity and encouraging short-term outcome. However, successful surgical outcome requires an experienced team and highly specialised equipment. Long-term outcome is yet to be determined due to the lack of longer follow-up and bigger cohort study.

Cross-sectional study on health-related quality of life among nasopharyngeal cancer survivors in Hospital Melaka, Malaysia

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ABSTRACT

Introduction: We assessed health-related quality of life (HRQOL) of nasopharyngeal carcinoma (NPC) survivors and analysed its factors influencing HRQOL from a single centre in Malaysia. **Methods:** Patients with diagnosis of NPC who completed treatment with a minimum of 6 months follow up were conveniently sampled from July 2019 to July 2020. They were asked to complete European Organisation for Research and Treatment of Cancer (EORTC) Quality of Life Questionnaire QLQ-C30 (version 3.0) and Head & Neck cancer module QLQ-H&N 35. All the scales and single-item measures range from 0-100. Higher scores represent higher response levels. Higher score for symptoms scale indicates higher symptoms. Mann-Whitney U nonparametric tests were used for comparisons. Spearman correlation coefficient was used to analyse factors influencing HRQOL. **Results:** 35 patients with a median age of 62, range of 11-79 years completed the questionnaires. Majority of the patients were Stage III 14(40%), followed by Stage IV 8(22%), Stage I 7(20%), and Stage II 6(17.1%). Median years of follow up was 4 years and 3 months with a range of 1-year 4 months to 18 years. Median HRQOL is 75 with IQR 16.67. Median HRQOL is significantly worse in Late stage (III & IV) 66.67 IQR (10.42) compared to Early stage (III & IV) 91.67 IQR (16.67) ($p<0.001$). Factors influencing HRQOL are dyspnoea ($p<0.001$), dry mouth ($p<0.001$), emotional functioning ($p<0.001$), swallowing ($p<0.001$), speech ($p<0.05$), nausea & vomiting ($p<0.05$). Median scores of 66.67 for sticky saliva and dryness were the highest rated symptoms. Intensity-modulated radiation therapy (IMRT) produces less scores of xerostomia 54.9 compared with 2D/3D conventional radiotherapy 70.37 ($p<0.05$). **Conclusion:** Overall HRQOL among NPC survivors in Melaka was good. Early stage produced better HRQOL. IMRT produced less xerostomia. Holistic care with particular attention to oral care and psychological support need to be given to NPC survivors.

OP-02

Pectoralis major myocutaneous flap in head and neck reconstruction by Otorhinolaryngology surgeon: Our experience and its outcome

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ABSTRACT

Introduction: The pectoralis major myocutaneous flap (PMMF) plays an important role in head and neck reconstruction surgery even though free flap is gaining its popularity in this era. This paper aimed to evaluate the outcomes of PMMF in head and neck reconstruction done by the Otorhinolaryngology Department in a tertiary center in Malaysia. **Method:** A retrospective review of medical records of patients underwent PMMF reconstruction from June 2019 to June 2020 was conducted. The demographic data, indication for operation, history of prior treatment, operating time and complications are evaluated. **Results:** A total of 8 reconstructions with PMMF were performed, consisting of 7 men and 1 woman. Six had primary reconstruction done and 2 had emergency reconstructive surgery with PMMF. Three patients had a history of radiotherapy. Mean operating time for primary reconstructive surgery after tumour excision was 433 minutes and emergency operation was 245 minutes. Complications occurred in 4 patients; 3 had surgical site infection, 1 had haematoma over recipient site. **Conclusion:** PMMF is a versatile flap with good survival rate in head and neck reconstruction surgery either for primary or emergency operation. Mastering the technique is beneficial especially in a center with limited resources.

New proposal to revise classification for squamous cell carcinoma of external auditory canal and middle ear

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ABSTRACT

Introduction: Prognosis of the patients with advanced squamous cell carcinoma of external auditory canal and middle ear (SCC-EAC/ME) have been improved by advances in skull base surgery and multidrug chemoradiotherapy during the last two decades. T4 includes a wide range of sites of extension, and the prognosis can vary greatly depending on the site of extension. We will analyze the cases treated at our hospital and propose a staging system based on the prognosis. **Methods:** Ninety-five patients with SCC-EAC/ME who were treated between 1998 and 2017 were enrolled. The number of the patients with T1, T2, T3 and T4 were 15, 22, 24, 34, respectively. Oncological outcomes and prognostic factors were retrospectively investigated. **Results:** The 5-year overall survival (OS) rates of the patients with T1, T2, T3 and T4 were 93.3%, 95.2%, 84.7% and 42.9%, respectively. Among patients with T4, brain invasion ($p=0.024$), carotid artery and/or jugular vein invasion ($p=0.049$, 0.040) were found as significant poor prognostic factors. The 5-year OS rate of the patients with at least one of these factors (T4b) was significantly higher than that of the patients without these factors (T4a) (65.5% vs 25.5%, $p=0.049$). **Conclusion:** We propose a new classification classifying T4 of modified Pittsburgh classification into two groups according to the prognostic factors; brain, internal carotid artery, and jugular vein.

Prognostic factors after transoral resection of early hypopharyngeal cancer

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ABSTRACT

Introduction: We aimed to investigate risk factors predictive of local recurrence and/or lymph node metastasis after transoral resection of early hypopharyngeal cancer. **Methods:** Forty-nine consecutive patients who underwent transoral videolaryngoscopic surgery (TOVS) as an initial treatment for hypopharyngeal cancer were included in this study. For univariate analysis, log-rank test was employed to assess the differences in local recurrence-free survival rates according to the following parameters: subsite, pT, horizontal margin, lymphatic invasion, vessel invasion, tumor thickness (> 4 mm versus ≤ 4 mm), history of esophageal cancer, and multiple Lugol-voiding lesions (LVLs) in the esophagus. Cox regression analysis was used for multivariate models. Categorical variables were evaluated for their associations with lymph node metastasis using chi-squared test or Fisher's exact test. **Results:** The subsites of primary lesions were piriform sinus (PS) in 24 patients, posterior wall (PW) in 15 patients, and postcricoid (PC) in 10 patients. Thirty patients had esophageal cancer. Only LVLs remained as a significant risk factor on multivariate analysis ($p=0.0395$; hazard ratio = 8.897; 95% confidence interval, 1.113–71.15). Most cases of local recurrence were satisfactorily controlled by repeated TOVS. Venous invasion ($p=0.0166$) and tumor thickness ($p=0.0092$) were significantly associated with lymph node metastasis on univariate analysis. **Conclusion:** Local recurrence was more frequent in patients with LVLs, but most of the cases were salvaged by repeated TOVS. Postoperative treatment should be considered in cases with venous invasion and/or tumor thickness greater than 4 mm to address the high rates of lymph node metastases.

Universiti Kebangsaan Malaysia Medical Centre experience in managing temporal bone carcinoma: What can we learn?

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ABSTRACT

Introduction: Temporal bone carcinoma is a rare and aggressive malignancy in the head and neck region. Although surgery carries an excellent cure rate if performed in the early stage, patients typically presented late. This study evaluates the clinical presentation and treatment outcome in a university hospital over the last ten years. **Methods:** Medical records of patients with temporal bone carcinoma presented to Universiti Kebangsaan Malaysia Medical Centre from 2010 until 2020 were retrieved. Data on clinical presentation, disease staging, and treatment outcome were collected and analysed using Microsoft Excel. **Results:** 15 patients were identified. The majority are Malay (53.3%) and female (66.7%). The mean age is 64 years old, with a range between 43 to 97 years old. Otorrhea (79%) and otalgia (71%) are the most frequent complaints. 43% of patients presented late to otorhinolaryngology, more than six months of symptoms. There were 12 cases of squamous cell carcinoma, two cases of recurrent squamous cell carcinoma, and one case of metastatic adenocarcinoma. Most patients (80%) had a high stage (T3 and T4) disease at initial diagnosis. 53% of patients underwent surgery, whereas 33 % received radiotherapy or chemotherapy only. Nine patients (64%) have passed away with an average survival period of nine months. **Conclusion:** In our series, patient with temporal bone carcinoma presented late with advanced stage. Management strategies can be complex, thus requiring a well-organised multidisciplinary team to optimise treatment outcome.

Reliability of the 'M-Line' in the prediction of the facial nerve position in patients with parotid neoplasms

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ABSTRACT

Introduction: Preoperative radiological assessment of parotid tumours represents a crucial step in the planning of a parotidectomy in order to avoid post-operative facial nerve paralysis. The purpose of this study is to determine the reliability of the 'M-line' in predicting the facial nerve position and compare it to various radiological methods in the same context. **Methods:** 66 patients with whom had underwent parotidectomy for parotid tumours from January 2012 to February 2021 were analyzed. Parotid tumour location was identified using the retromandibular vein, facial nerve line, Conn's arc, Utrecht line and the 'M'-line were compared to the intraoperative location of parotid tumours. The 'M'-line is a novel hypothetical line (drawn between the medial surface of the mandible to the lateral border of the mastoid process) used to identify the location of the facial nerve radiologically. **Results:** The 'M-Line' and other methods of radiological assessments were associated with a statistical significance in predicting if the parotid tumours were superficial or deep to the facial nerve (p-value <0.05). The 'M-line' had demonstrated a sensitivity of 73.6% and 92.3% specificity. It had also yielded the highest accuracy (77.3%) in the prediction of the parotid tumour location in relation to the facial nerve. **Conclusion:** While the radiological lines represented by the Retromandibular vein, facial nerve line, Utrecht line and Conn's arc were statistically significant in predicting the location of the parotid tumour in relation to the facial nerve, the M-line was the most accurate and sensitive predictor in our study. The M-Line can be a potentially useful tool to predict the location of the facial nerve in relation to a parotid tumour.

A glottic closure technique for severe aspiration after the treatment of head and neck cancer

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ABSTRACT

Introduction: In 2008, Kano et al developed a new glottic closure technique (Kano's method) for the treatment of severe aspiration. The aim of this study was to evaluate the safety and efficacy of this technique in patients with head and neck cancer. **Methods:** Since June 2014 until March 2021, Ten patients underwent Kano's method for management of severe aspiration after the treatment of head and neck cancers. The anterior parts of the thyroid and the cricoid cartilages were excised widely. The glottis was closed by suturing bilateral vocal folds and reinforced by the sternohyoid muscle. A tracheostoma was created with skin flaps, subglottic mucosal flaps, and stumps of cricoid and trachea cartilages. **Results:** No severe complications were observed after the surgery. Oral intake improved without developing aspiration. **Conclusion:** Kano's method can provide satisfactory functional results with minimal invasion for treating severe aspiration after advanced surgery, chemotherapy, and/or chemoradiotherapy, in patients with head and neck cancer.

A review of 18 years' experience managing salivary gland tumor's in Hospital Selayang, Malaysia

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ABSTRACT

Introduction: Salivary glands tumor exhibits diverse clinicopathological characteristics and most common salivary gland tumours involve parotid gland. This study aims to establish the demographics profile, the management, and follow-up of patients diagnosed with a salivary gland tumour in Malaysia. **Methods:** A retrospective review of case records of 197 patients with salivary gland tumours presented to Selayang Hospital, between 2001 and 2018. The following data were collected and reviewed: age, gender, FNAC results, post-operative specimen histological diagnosis, investigations, and type of surgery done. Diagnosis of salivary gland tumors was based on clinical features, investigations including fine needle aspiration cytology (FNAC) and computed tomography scan (CT Scan). Further management of these patients depends on the investigations and histopathological examination (HPE) results of the removed gland. **Results:** Pleomorphic adenoma tumour was the most prevalent as diagnosed in 72 parotid glands and 13 submandibular glands. Mucoepidermoid carcinoma is the most common malignant salivary gland tumour, which accounts for 7 cases in the parotid gland and 2 cases in the submandibular gland. The mean age is 50, and range from 10 to 88 years of age. Salivary gland tumour is common during the 6th decade. **Conclusion:** Pleomorphic adenoma as the most common benign salivary gland tumour and mucoepidermoid carcinoma the most common malignant salivary gland tumour. Superficial parotidectomy is the most common procedure done and the average follow up post parotidectomy is suggested up to 3 years and behaviour of salivary glands tumours does not change despite the progress and development in the country.

Double staged sleeve resection of laryngotracheal tumour of papillary and follicular thyroid carcinoma

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ABSTRACT

Introduction: Thyroid cancer has been increasingly prevalent in the recent decade mainly attributed to the rise in papillary thyroid carcinoma (PTC) rates while follicular thyroid carcinoma (FTC) rates only rising minimally. The management of thyroid carcinoma with infiltration into the aerodigestive tract has been widely discussed and yet no consensus has been achieved regarding the best surgical technique. We aim to review the outcomes of sleeve resection of laryngotracheal tumour in patients with papillary thyroid carcinoma (PTC) and follicular thyroid carcinoma (FTC) who underwent total thyroidectomy. **Methods:** Retrospective review of six patients with PTC and FTC complicated with intraluminal laryngotracheal infiltration who had undergone laryngotracheal sleeve resection with partial closure and insertion of tracheostomy. The medical records of these patients were reviewed and clinical data collected including the presentation of the patient, the extent of laryngotracheal intraluminal infiltration on endoscopy, radiological findings, staging and surgery. **Results:** Six patients were included in this review with ages between 44 to 74 years old. Three patients (50%) were female while the remaining three (50%) were male. Average post-operative follow up was 21 months. Post-operatively, one patient (16.6%) had hematoma requiring evacuation. Two patients (33.3%) had injury to recurrent laryngeal nerve (RLN) in which ansa cervicalis-to-RLN repair was performed for one patient with severed RLN. The other patient had RLN neuropraxia and regained normal vocal cord mobility few months post-surgery. Decannulation was successful in all patients within 3 months on average. One patient died 2 months post-operatively due to concomitant angiosarcoma. All except one patient were free from recurrence on follow-up. **Conclusion:** Complete resection of laryngotracheal tumour extension of thyroid carcinoma was achieved through laryngotracheal sleeve resection with partial closure and tracheostomy tube insertion. This procedure was chosen due to the urgency of performing the surgery in these patients with airway compromise and the limited post-operative Intensive Care Unit bed availability.

OP-10

Lymph node metastasis and adverse features evaluation in laryngeal cancer

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ABSTRACT

Introduction: Laryngeal cancer is still counted as one of 5 most frequent head and neck cancer in Indonesia. Neck metastasis is frequently found in level II-IV, and metastasis to level I, IIB and V is considered rare. Adverse features implied important prognostic factors and risk of local recurrence thus need to be included in post-operative evaluation. **Methods:** Data of all patients underwent total laryngectomy, neck dissection and thyroidectomy in our center was collected from December 2018 until March 2021. Cell differentiation, keratinization and adverse features profile; margin of incision, lymphovascular invasion, perineural invasion and extra capsular extension were recorded. **Results:** One female case was treated of 26 total cases studied. The youngest age recorded was 43 years old and the oldest was 77 years old. T4 stage was mostly found (50%) then followed by T3 (38.5%) and T2 (11.5%). Level II and III lymph node were frequently involved (38% and 35% respectively) with unilateral neck involvement found in 64.3% while bilateral neck involvement found in 35.7%. Level I and IIB positive only found in one case. Thyroid was confirmed positive in 30.8% case. NO was found in 50% cases, N2 and N1 was recorded respectively in 34.6% and 15.4%. Results of adverse features evaluation showed mostly free surgical margin (76.9%) meanwhile superior positive margin was found in 5 cases (75% in T4 cases); extra capsular extension (19.2%); lymphovascular invasion (34.6% in T2, T3 and T4) and perineural invasion (7.7%, all in T4). All cancer cells in this study were keratinized and 11.6% showed poor differentiation. **Conclusion:** Locally advanced cancer was predominant in this study with frequently involved level II and III of neck node. Evaluation of neck metastasis and adverse features were important to confirm the N staging and determine the prompt post-operative treatment for laryngeal cancer.

The prevalence of complementary and alternative medicines among allergic rhinitis patients in Malaysia

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ABSTRACT

Introduction: Allergic rhinitis (AR) is a common disease in Malaysia with many patients using complementary and alternative medicines (CAM) to alleviate their symptoms. However, there was no prevalence study done for CAM users among the AR patients in Malaysia. Because of the rising interest in CAM in the treatment of AR, we conducted this study to estimate the prevalence of CAM among AR patients in Malaysia and understand the practice of CAM usage among them. **Methods:** A cross-sectional study which included questionnaire-based study and survey that used secondary data, which was information of AR from patient's clinic records. Patients with AR who attended ORL-HNS department in Hospital Universiti Sains Malaysia and Hospital Sultanah Aminah, Malaysia were enrolled after consented, on a first come first serve basis as convenience sampling from July 2020 until February 2021. A pre-tested self-administered, 16-item questionnaire in Bahasa Malaysia was distributed to the participants. The questionnaire consists of a set of 16 questions with subsets to enquire about the sociodemographic data and pattern of usage of CAM and its effectiveness. **Results:** 372 patients were enrolled in this study consisting of 217(58.3%) female and 155(41.7%) male patients. 231(62.1%) participants had used CAM for AR in the past 10 years. A higher proportion of female ($p=0.015$) and those with higher income ($p=0.004$) had used CAM. Among the users, 87.9% found CAM to be effective. No difference were found in terms of age ($p=0.885$) and education level ($p=0.057$) for CAM usage. **Conclusion:** CAM is widely used in Malaysia to alleviate allergic rhinitis symptoms, with a large proportion of users think it is effective. Therefore, more randomized controlled trials and laboratory researches should be done in the future to provide evidence and guidance to integrate CAM into AR management.

Transluminal migration of oesophageal foreign bodies: A series of three patients

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SUMMARY

Inadvertent ingestion of foreign bodies, particularly fish bone are a common complaint in the otolaryngology emergency practices in Southeast Asia. Due to its thin, linear, and sharp pointed end, fish bone have the potential to penetrate through the oesophagus wall, or migrate extraluminally towards the surrounding structures in the neck, resulting in bizarre and lethal complications. We present an unusual case of extraluminal migration of foreign body (FB) and 2 cases of completely embedded FB in the oesophagus wall. We aim to share our experiences in both conservative approach and transcervical approach for these difficult clinical problems. All of them have negative rigid oesophagoscopy findings but possessed the radiological evidence of FB. Computed tomography scan have higher sensitivity and provide good preoperative guidance, it should be done early and performed in the event of negative endoscopic evaluation. Prompt diagnosis and early retrieval of FB can significantly reduce morbidity and mortality.

Prevalence of sensorineural hearing loss, with symptom of tinnitus and vertigo in type 2 diabetes mellitus in Malaysia: A cross sectional study amongst patient attending endocrine clinic at Ampang Puteri Specialist Hospital between June 2020 to December 2020

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ABSTRACT

Introduction: Diabetes mellitus is a significant risk factor for acquired hearing loss and disturbance in the vestibular system. Prevalence of Type 2 DM in Malaysia is high and increasing in trend (WHO 2016). **Methods:** This study included all patients between 20 to 60 years old diagnosed with T2DM attending an endocrine clinic in APSH who consented to be a research subject. Patients were given a set of questionnaires related to diabetic profile followed by full ear examination. Pure tone audiogram tests were performed to determine the hearing status. **Results:** Two hundred ninety three (293) subjects were included in this study. Pure tone audiometry results showed prevalence of SNHL is 66.2% (194 cases). Tinnitus and vertigo were common association symptoms with 35.4% and 14.6% respectively. Male significantly at higher risk to develop HL compared to female in long standing DM. Other significant risk factors include poor compliance to treatment, underlying comorbidities especially renal disease. There is no correlation neither Fasting blood sugar nor HBA1c in predicting the incident of HL. **Conclusion:** The prevalence of high frequency SNHL amongst T2DM in this study is high (66.2%), comparable with other worldwide studies (62%). Increasing age, duration of diabetes, gender, compliance and treatment with insulin were risk factors for SNHL. Hearing loss and vertigo are not commonly enquired symptoms by endocrinologists during diabetic clinic. Hence it remains unnoticed by patients and underdiagnosed. Pure tone audiogram should be mandatory tests for all patients with long-standing Diabetes mellitus.

The eustachian tube balloon dilatation versus conventional medical treatment in treating eustachian tube dysfunction: A pilot study

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ABSTRACT

Introduction: This study aims to determine the effectiveness of Eustachian tube balloon dilatation compared with conventional medical treatment in treating Eustachian tube dysfunction by assessing the pre- and post- treatment outcome. **Methods:** This is a prospective, randomized controlled study done in tertiary academic centre. Sixteen patients who were diagnosed with Eustachian tube dysfunction and had failed medical therapy for at least 4 weeks treatment were recruited and randomized into intervention group (n=6) who underwent Eustachian tube balloon dilatation and medical treatment group (n=10) who had medical treatment. The primary efficacy endpoints were the comparison between groups in the reduction from baseline in overall 7-item Eustachian tube dysfunction questionnaire (ETDQ-7) score, tympanic membrane appearance and tympanogram which were compared at 2 weeks, 6 weeks and 3 months after intervention. **Results:** Median in reduction of overall ETDQ-7 score at 3 months for intervention group was 2.93(2.14, 3.14), whereas for the medical treatment group was 0.43(0,0.86). Reduction in overall ETDQ-7 score showed significant improvement at 6 weeks and persistent at 3 months post balloon dilatation (p<0.05). Similarly, changes in tympanogram were reported in interventional group at 6 weeks and maintained at 3 months post balloon dilatation (p<0.05), whereas none was observed in the opposite group. Tympanic membrane appearances were similar before and after intervention in both groups. No complications were reported in both groups. **Conclusion:** The present study suggests that balloon dilatation is superior to conservative medical treatment in treating Eustachian tube dysfunction. It is a safe procedure that provides a significant symptomatic relief and tympanometry improvement.

Effectiveness of nasal endoscope sterilization using a novel rig-s™ device: A randomized controlled trial

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ABSTRACT

Introduction: The use of nasal endoscopes has allowed the diagnosis of pathologies of the upper aerodigestive tract more precise. However, the nasal endoscope are extremely delicate and must be handled with care. The turnover rate in the clinic may cause damage and breach of the sterilizing process of these endoscopes. Up to date, there is no one single method deemed as the perfect way to sterilize these nasal endoscopes. **Methods:** This randomized clinical trial included 500 endoscopes where 250 nasal endoscopes were sterilized with the conventional autoclave and 250 nasal endoscopes were sterilized with the rig-S™. Post sterilization, the endoscopes undergo swab culture and sensitivity test for bacteria and fungus, and Hepatitis B rapid kit test. **Results:** All 250 nasal endoscopes sterilized with conventional autoclave had no growth toward any bacteria, fungus, or Hepatitis B virus. All 250 nasal endoscopes sterilized with rig-S™ had no growth towards any bacteria, fungus and Hepatitis B virus. **Conclusion:** The rig-S™ device is as effective as conventional autoclave to sterilize nasal endoscope.

A prospective multi-centered randomized controlled trial comparing cold steel dissection and blend mode monopolar tonsillectomy in the pediatric population

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ABSTRACT

Introduction: Tonsillectomy is a common elective procedure performed in otolaryngology practice. This study compares the operative time, intraoperative blood loss and pain scores among pediatric patients undergoing tonsillectomy using either cold-steel dissection (Group A) or blend mode monopolar (Group B). **Methodology:** A prospective single-blinded randomized, controlled trial among patients under 18-year-old who underwent tonsillectomy in three tertiary hospitals between December 2018 to February 2020 (Duration: 18 months). Operative time, blood loss and pain scores at 8-hour, 1 day, 1 week and 2 weeks post-operatively were recorded. Comparisons of continuous variables were performed using Mann-Whitney U test and comparison of categorical variables were performed using Fisher exact test. **Results:** Eighty-five patients were randomized into two groups: Group A (n=39) and Group B (n=44); and 2 patients did not receive treatment allocation. The median age of the study population was 8.0-year-old. No significant difference was observed in distribution of age (p=1.000), sex (p=0.828), dental caries (p=0.558), tonsil grade (p=0.054), infective indication (p=0.480) and surgeon experience (p=0.153) between the two groups. Median tonsillectomy time was 35.00 minutes (IQR=41.2-25.6) in Group B, significantly lower than Group A at 41.14 minutes (IQR=50.6-31.8) (p=0.047). Median intraoperative blood loss was 23.10 mls (IQR=45.9-11.5) in Group B, significantly lower than Group A at 33.80 mls (IQR=79.1-19.6) (p=0.028). A trend towards lower pain score was seen in Group B compared to Group A at all-time points. However, this trend was not significant (p>0.05). **Conclusion:** Blend mode monopolar showed an advantage compared to cold steel dissection tonsillectomy. It resulted in a significantly reduced operative time and blood loss. Results from this RCT appeared promising. However, larger RCTs and meta-analysis will be required to establish the role of BMM in tonsillectomy.

The study of osteitic changes in CT paranasal sinus of atopic and non-atopic chronic rhinosinusitis

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ABSTRACT

Introduction: The aim of the study is to look for osteitic changes in paranasal sinus walls in patient with the atopic and non-atopic chronic rhinosinusitis (CRS) by computed tomography (CT) scan evaluation using Lund Mackay staging system and Global Osteitis Scoring System. **Methods:** This is a retrospective study of patients that were diagnosed with chronic rhinosinusitis and had done CT paranasal sinus within the period of January 2015 until December 2020. Patients with the history of craniofacial trauma, sinonasal malignancy, pregnant and below 18 years old were excluded. CT images that were evaluated were only the CT taken before any sinonasal surgery. Skin prick test was used to determine the atopy among the CRS patients. Another 66 patients that had CT scans within the same period and did not have CRS, facial trauma or sinonasal malignancy were included as a control group. The radiological findings for disease severity and osteitic changes in the both atopic and non-atopic CRS and the control group were evaluated using Lund Mackay staging system and Global Osteitis Scoring system (GOSS). **Results:** There were 54.7%(n=41) of CRS patients showed atopy in skin prick test. More than half of the CRS patients showed osteitic changes in the radiological assessment 64%(n=48), whereby only 3% (n=2) in the control group. However, there was no significant association between CRS severity and osteitic changes in both atopic and non-atopic groups ($p>0.05\%$). The mean score for Lund Mackay found higher in non-atopic group which is 9.03(SD=5.07) but the mean score for GOSS was found higher in atopic group 10.90(SD=10.50). **Conclusion:** CRS is a disease with multifactorial pathogenesis. Allergy status alone cannot conclude the severity of the disease and predicting risk for the osteitis.

Anterior ethmoid “genu”: A new anatomical landmark to guide frontal sinus and anterior ethmoid endoscopic surgical dissection

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ABSTRACT

Introduction: Thorough knowledge of anatomical variations in paranasal sinus structures and recognition of endoscopic landmark vital in performing safe and effective endoscopic sinus surgery. This multicentre retrospective radiological study explores the feasibility of using a newly appreciated anatomical landmark “Anterior Ethmoid Genu” (AEG) to guide frontal sinus and anterior ethmoid endoscopic surgical dissection. **Methods:** Multiplanar reconstruction on high-resolution computed tomography (CT) of paranasal sinuses was done to identify anterior ethmoid genu, its morphology, and characterize its position in the frontal sinus drainage pathway in relation to other frontal recess cells. **Results:** Anterior Ethmoid Genu constantly present in all CT paranasal sinuses independent of age, gender, and race. The frontal sinus drains medial to anterior ethmoid genu in 96% of cases. The position of AEG in the frontal sinus drainage pathway showed moderate correlation with vertical height of agger nasi. **Conclusion:** This study describes anterior ethmoid genu can be used as a landmark for frontal sinus surgery since its prevalence is 100%, frontal sinus drainage is mostly medial to it and it is easily detectable with high resolution CT scan of paranasal sinuses. Its usage as a landmark during frontal sinus surgery will further assess the realistic feature of anterior ethmoid genu in surgical practice.

The nasocardiac reflex during nasoendoscopy: A commonly overlooked risk

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ABSTRACT

Introduction: The nasocardiac reflex is a vagally mediated reflex induced by stimulation of the nasal mucosa which may lead to severe bradycardia. We aimed to ascertain its electrocardiographic features and to map the heart rhythm dynamics during nasoendoscopy. We also intended to identify variables that could affect its occurrence. **Methods:** This was a prospective, quasi-experimental study. Individuals 18-40 years old with normal heart rates were selected. Those with diabetes, hypertension, cardiac disease, nasal obstruction, cigarette smoking, or anxiety were excluded. Clinic setting flexible nasoendoscopy in first pass without local anaesthesia were conducted on the subjects while being observed electrocardiographically in three phases of 20 seconds each – baseline, nasoendoscopic, and recovery phases. Heart rate fluctuations were charted, and the positive and negative nasocardiac reflex groups of subjects were identified. Analyses against age, gender, blood pressure, heart rate, oxygen saturation, pain scale, and past nasoendoscopic experience were done using Fisher's exact test and Kruskal-Wallis test. **Results:** Fifty three subjects (34 males, 19 females, mean age 28.2) were analysed. The heart rates during the baseline, nasoendoscopic, and recovery phases were 81.0, 72.7, and 75.2 respectively. Sixteen subjects (30.2%) had a positive nasocardiac reflex, and they remained in sinus rhythm. One subject (1.9%) developed temporary ectopic premature ventricular contractions. No variables were found affecting the incidence of a nasocardiac reflex. **Conclusion:** The pattern of heart rate dynamics was consistent as heart rates drop rapidly upon endoscope insertion and recover after its withdrawal. Although our subjects remained asymptomatic, clinicians should not overlook the risks of a severe nasocardiac reflex when performing nasoendoscopy. We recommend cardiac monitoring to be part of the management of vasovagal responses during in-office endonasal procedures. Further research should be done on a broader range of subjects as long as ethical and safety concerns are fulfilled.

OP-20

The effects of subthalamic nucleus deep brain stimulation on sleep quality and polysomnographic parameters in patients with Parkinson's disease

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ABSTRACT

Introduction: The prevalence of Obstructive sleep apnea amongst patients with Parkinson's disease is reported to be up to 80%. Parkinson's disease is managed primarily using medications that act on the dopaminergic pathway. Subthalamic nucleus deep brain stimulation (STN-DBS) is now commonly used in patients who do not achieve satisfactory control of symptoms with optimal medical therapy. Although the various motor and non-motor benefits of this procedure has been documented, the changes in objective sleep-oxygenation related parameters in these patients have not been well studied. **Methods:** A prospective longitudinal observational cohort study was done in University Malaya Medical Centre from September 2019 to December 2020. Data was collected from 9 Subjects with Parkinson's Disease who underwent bilateral STN-DBS. Both Subjective and objective parameters of sleep apnea were assessed before and after this procedure. Subjective assessments included Movement disorder Society-Unified Parkinson's Disease Rating Scale (MDS-UPDRS) 1.7 and 1.8, Parkinson's Disease Sleepiness Scale 2 (PDSS-2) and Epworth Sleepiness Scale (ESS) scores. Objective polysomnographic parameters were the Apnea-Hypopnea-Index (AHI), Oxygen desaturation Index (ODI) and respiratory disturbance index (RI) were obtained before and after successful STN-DBS procedure. **Results:** Results obtained showed significant improvements in both Subjective assessments and polysomnographic parameters including the AHI, ODI and RI. **Conclusion:** We conclude, the benefits of STN-DBS go beyond the control of non-sleep related symptoms of Parkinson's Disease.

Oral tongue cancer, a retrospective study of an 8- year single centre experience

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ABSTRACT

Introduction: Oral tongue malignancy is the most commonly diagnosed cancer of the oral cavity. However, it is still associated with poor prognosis despite advances in diagnostic and aggressive treatment modalities. The objective of this study is to explore the clinical profile, stage at presentation and outcomes of 27 consecutive patients from year 2013-2020 who have been treated and followed up at our institution. **Methods:** This retrospective analysis was performed to analyse variables that include age, stage at presentation, treatment, resection margins, local, regional and distant recurrence. Treatments comprised of glossectomy, radiotherapy and chemotherapy. Exclusion criteria include patients referred from other centres for surgical procedures and followed up at their respective centres post procedure and incomplete data. **Results:** There were 15 males (56%) and 12 females (44%) included in this study. The presenting age ranges from 21 to 74 years old (median 54 years) with peak occurrences at ages 50 to 60 (48%). Of 27, 55.6% of our patients presented with a stage IV disease followed by stage III (25.9%), stage II (11.1%) and stage I (7.4%). Eighteen patients (67%) underwent surgical intervention; 38.9% of them had locoregional or metastatic recurrence following the surgical intervention. Resection margins were clear in 61% of our operated patients. Remaining 33% who underwent radiotherapy with or without chemotherapy had a 22% of recurrence. **Conclusion:** Our study reveals that patients in advanced stage of disease that underwent surgical intervention and those who opted for non- surgical treatment presented with similar outcomes however a larger sample size would provide better results in our study.

Incidence of facial nerve paresis before and after parotidectomy at Head & Neck surgery centre

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ABSTRACT

Introduction: Facial nerve weakness is one of the commonest conditions encountered in parotid tumour and surgery. The reported incidence of facial weakness immediately after parotidectomy ranges from 14% to 65%. The purpose of this study is to evaluate incidence of facial nerve paresis before and after parotidectomy. **Methods:** This was a retrospective study of 35 parotidectomy cases, both partial and total, performed at Taiping Hospital from the year 2017 to 2020. We included all the patients who underwent parotidectomy irrespective of the diagnosis and tumour classification. Facial nerve paresis was graded according to the House-Brackmann facial nerve grading system. Facial nerve paresis post parotidectomy was classified as temporary if recovered within the first 6 months. **Results:** Among the 35 patients, 23(66%) of them had benign pathology and 12(34%) were malignant. The commonest diagnosis was pleomorphic adenoma with 29% of the total cases. In the benign category, before surgery none of the patients had facial nerve paresis and 57% had paresis immediately after surgery. However, only 26% had permanent paresis. Meanwhile, 42% of the malignant group of patients had facial nerve paresis before surgery. It increased to 75% after surgery. **Conclusion:** The most prevalent parotid tumour in our study is pleomorphic adenoma. In general, after parotidectomy, majority of the benign category patients had House-Brackmann grade II paresis and majority of the malignant category patients had paresis higher than grade III.

Thyroid surgery outcome done by ORL-HNS in Hospital Taiping from January 2016 - December 2020: A retrospective study

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ABSTRACT

Introduction: Historically thyroidectomies are performed by General surgeons but recently more otorhinolaryngology surgeons have been offering thyroid surgery services. We present our single centre experience of thyroidectomies that was performed for the past few years. The objective of this study was to assess the postoperative complications of thyroidectomies done in Hospital Taiping from year 2016-2020 by ORL-HNS team. **Methods:** A retrospective analysis of data of patients who underwent hemithyroidectomy or total thyroidectomy from January 2016 to December 2020. Patients demographic and post-operative complication data was retrieved from clinic notes, operative notes and ward admission notes. **Results:** There were 52 surgeries performed by the ORL-HNS team which included 48 patients with 4 further completion of thyroidectomies. Equal number of patients underwent hemithyroidectomy (N=24) compared to total thyroidectomy (N=24). Female patients represent a majority of our cohort with 79.2% (N=38) while male patients only represent 20.8% (N=10) of our operated patients. In terms of pathology of the operated disease 2/3rd of the patients were reported as having benign disease 64.6% (N=31) while 1/3rd were having malignant disease 35.4% (N=17). 6 patients developed immediate unilateral vocal cord paresis postoperatively which recovered in 3-6months while 1 patient was complicated with unilateral vocal cord palsy. No other complication was documented in other patients post operatively. **Conclusions:** Thyroidectomies are safe and can be carried out with low complication rates as shown by our retrospective study.

Surgical versus conventional weight loss therapy for obstructive sleep apnea, a randomized controlled trial: Quantitative and qualitative outcome

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ABSTRACT

Introduction: This study aims to compare conventional and surgical therapy in treating obesity and OSA, also to explore patients' willingness to participate in such randomized controlled trials. **Methods:** Single centre randomized controlled trial and qualitative study with individual interviews. **Results:** 36 patients were interviewed, out of which 28 were randomized into surgical and conventional groups. Surgical group achieved statistically significant greater reduction in BMI, from 47.9kg/m² to 36.7kg/m². The median change in BMI was 7.7kg/m² (5.5, 10.9) and 0.9kg/m² (-2.2, 2.2) in surgical and conventional group respectively (p=0.001). Both surgical and conventional groups had equal and significant changes in REI. The median change in REI was 8.1 and 13.5 events per hour respectively in conventional and surgical groups (p=0.286). 42.9% of the surgical group and 30.8% of the conventional group achieved cure in OSA at the end of this study (p=0.695). Difficulties in recruitment were mainly due to patients' anxiety and strong preferences over one therapy than the other. **Conclusions:** Bariatric surgery was associated with greater weight loss, however it did not show greater improvement in REI and subjective evaluation of daytime somnolence in this study. A multicentre study or a patient preference trial may improve the recruitment in future trials.

5-Years survival rate of nasopharyngeal carcinoma patients in Hospital Taiping from January 2008 - December 2016: A retrospective study

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ABSTRACT

Objectives: Nasopharyngeal carcinoma (NPC) is the 5th commonest cancer encountered in Malaysia. This study aimed to determine the five-year survival rate and survival time of NPC patients in Hospital Taiping. **Methods:** NPC cases that were confirmed by histopathology in Hospital Taiping from 1st January 2008 and 31st December 2016 were retrospectively reviewed. Mortality outcome was ascertained through record linkage with the national death registry and direct contact by phone. **Results:** A total of 87 cases were identified with a median age of 63 years old, 67.8% being males. The majority were Malay (55%) followed by Chinese (41%). Primary tumour stages (T stages) 3 and 4 were present in 18.3% and 21.8% respectively and 77% of patients presented with nodal diseases. In overall AJCC staging, 31.4% of patients presented with stage 3 and 37.9% in stage 4. The most common mode of treatment is neoadjuvant chemotherapy followed by radiotherapy (25.2%) and concurrent chemo and radiotherapy (22.9%). The overall 5-years survival rate is 45.9% and median survival time is 9 years. 5-years survival rate for patients underwent CCRT was 50%, neoadjuvant chemotherapy followed by CCRT was 35.7%, neoadjuvant chemotherapy followed by radiotherapy was 59.1%, radiotherapy alone was 63.1% and chemotherapy alone was 0%. **Conclusion:** The overall 5-years survival rate is 45.9% and is comparable with other studies done in other centres.

Outcome of neck dissection in a single centre: A 9 years experience

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ABSTRACT

Introduction: Head and neck cancer were listed as one of the commonest cancers among Malaysian population in which neck dissections (ND) were performed. ND refers to a surgical procedure that removes lymphatic tissues and the surrounding fibrofatty tissues with or without some non-lymphatic tissues or organs. The aim of the study is to present the demographic data and the outcome of ND performed in our centre from 2012 until 2020. **Methods:** A retrospective analysis of hospital manual data of patients who underwent ND from January 2012 to December 2020 were reviewed with exclusion of untraceable medical records. Patient's demographic, nodal stage at presentation, histopathological result and recurrence data are retrieved from clinical notes. **Result:** A total of 77 patients with 2 patients were excluded in view of unable to retrieve their medical records were identified with age ranging from 37 years old to 89 years old (Median=59). Majority of patients who underwent ND were laryngeal (28;36.4%) malignancy followed by oral cavity (21;27.3%), parotid (8;10.4%) and thyroid (8;10.4%) malignancy. Male patients are the majority of 63.7% while female patients are of 36.3%. Chinese and Malay races predominate with 39% and 37.7% respectively. Thirty-seven patients (48.1%) had presented to us with N0 stage while stage N1, N2 and N3 were of 21(27.3%), 18(23.4%) and 1(1.3%) patient respectively. Overall, there were 43(55.8%) of 77 lymph node specimens reported as positive for metastasis histopathologically. The majority of positive nodes were patients who have undergone modified radical ND (55.8%). Twenty patients (26%) had nodal recurrence that is attributed to poor compliance to follow up and advanced stage. **Conclusion:** The present retrospective study showed that the outcomes of ND done in our centre were comparable with other centres in terms of nodal recurrence.

Quality of life of chronic rhinosinusitis with allergic rhinitis patients following immunotherapy

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ABSTRACT

Introduction: Chronic rhinosinusitis without nasal polyposis (CRSsNP) and allergic rhinitis (AR) are a commonly diagnosed upper airway disease in the worldwide population. Allergen immunotherapy has proven to be efficacious in treating AR. The aim of this study was to investigate the effect of allergen immunotherapy in the quality of life (QoL) in CRSsNP patients with underlying AR. **Methods:** This was a prospective study involving CRSsNP patients with positive skin prick test (SPT) towards house dust mite (HDM). A baseline QoL assessment via Sinonasal Outcome Test 22 (SNOT-22) and objective tool using peak nasal inspiratory flow (PNIF) were recorded and patients were followed up at 1, 3 and 6 months for subsequent reassessment. **Results:** A total number of 78 patients were enrolled in the study that demonstrated significant improvement in the QoL through SNOT-22 ($p < 0.05$). Objective PNIF revealed improvement in the sinonasal passage with mean score ($176.1, \pm 46.15, p=0.001$). **Conclusion:** SLIT is an effective therapy in treating CRSsNP and subsequently improved the QoL of the patients.

Outcome of laryngeal squamous cell carcinoma: A retrospective study in a single centre

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ABSTRACT

Introduction: Laryngeal carcinoma is 10th common carcinoma in Malaysia. In otolaryngology it is the second most common after nasopharyngeal carcinoma. Diagnosis at early stage held better prognosis compared to late detection. The present study is aimed to assess the outcome of laryngeal carcinoma patients in Hospital Taiping from 2010 until 2017. **Method:** Retrospective study extracting data of patients with laryngeal squamous cell carcinoma (SCC) focusing on demographics, stage of presentation and treatment received in Hospital Taiping between 2010-2017. Data was collected from clinic, admission and operative notes which subsequently was analyzed with statistical package for the social sciences (SPSS) version 21. **Results:** Total 41 patient's data was extracted with male to female ratio of 40:2. Median age is 67 years old. The patients were predominantly of Chinese ethnicity with $n=18$ (43.9%), followed with Malay $n=12$ (29%) then Indian $n=11$ (26.8%). Most of them present at T3 $n=19$ (46.3%), then T4 $n=15$ (37.5%). In term nodal involvement patients present with N0, N1 and N2 were 27 (67.5%), 8 (19.5%) and 6 (15%) respectively. Only 2 patients presented with systemic metastatic disease. Twenty four patients underwent total laryngectomy with 45% of them being T3, 50% of them was T4 and 4% of T2. Three patients underwent laser cordectomy for stage T1 ($n=2$) and T3 ($n=1$). All patient post operatively given concurrent chemoradiotherapy except 4 who refused. Fifty eight percent of patient undergoing total laryngectomy was complicated with surgical site infection while 29% had pharyngocutaneous fistula. **Conclusion:** Most patient presented with advanced stage of laryngeal SCC leading to laryngectomy being the most common method of treatment. Therefore early detection and community education should be emphasized.

Association between patient-reported outcome of dysphagia and penetration-aspiration scale among post radiotherapy nasopharyngeal carcinoma patients

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ABSTRACT

Objective: Dysphagia is well recognized as late sequelae for radiotherapy which is the mainstay treatment in nasopharyngeal carcinoma (NPC). The purpose of this study was to evaluate the association between patient-reported outcome (PRO) of dysphagia and the penetration-aspiration scale among post radiotherapy nasopharyngeal carcinoma patients. This study also investigates the PRO of dysphagia and the effects of dysphagia and aspiration in the quality of life (QOL) in post-irradiated NPC patients. **Methods:** A cross-sectional study was conducted and a total of sixty post-irradiated NPC patients were recruited from a single tertiary centre. PRO of dysphagia were assessed using MDADI questionnaire and simpler version of DESdC (acronym for Drinking, Eating, Swallowing difficulties, and Coughing when eating/drinking) score. The patient underwent FEES examination and aspiration or penetration were measured using Penetration-aspiration scale (PAS). Descriptive statistics, association and correlation between subjective and objective assessment of dysphagia were evaluated. **Results:** There was statistically significant association between both MDADI composite score and PAS ($p < 0.001$). It demonstrated that significant association between DESdC score and PAS ($p < 0.001$). Among the DESdC score, the specific question of 'cough during eating or drinking' is significantly associated with PAS ($p < 0.046$). Among the MDADI subscales, subjects expressed that the swallowing difficulties affect their QOL physically (MDADI-P) the most with mean score of 60 but do not hinder their social function nor emotion with mean score of 78.0 for MDADI-F and 74.4 for MDADI-E. **Conclusion:** PRO can be used as a potential generalized screening for dysphagia however must be further evaluated with clinical assessment. Patients' awareness of their own swallowing impairment represents an important aspect of functional recovery, but may not reflect the actual laryngeal function. Dysphagia or swallowing difficulty is a concern to post-irradiated patients but do not cause significant impact on the quality of life.

A-10

Prevalence of laryngopharyngeal reflux and its associated factors among staff of Faculty of Medicine and Health Sciences of Universiti Putra Malaysia

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ABSTRACT

Introduction: Laryngopharyngeal reflux (LPR) refers to the contents of the stomach moving back into the laryngopharynx. Belafsky et al. developed the Reflux Symptom Index (RSI) questionnaire for the assessment of symptoms found in individuals with reflux diseases. The purpose of this research is to study the prevalence of laryngopharyngeal reflux and its associated factors among staff of Faculty of Medicine and Health Sciences (FMHS) of Universiti Putra Malaysia (UPM). **Methods:** A cross-sectional study design was conducted among the staff of FMHS, UPM, who fulfilled the inclusion and exclusion criterias. Simple random sampling was used. The data was collected using self-administered questionnaires including the RSI questionnaire. **Results:** The prevalence of LPR among the staff of the FMHS, UPM was 20.3%. There is a statistically significant association between gender and LPR, and smoking and LPR. Meanwhile, there is no statistically significant association of age and caffeine consumption with LPR. No respondent consumed alcohol thus, association of LPR with this factor cannot be done. **Conclusion:** The prevalence of LPR among the respondents was 20.3%. Smoking and gender contribute to LPR, while age and caffeine consumption do not. RSI serves as an important tool to create awareness and identify potential undiagnosed cases of LPR.

Parotid carcinoma: A comprehensive clinical review from a single tertiary hospital in southern Malaysia

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ABSTRACT

Introduction: Parotid malignancies are relatively rare and comprise of 1-3 % of all head and neck cancers. The most common malignancy in parotid gland is the mucoepidermoid carcinoma. **Methods:** This study is a review of 22 patients with histologically confirmed parotid carcinoma treated in Otorhinolaryngology department, HSAJB from January 2012 till December 2018. The patient demographic data, presenting features, CT scan images for clinical staging, fine needle aspiration cytology (FNAC) reports, type of surgery performed, histopathological examination (HPE), post-operative radiation and recurrence were evaluated. **Results:** There were 12 males, 10 females, with mean age of 47.8. All patients presented with swelling at the parotid region with 5 of them having facial nerve involvement on the first visit. Fifteen patients were reported to have atypical cell on FNAC, and 3 was reported as malignant. Total parotidectomy performed in 16 patients with or without neck dissection, superficial parotidectomy in 6 patients. Sixteen patients had post-operative radiotherapy. Three patients refused radiation after an oncology team assessment. The length of follow up of the patients with parotid carcinoma ranged from 2 months up to 70 months with a mean of 18.3 months. Recurrence was seen in 8 patients, as early as 5 months post-surgery. Among the recurrence cases, one case occurs to a patient who underwent superficial parotidectomy which developed local recurrence while she was pregnant which she underwent excision of local recurrence followed by post-operative radiation after delivery. **Conclusions:** Parotid malignancies should be treated intensively with surgical and combined post-operative radiation in high grade tumor to ensure local control and prevent local recurrence.

A-12

Prospective evaluation of radiation-induced late toxicities in head and neck cancers in University Malaya Medical Centre

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ABSTRACT

Introduction: Head and neck cancers require multimodality treatment, including radiotherapy (RT). We aimed to determine the incidence and severity of radiation-induced late toxicities, associated factors, and treatment outcomes for head and neck cancer patients treated at the Clinical Oncology Unit in University Malaya Medical Centre (UMMC). **Methods:** Patients who received radical primary or postoperative RT to the head and neck for carcinoma of the oropharynx, nasopharynx, larynx, hypopharynx, and oral cavity from December 2018 to October 2020 were included. Prospective assessment of late toxicities in the skin, subcutaneous tissue, mucous membrane, salivary glands, larynx, and esophagus was done 3-monthly from RT completion via Radiation Therapy Oncology Group (RTOG) Late Radiation Morbidity Scoring. Treatment outcomes were progression-free survival (PFS) and overall survival (OS). **Results:** Sixty-four patients were evaluable with a median follow-up of 12 months. The majority presented in advanced stages and the nasopharynx was the commonest site (40.6%). Ninety-eight percent of patients received intensity-modulated radiotherapy (IMRT) and 20.3% had surgery. Most toxicities were Grade 1-2. Xerostomia was the most reported late toxicity (89.1%) and cumulative improvement was observed at 1 year. Grade 3-4 toxicities were reported in the skin (1.6%), larynx (1.6%), and esophagus (12.5%). Associations were found between tumor site with toxicities of the larynx ($p=0.005$) and esophagus ($p=0.007$), surgery with subcutaneous tissue toxicities ($p=0.02$), and chemotherapy with oesophageal toxicities ($p=0.036$). Median PFS and OS were not reached. Seventy-four percent of patients remained progression-free and 79.7% were still alive. Distant metastasis was the major pattern of failure and the nasopharynx site had an impact on OS (HR 0.18, 95% CI 0.04–0.94; $p=0.042$). **Conclusion:** The highest incidence of late toxicity occurred in the salivary gland. Most toxicities were mild, as expected with IMRT treatment. A bigger sample size will allow for more conclusive correlations and a longer follow-up will better report on late toxicity events and treatment outcomes.

Treatment outcome for local recurrent nasopharyngeal carcinoma in University Malaya Medical Centre from 2010-2017

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ABSTRACT

Introduction: We aim to analyse the different treatment outcomes received by patients with recurrent local Nasopharyngeal cancer. **Methods:** A total of 22 patients previously diagnosed with Stage I- IVB (AJCC 7th Ed.) Nasopharyngeal carcinoma (NPC) that developed local recurrence within 6 months post concurrent chemo-radiation with histological and radiological confirmation that received treatments in UMMC from 2010- 2017. Patients are analyzed based on the treatment that they have received in recurrent disease; surgery, radiotherapy, and chemotherapy groups. **Results:** Surgery provides the best outcome, followed by reirradiation and lastly chemotherapy; 5- year OS and median survival for each group is; 33.3%, 66 months; 30%, 44 months; 0%, 8 months respectively. Surgery is well tolerated with minimal side effects and no life-threatening complications compared to reirradiation. From the reirradiation group, 100% developed xerostomia, 60% developed hearing loss, 10% developed temporal bone necrosis, and 10% developed RT-induced dysphagia. **Conclusion:** Surgery and reirradiation offer better PFS and OS compared to chemotherapy. Early resectable relapse will have a better outcome and less toxicity with surgery. Reirradiation could be considered in patients with more local advanced stages and favorable prognostic features. For unfit patients that are not amenable to re-RT or surgery, palliative chemotherapy is a reasonable option.

Prevalence and factors associated with dizziness and imbalance among elderly with healthy ageing in Malaysia

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ABSTRACT

Introduction: Dizziness and imbalance is a common problem among elderly. The aims of the study is to determine the prevalence of dizziness and imbalance among healthy ageing elderly, related associated factors and effect of dizziness on level of functioning in daily activity. **Methods:** A cross-sectional study carried out among members of University of Third Age (U3A), Malaysia using Amer Dizziness Diagnostic Scale (ADDS) and Activities-specific Balance Confidence (ABC) Scale questionnaire. A total of 200 respondents age from 60 years old till 86 years old were recruited in the study. **Results:** Out of 200 respondents, the prevalence of dizziness and imbalance among elderly was 63.5% with 30.5% due to Central Mediated Problem (CMP), 17.5% Benign Paroxysmal Positional Vertigo (BPPV), 12.5% Unilateral Vestibular Hypofunction (UVH) and 3% Cervicogenic Dizziness Problem (CGD). There is a significant association between hypertension and neurological problems with the ADDS Questionnaire. Dizziness and imbalance have an impact on level of functioning ($p < 0.05$) with participants who have dizziness or light-headedness upon head or body movement and longer duration of dizziness have lower confidence level in maintenance balance on ABC scale ($P < 0.001$). **Conclusion:** In view of high prevalence of dizziness, a screening among elderly in the community is recommended.

Extent of radical neck dissection in patients with oral cancer and neck lymph node metastasis: A clinical analysis

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ABSTRACT

Introduction: Control of neck lymph node metastasis is one of the most important prognostic factors in oral cancer. In cases where there have been no metastases to the lymph nodes, cN0, this has been achieved by performing modified dissection of the lymph nodes of the neck at Levels I to III. However, in cases involving metastases to one or more of the lymph nodes, the range of lymph node dissection varies depending on the facility and individual case. In the past, in cN (+) cases, neck dissection has been performed from Levels I to V on the affected side. Recently, we consider utilizing a reduced dissection range at Levels I to III, particularly in cN (+) cases, involving Level Ib alone. **Methods:** We retrospectively examined data from 306 patients with oral cancer who underwent surgery as a first-line treatment at our hospital between 2013 and 2018. The presence or absence of neck dissection and extent of cervical dissection were analysed. **Results:** Local resection alone was performed in 135 cases, while local resection and neck dissection were performed concurrently in 171 cases. Among the cN0 cases, the dissection range was lymph node Levels I to III in 61 cases, Levels I to IV in 7 cases, and Level I to V in 17 cases. Furthermore, among the cN (+) cases, the dissection range was Levels I to III in 11 cases, Level I to IV in 23 cases, and Level I to V in 52 cases. Among the 86 cases with cN (+), there were 3 cases (4.3%) involving metastasis to Level V and all cases had multiple lymph node metastases to the affected side, Level II to IV. **Conclusion:** Level V metastasis was associated with Level IV metastasis in all 3 cases, it suggested a poor prognostic factor.

Early trans-thyrohyoid injection laryngoplasty under local anaesthesia in a single tertiary center

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ABSTRACT

Introduction: The objective of the study is to assess the voice outcomes in patients with unilateral vocal fold paralysis (UVFP) following early percutaneous trans-thyrohyoid injection laryngoplasty under local anaesthesia. **Methods:** Retrospective study with twenty-nine cases of UVFP of less than 6 months duration, underwent injection laryngoplasty under local anaesthesia were reviewed. All patients were injected with 0.5-1 ml Juvederm ULTRA XC (Allergan Industrie, France), a hyaluronic acid based material, via trans-thyrohyoid approach using a double bend 21G needle under local anaesthesia. Subjective assessment by Voice-Handicap Index (VHI-10); objective assessment by maximum phonation time (MPT); and acoustic analysis of jitter, shimmer and noise-harmonic ratio (NHR) were used as the measurement of multidimensional voice outcomes. They were assessed at baseline 2 weeks pre injection, 1 month, and 3 months post injection. **Results:** The mean age of the entire case series (n=29) was 44.69(13.41) with the female to male ratio of 3.14:1. Statistical analysis of the voice outcomes of VHI-10, MPT, and acoustic analysis of jitter, shimmer and NHR with repeated measures ANOVA depicted significant improvement from baseline to 3 months post injection laryngoplasty with VHI, Jitter and NHR (P<0.001) while shimmer (P=0.005) and MPT (P=0.018). None of the patients had serious complications like upper airway obstruction, allergic reaction or hematoma formation following the procedure. **Conclusion:** Percutaneous trans-thyrohyoid injection laryngoplasty under local anaesthesia in carefully selected patients is a safe modality with high success rate for the treatment of glottic insufficiency evidenced by our series of subjective, objective and acoustic analysis.

Sensitivity and specificity of modified Beaty risk factors for patients underwent tonsillectomy in Hospital Ampang

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ABSTRACT

Introduction: Routine histopathological examination (HPE) for all tonsillectomy specimens had been a long debate for the cost-effectiveness, manpower-consumption and its low incidence of unexpected malignancy. Based on Beaty criteria in 1996, we developed a modified criteria as a guidance to assess the risk factors for tonsil malignancy which is more suitable for Malaysian population. The objective of this study is to determine the sensitivity and specificity of the modified criteria. **Methods:** A cross-sectional study was performed with a total of 360 tonsillectomy cases were recruited from March 2017 to February 2020 in Hospital Ampang. Tonsil specimens were selected for histopathological examination (HPE) based on the modified Beaty criteria. Patients with tonsil specimens sent for HPE were reviewed in 2 weeks, while patients without sent tonsil specimens were reviewed in 1, 3, 6, 12 months postoperatively to assess any signs of malignancy. **Results:** The mean age of the study population was 16 years old with an equal distribution of the gender. Common indication for tonsillectomy was chronic tonsillitis. Only n=23 (6.4%) of cases were due to suspicious malignancy. Ninety-six (26.6%) out of 360 tonsillectomies were selected for HPE with 1 case (0.3%) reported as malignancy (1% sensitivity). Among the risk factors, family history of malignancy had the highest number (8%) followed by family history of blood dyscrasia (3.3%), smoking (2.5%), cervical lymphadenopathy (0.8%), consumed alcohol (0.3%) and betel nut chewers (0.3%). HPE were not sent for n=264 (73.4%) and all of them were healthy with no malignancy-related symptoms during the first-year follow-up (100% specificity). **Conclusion:** The proposed modified Beaty criteria was very specific but lack of sensitivity in assessing the risk of tonsil malignancy. However, the results should be treated with caution as longer study duration and higher number of study participants are needed for better assessment of its sensitivity and specificity.

Epidemiology and clinicopathological features of patients with oral squamous cell carcinoma seen at a tertiary referral centre in Sarawak

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ABSTRACT

Introduction: Oral squamous cell carcinoma (OSCC) is a debilitating disease with high mortality and morbidity despite advances in treatment strategies. Globally, approximately two-thirds of new cases occurred in men and around 77% of deaths were in less-developed nations. There is currently very limited data on the epidemiology and clinicopathological features of OSCC patients from the state of Sarawak. **Methods:** A cross-sectional retrospective study of patients diagnosed with primary OSCC over a 5-year period from 2015 to 2019 was undertaken as part of a larger study. Data such as age, sex, ethnicity, habits, site, staging and survival were retrieved and analysed. **Results:** Fifty-four patients fulfilled the selection criteria. Mean age at diagnosis was 60.83 years (SD = 12.21) and 63.0% of patients were females. In this cohort of patients, 27.8% were Chinese, 24.1% were Bidayuh, 22.2% were Malay, 20.4% were Iban while the remaining patients were from other ethnicities. Twenty-two patients (40.7%) had a history of smoking tobacco products, 15 patients (27.8%) had a history of alcohol consumption and 22 patients (40.7%) had a history of betel-quid chewing. Eleven patients (20.4%) had a history of smoking and chewing betel-quid. Six patients (11.1%) had a history of smoking, chewing betel-quid and alcohol consumption. The tongue was the most frequently encountered tumour site (42.6%) followed by buccal mucosa (25.9%) and alveolar ridge / gingiva (25.9%). The majority of patients (70.4%) presented with late-stage disease (Stage III or IV). Fifty-percent of the tumours were histologically graded as being well-differentiated OSCC. Forty-one patients (75.9%) had some form of surgery as part of their treatment and nine (16.7%) had adjuvant therapy as well. **Conclusion:** Our study has elucidated the epidemiology and clinicopathological features of OSCC patients seen at a tertiary centre in Sarawak. Some differences were seen between OSCC patients from Sarawak and West Malaysia.

A 5-years retrospective study of surgical outcomes of an early and delayed facial nerve decompression

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ABSTRACT

Introduction: Temporal bone fracture resulting in facial nerve palsy is a debilitating condition. Surgical exploration and decompression is beneficial in severe traumatic facial nerve palsy (FNP). The timing of surgery remains controversial. This study is to evaluate the outcome of facial nerve function in an early and delayed facial nerve decompression. **Methods:** A retrospective study of fifteen patients who underwent transmastoid facial nerve decompression for FNP secondary to temporal bone fracture between 2015 to 2020 in ORL-HNS Department of Hospital Kuala Lumpur. All patients were evaluated clinically and facial nerve function was assessed pre and postoperatively using House-Brackmann (HB) grading scale. **Results:** Out of fifteen cases, there were 6 cases of immediate onset and 9 cases of delayed onset FNP. The timing of surgical intervention ranged from 26 days to 325 days (mean 91 days). In the early decompression group, EDG (less than 6 weeks), there were a total of 8 cases while the delayed decompression group, DDG, comprised 7 cases. The outcome of EDG showed complete recovery in 2 cases (25%), improvement to HB grade II in 4 cases (50%), grade III in 1 case (12.5%) and grade IV in 1 case (12.5%) whereas in the DDG, it showed improvement to HB grade II in 4 cases (57%), grade III in 2 cases (29%) and grade IV in 1 case (14%). **Conclusion:** Based on our study, both early and delayed decompression groups showed improved facial nerve function post operatively. Early surgical intervention demonstrated better outcomes than late intervention. However, delayed facial nerve decompression also showed beneficial effects that support the role of surgery.

Correlation between quantitative laryngeal electromyography and voice assessment in unilateral vocal fold paralysis

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ABSTRACT

Introduction: This study aims to correlate quantitative LEMG measurements of thyroarytenoid-lateral cricoarytenoid (TA-LCA) muscle complex with subjective and objective voice assessments in patients with unilateral vocal fold paralysis (UVFP). **Methods:** This is a cross-sectional study involving 77 patients (18 males, 59 females, mean age of 48) with UVFP. Laryngeal electromyography (LEMG) was used to determine mean turn (MT) and mean amplitude (MA) of paralyzed VF. Subjective (Voice Handicap Index-10 (VHI-10) and overall dysphonia) and objective (maximum phonatory time (MPT), jitter, shimmer, fundamental frequency (FF) and noise harmonic ratio (NHR)) voice assessments were used to assess voice parameters. Correlation between quantitative LEMG and voice assessment was evaluated using Spearman's correlation analysis. Comparison of objective voice assessment between gender and its correlation with quantitative LEMG were also analyzed. **Results:** There were weak positive correlation between MT and MA vs. MPT ($p < 0.05$) and weak negative correlation between MT and MA vs. VHI-10, jitter and shimmer ($p < 0.05$). There was no statistical correlation between MT and MA vs. overall dysphonia, FF and NHR ($p > 0.05$). In males, there were weak to moderate correlation between MT vs. MPT and FF ($p < 0.05$) and weak to moderate negative correlation between MT vs. jitter, shimmer and NHR ($p < 0.05$). In females, there were weak positive correlation between MT vs. MPT ($p < 0.05$) and weak negative correlation between MT vs. jitter, shimmer and FF ($p < 0.05$). There was no correlation between MT and NHR in females ($p > 0.05$). No significant correlation was found between MA and all voice assessment parameters across gender ($p > 0.05$). **Conclusions:** There were no correlation between quantitative LEMG and subjective voice assessment and statistically weak correlation between quantitative LEMG and objective voice assessment. Therefore, the quantitative activation of motor units may not reflect the voice parameters.

Nasal bitter taste testing as a screening tool in chronic rhinosinusitis

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ABSTRACT

Introduction: The disease burden of chronic rhinosinusitis (CRS) has encouraged numerous research for efficient management of this condition. The bitter taste receptors (T2Rs) emerging role in CRS came by that way. Studies have suggested targeting these receptors could help in stratifying CRS patients into groups requiring medical treatment or surgical intervention. This study is aimed at developing a screening method to detect the bitter taste receptor in the nose using available bitter ligand and to come up with suitable titration of this ligand for future use. Additionally, we detected the presence of this receptor and the difference in its sensitivity between healthy and individuals with CRS. **Methods:** A comparative cross-sectional study was carried out to determine nasal glucose concentration and phenylthiocarbamide (PTC) taste threshold sensitivity in different subsites of the nose among healthy and individuals with CRS. Serial dilution method employed on PTC dilution prior to application into the nose and intranasal glucose concentration measured obtained with the use of colorimetric assay. **Results:** Based on the 0.13% as the most suitable dilution for intranasal testing of PTC, there is an association between nasal bitter taste testing among CRS and control groups with a P value of <0.001. Majority of the CRS individuals were not able to detect PTC and also had a raised nasal glucose concentration at the same time. The detection of a bitter taste in different sites of the nose was similar in the same individual for the given concentration of PTC. **Conclusion:** The bitter taste testing to the nose seems to be a simple and inexpensive way for screening of patients with CRS. The titration and intranasal sites suggested in this study can be used as a basis for further prospective studies to view the outcome of patients with CRS. Targeting these receptors in diagnosis could open a new window of opportunity in the management of patients with CRS.

The effect of mometasone furoate nasal spray on blood oxygenation in allergic rhinitis patients

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ABSTRACT

Introduction: Allergic Rhinitis (AR) is a disease presented with symptoms like nasal discharge, blockage and itchiness which impaired the quality of life of most patients depending on its severity. The most common symptom in AR patients is a persistent bilateral nasal blockage which may inevitably affect the blood oxygenation in the lung. However, the symptoms can be controlled using intranasal steroid spray (INS). This study is going to elicit the influence of nasal obstruction in decreasing blood oxygenation and how INS improves the blood oxygenation. **Methods:** This study involved 33 AR patients. Subjects of moderate to severe nasal obstruction are recruited based on Visual Analogue Scale (VAS) and Mometasone furoate nasal spray (MFNS) two puffs twice a day for two weeks, was given. Parameters compared pre and post medication include VAS of nasal obstruction, partial oxygen arterial pressure (PaO₂), partial arterial carbon dioxide pressure (PaCO₂) and oxygen saturation (O₂ Saturation). **Results:** All parameters showed a significant difference between pre and post medication. VAS, PaO₂, PaCO₂ and O₂ saturation showed a significant pre and post medication differences (p<0.01). **Conclusion:** A comprehensive treatment of nasal obstruction using MFNS help to improve blood oxygenation and nasal obstruction in AR patients.

The study on post-tonsillectomy pain relief and wound healing by using Bismuth Iodoform Paraffin Paste (BIPP) on dissected tonsillar bed

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ABSTRACT

Introduction: Tonsillectomy is one of the most common operations performed by ORL-HNS surgeons worldwide. Despite being frequently done, recent surveys have emphasized the insufficient quality of postoperative pain management and the need for further improvements. In saying so, safe and effective post-tonsillectomy pain relief remains a clinical dilemma. The aim of this study is to evaluate the efficacy of applying BIPP, to be in contact with the dissected fossa for a given time (3-5mins) as an adjuvant therapy for a better outcome in post-tonsillectomy pain management and in wound healing property. **Methods:** This is a prospective randomized control pilot study in 44 patients of age group above 7 years old who underwent tonsillectomy by the same surgeon from January to December 2009. The patients was randomized into group A (n=22, control group) and group B (n=22, with BIPP application on the dissected tonsillar fossa) from the operation list by a doctor who is not involved in the study. Pearson Chi-Square test was used to analyzed visual analogue score (VAS) which is the assessment of the severity of the pain post operatively and the wound epithelization percentage between Group A and B at day 1, 2, 3, 5, 7, and 14. **Results:** There was a statistically significant pain-relieving effect subjectively and objectively in group B for the first 5 days of postoperative period ($p < 0.05$) with the mean and SD of VAS was 1.4 and 1.732 respectively. The mean and SD for the percentage of epithelization was 1.6 and 2.0 respectively. We did not encounter any postoperative complications in this study. An earlier healing of the dissected tonsillar fossa was significantly observed in group B compared to group A from post-operative Day 3 onwards which then become constant on day 14. **Conclusion:** The topical applications of BIPP showed a better pain-relieving effect which was safe and readily performed and with no special training required applying it.

Olfactory & taste dysfunction in COVID-19 patients: Pathogenesis and associated factors

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ABSTRACT

Introduction: Olfactory and taste dysfunction (OTD) have been widely reported as a key symptoms in Covid-19 patients. It also can be manifested as an isolated symptom that caused delay in diagnosis of SARS-CoV2 infection. Identifying the mechanism of OTD and its associated factors may help to understand its association with Covid-19 manifestation. **Methods:** Literature search was conducted via database PubMed, Scopus, Embase and Science Direct using keyword (anosmia OR olfactory dysfunction) AND (ageusia OR taste dysfunction) AND (pathogenesis) AND (associated factor) AND (Covid-19 or SARS CoV-2). About 93 abstracts related to the keywords were retrieved. Only 54 articles which fulfilled the criteria such as published in English, available full text and peer-review or data based research have been selected. **Results:** Prevalence of OTD in Covid-19 patients varies markedly between studies from 5.1% to 98.0%. Duration of anosmia ranging from 4 to 28 days and appeared as early as day 1 post infection. Some authors postulated that OTD occurs due to angiotensin converting enzyme 2 (ACE2) assisted the coronavirus to stimulate neuronal damage. Besides, viruses also can directly damage the olfactory epithelium, nerve and central pathway. Most studies which looked at the association between OTD with olfactory damage using computed tomography scan and magnetic resonance imaging showed insignificant findings. There were studies that showed that OTD related with gender and age. High proportion of OTD in COVID-19 cases were female, young patients, non-smoker, patients without comorbid and in mild to moderate symptoms of COVID-19. There were limited and inconsistent results for the relationship between viral load and OTD. However, there was no relation between previous neurological disorder with OTD. **Conclusion:** The pathogenesis of OTD in Covid-19 and its association between viral load with its severity of OTD is still debatable and further study is warranted. The researchers need to look at all perspectives, allowing sufficient data to be explored to get more understanding about OTD in COVID-19.

Objective assessment of frey's syndrome via minor's starch iodine test

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ABSTRACT

Frey's syndrome is characterized by transient facial flushing, sweating and feeling of burning sensation at the parotid or lower cheek region, which most commonly occurs in post parotidectomy cases. It can also occur, though less commonly, following neck dissection, facelift procedures and trauma. Majority of patients denies of the symptoms, but when the objective assessment with a Minor's starch iodine test is performed, most patients had positive results. We performed a serial objective Minor's starch iodine test in post parotidectomy patients. The majority of patient denies the symptoms of Frey's syndrome, when assessed subjectively during the follow up clinic. The objective Minor's starch iodine test, however showed positive results. The incidence of Frey's syndrome is higher that estimated in the patients underwent parotid glands surgery. Frey's syndrome is a complication of parotidectomy that is thought to occur as a result of aberrant regeneration of the postganglionic parasympathetic nerve fibres supplying the parotid gland to severed postganglionic sympathetic fibres which innervate the sweat glands of the skin. It is not frequently manifested clinically, but it causes significant morbidity to the patients. In most of patients, they are asymptomatic, but once the Minor's starch iodine test is carried out, the test is positive. The Minor's starch test is easy to do at the outpatient clinic setting, with minimal cost and time, and it is highly reliable. The incidence of Frey's syndrome should be assessed objectively in all patients underwent parotid glands surgery with Minor's starch iodine test.

Single centre experience of endoscopic cartilage graft butterfly myringoplasty

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ABSTRACT

Introduction: Myringoplasty is frequently performed among adult patients with non-healing perforation as a result of chronic otitis media and trauma. Various graft materials and graft placement methods have been developed. This case series describes the method of cartilage graft butterfly myringoplasty (CGBM) for selected small to medium-sized tympanic membrane perforations and its clinical outcomes. **Methods:** Endoscopic CGBM has been performed on 13 patients (13 ears) under general anaesthesia but only 11 patients were included in this study with complete records including pre- and postoperative pure tone audiograms (PTA) and follow up endoscopic findings. These audiograms were analyzed retrospectively with respect to the pre- and postoperative pure tone audiometry thresholds, air-bone gaps (ABGs) and graft uptake success rate. **Results:** Among these 11 patients, 64% of them has small perforations and the remaining with medium-sized perforations. Successful closure of tympanic membrane in all patients no residual perforation have been observed at the end of three months follow up and success rate is 100%. The preoperative mean PTA values was 46.1 ± 15.5 dB and postoperative PTA values was 30.7 ± 17.0 dB. The mean ABG was 28.6 ± 9.2 dB preoperatively whereas 22.0 ± 8.4 dB at 3 months after surgery. No postoperative complications were reported. **Conclusion:** Endoscopic cartilage graft butterfly myringoplasty (CGBM) is effective and safe in repairing small to medium tympanic membrane perforations with excellent graft uptake rate and hearing outcomes.

Diabetes mellitus in head & neck infections: 18 years' experience in a single tertiary centre

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ABSTRACT

Introduction: Diabetes mellitus continues to rise worldwide together with all its complications including a risk developing potentially fatal head neck infections responding poorly to treatment. **Methods:** A cross sectional study was done. Records of 554 adult patients diagnosed with head and neck infections for the past 18 years were reviewed. Fifty-six were diabetic. The control cases were selected by matching the age, gender and ethnicity. A total of 112 patients (56 diabetes and 56 non-diabetes) were recruited. Variables were compared between the 2 groups and analyzed using the SPSS software. **Results:** Diabetic patients developed head neck infections at an earlier age, required more surgical intervention and longer hospital admission compared to the non-diabetic patients. The most common organism cultured was *Klebsiella pneumoniae* for the diabetic group. *Mycobacterium tuberculosis* alarmingly was the most common organism found in the non-diabetic group. **Conclusion:** The approach in managing head neck infections in diabetic patients has to be more aggressive and holistic for a better outcome. The choice of antibiotics for DM patients should be towards antimicrobials covering *Klebsiella pneumoniae* while further investigation for *Mycobacterium tuberculosis* should be performed in non-diabetic patients with head neck infections not responding to antimicrobials, especially in endemic areas.

Correlation of growth hormone and insulin like growth factor in children with obstructive sleep apnoea syndrome: A comparison of obese and non-obese children

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ABSTRACT

Introduction: This study was performed in order to investigate the independent effect of OSAS on the growth hormone/insulin-like growth factor (GH/IGF) axis, which is poorly understood. The objective of the study specifically aims to investigate the independent mechanistic role of OSAS in causing metabolic dysregulation. **Methods:** Subjects enrolled in this study were a cohort of children ranging from age 2 to 15 years old, from July 2019 to December 2019. Blood samples were collected to analyze baseline GH and IGF-1 level and results were compared with age and gender specific reference range. All children underwent Level 1 Polysomnography. Chi squared test and independent t-test were used to compare statistical differences between categorical variables. **Results:** Over a period of six months, 33 children aged between 2 to 15 years were enrolled in this study, 12 females (age 5.91 +/- 1.28 years, BMI 18.96 +/- 2.2 kg/m²) and 21 males (age 8.38 +/- 2.2 years, BMI 19.23 +/- 3.2 kg/m²). Among the study population, 8 children were found to be obese (age 10.88 +/- 1.3 years, BMI 28.54 +/- 3.6 kg/m²). Baseline measurement of IGF-1 showed a reduction of secretion for obese children with OSAS and non-obese children with OSAS with a p value of 0.036. However, no significant reduction was observed with GH level across both study populations, p=0.071. As severity of OSAS increased, reduction in IGF-1 secretion was more evident especially among non-obese children with OSAS. Mixed sleep apnoea had a more pronounced reduction in IGF-1 secretion comparison to obstructive type p=0.032. **Conclusion:** These study findings suggest that OSAS by itself is independent of obesity status of a child, and does cause reduction in GH/IGF-1 secretion.

Factors associated with neurocognitive impairment amongst obstructive sleep apnoea patients

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ABSTRACT

Introduction: Sleep fragmentation and intermittent hypoxia are postulated as a mechanism leading towards early onset neurocognitive impairment in patients with Obstructive Sleep Apnoea (OSA). We explored the potential of the Self-Administered Gerocognitive Examination (SAGE) questionnaire as a screening tool to determine the prevalence of neurocognitive impairment amongst OSA patients and we studied possible associated factors related to it. **Methods:** This is a cross sectional study using convenience sampling. The inclusion criteria include patients aged 18 years old and above. Exclusion criteria include patients who are already on Continuous Positive Airway Pressure (CPAP) machine. Hundred and thirty-seven participants with sleep disorder symptoms at least with score of one based on stop-bang questionnaire (SBQ) were recruited from Sleep Clinic Hospital Serdang over a 4 weeks data collection period. The age of the participants was divided into young adults (19-39 years old); middle age (40 to 64 years old) and elderly (65 years and above) according to WHO classification. The severity of OSA is divided into normal-mild/low risk (AHI score less 15 or SBQ 0 to 2) and moderate-severe/intermediate-high risk (AHI score more than 15 or SBQ 3 and above). SAGE score between 17 to 22 indicates normal cognitive function, 15-16 are likely to have mild cognitive impairment (MCI) and score of 14 or less are likely to have dementia. Sociodemographic includes age, gender, race, and education are independent variables while neurocognitive impairment as a dependent variable. The comparison between these categories were performed by non-parametric tests; Mann-Whitney and Kruskal-Wallis test. **Results:** Of 137 participants, 26.3% are classified as normal-mild/low risk OSA and 73.7% are classified as moderate-severe/intermediate-high risk OSA. The participants comprise 56.2% young adults, 40.1% middle aged and 3.6% elderly. For education level, 59.1% tertiary, 35% secondary and 5.8% primary education level. Neurocognitive impairment was recorded in 24.8% of participants. There is a significant association ($p < 0.001$) between severity of sleep apnoea and lower SAGE score; and there is a significant association between SAGE score and: 1) education level ($p < 0.001$); 2) age ($p < 0.05$) with elderly having a poor mean rank as compared with young adults; 3) race ($p < 0.05$) with median SAGE score for Malay is 19, Indian 17, Chinese 20 and Others is 18. There is no association between gender and SAGE score ($P > 0.05$). **Conclusion:** A significant percentage of patients with sleep symptoms have neurocognitive impairment elements and there is strong association between severity of OSA score and SAGE score. Interestingly SAGE score in this study also has an association with education level and race. A further evaluation to explore the issue is warranted.

Hospital Putrajaya 10 years' experience on sleep surgery outcome by ESS and PSG

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ABSTRACT

Introduction: Obstructive sleep apnea (OSA) is characterized by repetitive upper airway collapse, hypoxemia, and sleep disruption. Continuous positive airway pressure (CPAP) is the primary treatment for OSA. However, some patients are unable to tolerate CPAP, and face difficulties to be compliant towards CPAP, these patients would benefit from sleep surgeries. In this study done in Hospital Putrajaya, patients who are not compliant and not keen to use CPAP machines, are evaluated further by performing Drug Induced Sleep Endoscopy (DISE), surgery is an option based on DISE findings. **Methods:** Retrospective case series with prospective reanalysis of polysomnographic data and ESS. Consecutively treated adult patients (N = 18) with moderate to severe OSA having multi-level sleep surgery done from year 2010 to 2020. Full polysomnography (PSG) was performed preoperatively and at a mean of 120 days postoperatively as well as ESS scoring. **Results:** Total of 18 patients were being reviewed from which 10 patients were male and 8 were women with the age group from 19 to 57 years old. Each patient clinically differs based on their symptoms, ESS scoring, PSG results, and clinical findings. In this group the surgical intervention was associated with a 66.7% success rate. **Conclusion:** The diagnosis and treatment of obstructive sleep apnoea is crucial to improve quality of life and reduce the morbidity among the Malaysian population. DISE has been helpful in selecting and planning patients for sleep surgery. There has been a successful outcome of sleep surgery as it can be demonstrated to be beneficial to the majority of carefully selected patients.

External auditory canal metastasis in nasopharyngeal carcinoma: A case report

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SUMMARY

Nasopharyngeal carcinoma (NPC) has higher incidence in South-East Asia. The most common sites for distant NPC metastases are the bone, lung, and liver. Metastasis to the external auditory canal (EAC) is rare. To our knowledge, there were less than 30 cases reported to date. We report a case of a 69-year-old Malay lady who is a slow learner, known case of NPC (T3N2M0) and completed radical radiotherapy in May 2019. She did not complete her concurrent chemotherapy as poor tolerance to side effects. Her initial surveillance follow-up was uneventful, until the 4th month in which she complained of right otalgia. Otoscopy examination revealed friable mass filling up the whole EAC. Nasoendoscope and neck examination were normal. Initial biopsy of the mass showed necrotic tissue and grew *Pseudomonas aeruginosa*. She was treated as otitis externa with multiple courses of local, oral and intravenous antibiotics. However subsequently she had right facial nerve palsy with profound hearing loss on the same site. The patient then underwent examination under general anaesthesia and biopsy of the right ear mass. Intra-operatively, showed worsening of the disease over right ear while nasoendoscopic examination showed normal mucosa seen over bilateral FOR. The histopathology examination revealed metastatic undifferentiated carcinoma, compatible with her initial NPC histology, while biopsy at the primary site was negative of malignancy. A CT brain and HRCT temporal bone revealed enhancing soft tissue density within the right EAC, middle ear and mastoid air cells causing erosion of tegmen tympani and tegmen mastoidea with enhancing thicken adjacent meninges. The right Eustachian tube and right FOR were normal, however the left FOR had a localized mucosal enhancement; in which likely post radiotherapy changes. There were also right level II cervical lymphadenopathy but no distant metastasis was seen. She was referred to the oncology team and planned for palliative radiation therapy. In conclusion, otological symptoms may be the presentation of recurrent NPC, and should be treated with a high index of suspicion. Prompt investigation for early diagnosis and treatment may improve prognosis.

CR-02

Endoscopic skull base repair of CSF leak using tisseel glue – Hospital Ampang experience: Challenges in laterally placed sphenoid defect with herniation

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SUMMARY

CSF rhinorrhoea is a result of an abnormal communication between the subarachnoid space and sinonasal tract. 90% of cases are due to trauma and another 10% due to non-traumatic. The most common site for non-traumatic CSF leak is the cribriform plate followed by the ethmoid roof. Traditionally, this condition was repaired via open craniotomy approach, however with the advancement of technology, endonasal endoscopic repair is preferred. We report 2 cases of spontaneous CSF rhinorrhoea which were endoscopically repaired via anterior skull base approach using a fat graft and fibrin sealant. Case 1, A 43-year-old Indian lady, presented with left-sided unilateral clear watery nasal discharge for 10 days duration. It was associated with low grade fever and one episode of syncopal attack at home. She had a one-week history of upper respiratory infection prior to this attack. On examination, there was no sign of meningism. She demonstrated a left-sided clear rhinorrhoea upon bending forward. Naso-endoscopic examination showed no abnormality. Contrast-enhanced CT brain and paranasal sinuses revealed multiple bony defects at the left roof of sphenoid sinus measuring 0.4cm x 0.6cm and MRI cisternography confirmed the mentioned defect with active flow of CSF through the defect. Thin linear hypointense structure was seen herniated through the defects which represent the meningocele. For case 2, A 45-year-old Chinese lady presented with spontaneous left-sided unilateral clear watery nasal discharge for 2 weeks duration when she bends forward. She denied any other associated symptoms. Upon examination, there were no signs of meningism. Naso-endoscopic examination was normal. Contrast-enhanced CT brain and paranasal sinuses revealed a bony defect at the roof of left sphenoid sinus measuring 0.7cm and MRI cisternography showed similar defect with temporal lobe meningoencephalocele causing CSF leak into the left sphenoid sinus. Both of these patients underwent endoscopic repair of CSF leak using Tisseel glue. Fat graft was harvested from the abdomen and reinforced with pedicled-Hadad-Bassagasteguy flap. Endoscopic endonasal repair of CSF rhinorrhoea is the preferred method at present compared to open craniotomy as it has less complication, shorter recovery time and higher success rate. However, the laterally placed sphenoid defect with herniation gives a challenge in terms of approach and techniques. The usage of Tisseel fibrin glue to the fat graft and flap provide an effective and stable seal.

An uncommon complication of otitis media in the only hearing ear: Bezold abscess

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SUMMARY

Although Bezold abscess is rarely seen nowadays as a result of the early intervention of ear infection with the antibiotics, it is still one of the acknowledged but rare complication reported in the literature. We present a case of Bezold abscess which developed in the only hearing ear. The Bezold abscess occurred after 3 months of resolution of otitis media which was previously treated with topical and systemic antibiotics. Urgent computed tomography revealed the pathology. His hearing was saved with timely surgical interventions and antibiotics. Bezold abscess typically presents with neck swelling and a history of ear infection with or without ear symptoms. It can be diagnosed easily with radio imaging. Immediate interventions limit the progress of the disease. Aggressive management and close follow up of patients with ear infection in the only hearing ear is crucial to detect its complication. Timely intervention can reduce its morbidity

Ibuprofen-induced allergic reaction presenting as a spontaneous retropharyngeal and laryngeal hematoma: A case report

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SUMMARY

Ibuprofen is a widely used analgesia with minimal side effects reported. It is usually purchased over the counter by patients due to its safety and relatively low side effects. There is no literature available on spontaneous retropharyngeal and laryngeal hematoma due to an allergic reaction. The objective of this case report is to highlight a rare case of a patient presenting with throat discomfort, dysphagia, odynophagia, hoarseness and developed spontaneous bruising over the anterior neck after consuming multiple doses of ibuprofen. On further investigation the patient was found to have a spontaneous retropharyngeal and laryngeal hematoma.

Neck swelling: Expect the unexpected!

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SUMMARY

Neck swelling is a relatively common head and neck complaint in patients presenting to ENT clinic. Evaluation of neck masses must be approached in a thorough manner as it helps to narrow our diagnostic possibilities. We report of a rare case of carotid body paraganglioma which mimics the presentation of an infective lymph node. Mr K, 42-year-old gentleman with underlying hypertension and tuberculosis of pleura, diagnosed 1 year ago and completed anti-TB treatment presented with painless left neck swelling for 3 months duration. The swelling did not increase in size and he denied any constitutional symptoms. On examination, there was a solitary mass measuring 3.0 X 3.0 cm at left Level II, firm, mobile, not pulsatile and no bruit felt. Initial diagnosis was made to rule out tuberculosis of lymph nodes in view of a solitary firm non-pulsatile mass with previous history of tuberculosis of pleura. No imaging was done. As the FNAC revealed atypical cells, excisional biopsy was performed under local anesthesia. Intra-operative revealed a firm, vascularized mass located at the bifurcation of the left carotid artery. The mass was excised in total with vagal nerve preservation and minimal blood loss. The histology reported as carotid body paraganglioma. He is free of disease progression after 12 months follow up without any recurrence or new lesion on the neck. In conclusion, paraganglioma of carotid bodies should be considered as a differential diagnosis for painless lateral neck masses. Although infective neck causes are more common, we should have a high index of suspicion in order to prevent unnecessary risky procedures. The mainstay of treatment is surgical excision and follow up is imminent as this tumour poses high risk of malignant transformation and recurrence.

CR-06

An intriguing case of unilateral nasal blockage

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SUMMARY

Nasal septal seroma is a collection of serous fluid between the cartilaginous or bony septum and its adjoining mucoperichondrium or mucoperiosteum. This condition is extremely rare, necessitating a thorough history, investigation and prompt management to prevent nasoseptal deformity. We report an intriguing case of spontaneous septal seroma in a young gentleman with no preceding risk factors. Mr F, a 29-year-old healthy male, presented with progressive worsening right nasal blockage for 2 months. He denied nasal pain, rhinitis symptoms, fever, history of trauma or surgery prior to the symptoms. The systemic review on other body systems were unremarkable, making the systemic disorder was unconvincing as its causative factor. Examination revealed fullness of the nasal dorsum. Anterior rhinoscopy showed a soft, fluctuant right septal swelling which was tender on palpation with normal left nostril. Aspiration was performed and drained about 8cc of yellowish serous fluid. He was treated as outpatient with oral antibiotic for 1 week. However, during his subsequent follow up, the swelling recurred with involvement of the contralateral side of the septum, occluding both anterior nares. Incision and drainage were done under local anesthesia, which drained about 10cc of yellowish serous fluid. Samples were sent for biochemistry, culture and AFB stain which came back as negative. There was small septal perforation caudally. Nasal packing was inserted and he was admitted for intravenous antibiotics. He was discharged well with neither any signs of residual nor recurrence of the disease. In conclusion, although neither nasal trauma, nasal surgery nor features of infection were demonstrated, subclinical inflammation, autoimmune and chronic inflammatory disorder of the nasal septum should be thoroughly investigated. Despite the rare occurrence of spontaneous nasal septal seroma, a prompt recognition and treatment is necessary to prevent further deformity of the nose.

An unusual presentation of nodular fasciitis: A rare case

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SUMMARY

Nodular fasciitis is a benign soft tissue lesion caused by reactive proliferative fibroblast mainly according to literature triggered by trauma. Morphologically it mimics sarcoma hence also called pseudosarcoma. It is commonly seen in upper and lower extremities, as well as the trunk but rarely in the head and neck region. We are reporting a rare presentation of nodular fasciitis seen over the right maxillary region. A 27-year-old chronic smoker male presented with 3-months history of gradual increase in size of painless right maxillary mass with history of trauma to the face more than 6 months prior to presentation. Otherwise, no other significant history. On examination there was a swelling seen over the right maxillary region measuring 3cm x 3cm, which was mobile with firm to hard in consistency, non-tender with no overlying skin changes. Computed Tomography of the paranasal sinuses showed a well-defined round heterogeneously enhancing subcutaneous soft tissue mass. The mass was visualized at the right anterior maxillary region measuring 1.8cm x 2.0cm with no evidence of bony lesion, or calcification. Fine needle aspiration and cytology revealed spindle cell lesions. The patient underwent tumor excision via sublabial approach. The histopathological examination of the removed mass reported as nodular fasciitis with positive for SMA (smooth-musclespecificactin) stain. The postoperative recovery was uneventful with no cosmetic defect. Within a period of 3 months, there was no recurrence seen, nevertheless the patient is still under follow up. In conclusion, although nodular fasciitis is uncommonly seen over the head and neck region, it should be considered as one of the differential diagnoses especially for any painless subcutaneous masses with a history of trauma to the area. A thoughtful consideration and careful work up should be done to obtain a proper diagnosis and treatment of this favourable lesion as the prognosis is good with low recurrence rate.

CR-08

The role of extra-endolaryngeal suture lateralization: How we manage in recalcitrant subglottic stenosis in our centre

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SUMMARY

We report a case of recalcitrant subglottic stenosis in a 17-year-old teenage boy following 2 episodes of intubation in 2019. Patient was diagnosed with subglottic stenosis Cotton Mayer grade 4 where the proximal part of the stenosis is only 0.6 mm from the inferior surface of the vocal folds. Patient also had propensity to develop keloids which lead to impaired tissue repair. Initially, the stenosis segment was softened by repeated intralesional steroid injections under local anaesthesia (LA) into the proximal end of the stenosis via trans-thyrohyoid approach and distal end of the stenosis via the tracheostoma. After a month of repeated intralesional steroid injections, the patient who was aphonic are now able to whisper. This indicated there was presence of a small lumen. Patient was then subjected to multiple endoscopic dilatations followed by endoscopic tracheal stent insertion which was later changed to Montgomery T-tube. Despite various surgical procedures performed to treat the condition, the patient is still on Montgomery T-tube and decannulation seems almost impossible. The main challenge in managing this condition is due to close proximity of the proximal segment of the stenosis to the inferior surface of vocal folds. We venture into an alternative surgical procedure called extra-endolaryngeal suture lateralisation technique. Although this procedure is mainly performed to treat bilateral vocal fold immobility, we believe that this technique may be beneficial in providing better airway to the patient and eventually decannulation.

A case report: Chronic sialolithiasis of submandibular glands with sialocutaneous fistula in the neck

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SUMMARY

Sialocutaneous fistula in the neck is a rare complication of chronic sialolithiasis which can be challenging to manage. A thorough history taking and physical examination with aided of proper imaging are essential to diagnose the condition. We report a rare case of discharging fistula in the neck secondary to chronic sialolithiasis in a 68-year-old Malay man with background history of Alzheimer disease. A simple excision of the gland along with the fistulous tract was complicated with gingivobuccal tear due to formation of thick fibrotic band adhering the submandibular gland to the floor of the mouth. There was a possibility of the thick fibrotic band to be submandibular ductal fistula into the floor of the mouth, however due recurrent sialadenitis in the past, the ductal fistula into the floor of mouth was severely atrophic and could not be cannulated leading to adhesion. In this case report, we will describe further on the clinical presentations and investigations, the step by step of the surgical approach of submandibular gland with fistula tract excision, the unusual intraoperative findings and the postoperative management of the patient. The understanding of the anatomical relationship between the submandibular gland and its surrounding is important in anticipating variety in the salivary gland pathology and appropriate measure can be taken to prevent unnecessary surgical complications.

A giant sinonasal schwannoma

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SUMMARY

Schwannoma is a rare tumour found in the nasal cavities or paranasal sinuses but is increasingly encountered and being reported. It arises from the nerve sheath of the peripheral nerves. Despite the traditional belief that it is rather a slow-growing tumour, many of the reported cases were large and would cause bony erosion and remodelling. We present a case of huge sinonasal schwannoma which eroded into the orbit, frontal sinus and maxillary sinus. Contrast-enhanced computed tomography (CT) scan showed a homogeneously enhancing soft tissue mass occupying the left nasal cavity extending into the left maxillary sinus, left frontal sinus and posteriorly into nasopharynx measuring 7.5cmX5.0cmx5.9cm. The left globe and medial rectus were displaced laterally by the mass. The tumour was completely excised through a lateral rhinotomy approach and there was no recurrence seen at one year post surgery. Despite being rare, huge size sinonasal schwannomas were often encountered probably because the schwannomas can grow faster in the roomy nasal cavities. Urgent imaging and biopsy are needed to exclude malignancy. Total excision of the tumour can be achieved endoscopically or by an open method. Recurrence can be prevented by complete excision of the tumour.

Post traumatic pseudoaneurysm of a branch of facial artery

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SUMMARY

Pseudoaneurysm of the facial artery is a rare entity. The causes of facial artery pseudoaneurysm include trauma and iatrogenic causes. Clinically, it usually presents as a pulsatile swelling which develops over a period of a few weeks and can cause severe bleeding. Here we present a case of post-traumatic pseudoaneurysm of a branch of facial artery and its management. An 18-year-old man developed a pulsatile swelling around the left angle of mandible about eleven days after sustaining a wound to the same area from a motor vehicle accident. Computed tomography(CT) angiogram showed a pseudoaneurysm of a branch of the left facial artery. Embolization was performed and one month later, the swelling has resolved completely. Despite being rare, pseudoaneurysm of facial artery should always be suspected in patients with a pulsatile mass at the angle of mandible especially after trauma. Diagnosis can be confirmed by either CT angiogram or MRI. In terms of treatment, open surgery or embolization appears to be a safe option provided that it is performed correctly.

An enthralling case of parotid gland tumour

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SUMMARY

Solitary fibrous tumour (SFT) is a rare spindle cell neoplasm commonly occurring in the pleura and peritoneum. The rare phenomenon of SFT of the parotid gland has been reported in only 34 cases up till date. Histopathological examination and immunohistochemistry are required to make the correct diagnosis and differentiate it from other parotid tumours. We report a case of a 22-weeks pregnant lady, who presented with a painless and non-progressive right parotid swelling for 10-months duration. Examination revealed a right parotid swelling, firm in consistency measuring 7x8cm. The facial nerve was intact and there was no medialization of the lateral pharyngeal wall. The fine needle aspiration cytology was reported as pleomorphic adenoma. As the patient was pregnant, definitive surgical intervention was postponed. A post-partum contrasted computerized tomography scan of the neck showed a well demarcated right parotid mass involving both superficial and deep lobes. She was subjected to right subtotal parotidectomy with facial nerve preservation. However, she developed right facial nerve palsy House Brackmann grade IV post-operatively as the result of nerve fatigability/neuropraxia due to intraoperative manipulation. The histopathological microscopic examination reported that the cells have round to oval, centrally placed nuclei and the stroma shows medium-sized ramifying vessels, some of which have hyalinized walls. The tumour cells are positive for CD34, BCL2 and CD99, in which the findings were consistent with SFT. During subsequent 7 months follow up, her facial nerve function had recovered completely with no signs of recurrence of the parotid tumour. In conclusion, SFT of parotid gland is a rare, non-aggressive benign tumour with non-specific clinical and radiological findings. However, the histopathological examination and immunohistochemistry with CD34 and BCL2 will render this diagnosis. Complete resection is the treatment of choice with good prognosis.

Malt lymphoma of maxillary sinus: A rarity of aggressiveness

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SUMMARY

Extranodal marginal zone lymphoma of mucosa-associated lymphoid tissue (MALT lymphoma) is a low grade B-cell lymphoma, occurring secondary to chronic inflammation. As the mucosa in the nasal and paranasal sinuses does not contain prominent lymphoid tissue, it is relatively rare for this lymphoma to arise here. We report a case of a 68-year-old lady with multiple co-morbidity who was referred for painless left facial swelling for 2 weeks. She denied any sinusitis symptoms or epistaxis. Clinically, there was a firm and non-tender mass over the left maxillary region measuring 3x4cm. Rigid nasal endoscopy revealed a polypoidal mass arising from the left osteomeatal complex. The nasopharynx was normal. Contrast-enhanced computed tomography (CECT) scan of paranasal sinuses reported an enhancing hyperdense lesion in the left maxillary sinus which extends posteromedially to the left inferior turbinate and continuous subcutaneously to the left maxilla. She was subjected to endoscopic sinus surgery and excision of the mass. Intraoperatively, the mass originated from the floor of maxillary sinus and extended medially to anterior floor of the nose. Sublabially, the mass continued subcutaneously anterior to the left maxilla, posteriorly to the infratemporal fossa and superiorly just inferior to infraorbital foramen. The histology revealed Extranodal MALT. She was subsequently referred to haematology for further management and she was well upon subsequent follow up. Despite a short duration of presenting complaints, malignancy should be a top differential to the practitioner. Therefore, haemato-lymphoid disorders should always be considered as a possible diagnosis as it may behave aggressively and rapidly fatal or even be an indolent progress.

A rare clinical entity: Hypopharyngeal carcinoma with musculoskeletal metastasis

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SUMMARY

Hypopharyngeal carcinoma with metastasis to skeletal muscles is relatively rare as the most common site for metastatic spread of solid tumours are the lung, liver, bones, and adrenals. It has been reported in only a small number of cases. We present a case of a 61 years old gentleman who is a known case of hypopharyngeal carcinoma, stage T4bN2cM0 and had completed radical chemoradiotherapy. During the period of surveillance, he developed a right proximal arm swelling 18 months post treatment. There were neither neurological nor neurovascular deficits. A flexible endoscopy did not reveal any primary site recurrence. However, the MRI of the right arm revealed an irregular enhancing intramuscular soft tissue mass within the right triceps muscle with multiple axillary lymph nodes enlargement. Biopsy revealed a metastatic carcinoma favouring poorly differentiated squamous cell carcinoma which is compatible with the histopathological evidence of hypopharyngeal carcinoma. He was then referred for further oncological treatment. This case raises awareness of skeletal muscle metastasis in the setting of previous head and neck malignancy despite being rarely reported. Hence it should be treated with high degree of suspicion for metastasis thereby requiring prompt investigation.

Palatine tonsillar metastasis of primary lung carcinoma: A rare case

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SUMMARY

Malignant tumor of the tonsil is usually primary. It is an extremely rare site for metastatic disease, accounting for only 0.8% of malignant tonsillar neoplasms, with most reported primary metastatic sites are kidney, skin, colon, rectum, cecum, liver and stomach. To our knowledge, only 22 cases of lung cancer with tonsil metastasis have been reported in the literature. We report a case of 45 years old nonsmoker Chinese gentleman, presented with 2-week duration of painless right neck swelling with one month duration of hemoptysis. He denies dysphagia, odynophagia, hoarseness, shortness of breath and constitutional symptoms. Neck examination showed a firm, non-tender right submandibular mass measuring 5x5cm. Initial oral cavity and flexible nasopharyngoscopy examination was unremarkable however we proceeded with biopsy from both FOR which came back negative for malignancy and the TB workout was also negative. FNAC of the right neck revealed atypical cells in which an incisional biopsy was proceeded. Histologically revealed metastatic carcinoma with probable primary from lungs or thyroid was given. CT neck showed right middle lobe lung mass with bilateral cervical lymphadenopathies. CT-guided biopsy of the lung revealed necrotic tissue. Upon subsequent follow up, patient complaint of globus sensation and repeated endoscopy showed a fungating mass at the right tonsillar inferior pole obscuring the right base of tongue and vallecula. Biopsy taken showed poorly differentiated carcinoma with probable primary from the lung. He underwent 3 cycles of chemotherapy. Unfortunately, the patient developed extensive thrombosis and was subjected for palliative care. Distance metastasis of lung carcinoma to palatine tonsil is extremely rare as the metastasis was considered as retrograde lymphatic propagation. Poor prognosis and short mean time survival rate act as indicators for an early intervention.

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Intraoral mature teratoma in newborn: A case report

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SUMMARY

Teratoma is the most common congenital tumour. However, neonatal intraoral teratoma is extremely rare benign lesions. To our knowledge, based on the extensive literature review, there are less than 15 cases reported with female predominance has been reported in the literature and preterm birth has a higher incidence. Even though it is associated with a high neonatal mortality rate due to severe airway obstruction and feeding difficulties, we would like to point other complications such as sepsis can also attribute to death. A 35-week vaginally delivered 2.1 kg baby girl referred to us with protruding mass from the oral cavity, with respiratory distress at day three of life, which required non-invasive ventilation. There was no abnormality detected from the antenatal ultrasonography. The mass was originating from midline palate cleft up to soft palate. It measures 4.0 X 2.0 cm in size with presence of bifid tongue. The baby was then transferred to neonatal intensive care unit at Hospital Kuala Lumpur for further management by ENT (pediatric). Imaging (CECT Base of Skull and Neck) showed intraoral teratoma from midline cleft with obstruction of oral cavity and nasopharyngeal airway. There was no intracranial extension. At day 13 of life, the tumour was surgically excised via combined intraoral and nasal endoscopy approach. The histopathological examination (HPE) revealed tissues from all the three germ cell layers and hence confirmed the diagnosis of mature teratoma. Unfortunately, post operatively, patient developed hospital acquired pneumonia and succumbed secondary to sepsis at 1 month of age. Intraoral mature teratoma is a rare benign entity which may cause airway obstruction needing immediate intervention. Complete surgical removal of the tumour is the mainstay approach of the treatment. However, patient may succumb due to other complications while on treatment. Hence, multidisciplinary collaborations are essential.

5-Fluorouracil-Induced mood disorder in a patient with tongue carcinoma

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SUMMARY

List of differential diagnosis of psychiatric symptoms in a patient with an underlying malignancy is exhaustive. 5-Fluorouracil (5-FU) remains as one of the most widely used chemotherapy agent and its often used as the first line regime in Head & Neck malignancies. We present a case of an elderly female with an underlying locally advanced p16-positive squamous cell carcinoma of the tongue presented with manic symptoms for one week after 2nd cycle of chemotherapy. Multidisciplinary management by Otorhinolaryngologists with Psychiatrist and Oncologist leads to cessation of 5-FU, administration of antipsychotics, replacement with different chemotherapy agent leads to complete resolution of manic symptoms. Possible mechanisms of 5-FU induced manic episode with its treatment is discussed in this report.

Synchronous laryngeal squamous cell carcinoma and adenocarcinoma of colon: A case report

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SUMMARY

Multiple primary malignancies (MPM) are widely discovered in head and neck cancer. There is a 19% risk of MPM in head and neck cancer with the larynx being the third most common site of initial primary cancer after the base of tongue and pyriform sinus. Literature studies have shown adenocarcinoma of lung represent the commonest synchronous tumour in laryngeal carcinoma, followed by squamous cell carcinoma of oesophagus and the least commonest localization from lower sites; colorectal carcinoma and bladder carcinoma. We report a case of laryngeal carcinoma, with a rare synchronous lesion adenocarcinoma of colon. A 68-year-old Malay male, a chronic smoker complained of dysphagia and foreign body sensation of the throat for 1 week associated with hoarseness, loss of appetite and weight for 7 months. On examination, he appeared cachexic and dehydrated. Flexible nasopharyngolaryngoscopy revealed an ulcerative mass seen at the whole length of the edge of the right vocal cord. Histopathological study of the mass showed moderately differentiated squamous cell carcinoma. A staging Computerized Tomography (CT) scan of the thorax, abdomen and pelvis was done showed a mass at the right false vocal cord extending to right subglottic region with incidental finding of circumferential thickening of the proximal ascending colon extending from the ileocecal junction. Nevertheless, the patient denied any bowel symptoms. Colonoscopy showed a large stricture type lesion visualized from transverse colon until ascending colon, which biopsy of the mass reported as moderately differentiated adenocarcinoma. In conclusion, synchronous multiple primary malignancies in laryngeal tumours should be thoroughly taken into account in all locally advanced cancer patients especially those with risk factors such as elderly, male and active smokers. Although synchronous lesion in lower gastrointestinal is rare and patient is asymptomatic, prompt and detailed examinations and investigations are crucial for proper staging and early management, perhaps will improve the survival rate.

Kaposi sarcoma of the larynx, an unusual encounter

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SUMMARY

Kaposi Sarcoma is a low-grade malignant mesenchymal neoplasm commonly associated with acquired immunodeficiency syndrome (AIDS). It primarily affects the cutaneous layer of the face and extremities and also oropharyngeal mucosa. Involvement of the larynx is somewhat unusual, with sparse information in the English literature. Herein, the author reported a case of a 27-year-old gentleman with Human immunodeficiency virus (HIV) on HAART treatment, who presented with progressive dysphonia and globus sensation of 1-month duration. In addition to the multiple purplish raised papules over his right forearm, a similar violaceous lesion was observed arising from the lingual surface of the epiglottis via flexible bedside laryngoscopy. Biopsy of the lesions confirmed the diagnosis of Kaposi Sarcoma. The clinical conundrum of managing this case was well illustrated with the concurrent diagnosis of COVID-19 in him. Detailed counselling on the treatment options of the laryngeal lesion was arranged, involving a multidisciplinary approach. The patient then opted for concurrent chemoradiotherapy. Chemotherapy offers the benefit of laryngeal preservation in Kaposi sarcoma involving the larynx and may be considered as a treatment option in patients with high risk of surgical intervention.

Hyperpneumatisation of paranasal sinuses and mastoid and Valsava's maneuver: A missing link?

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SUMMARY

Excessive enlargement of paranasal sinuses and mastoid is a rare condition with unknown aetiology. To date, only a few case reports about spontaneous hyperpneumatisation have been published and the true causative mechanism is still a myth. The direct link between hyperpneumatisation and Valsava's maneuver has not been found. We would hereby present a case report of hyperpneumatization of mastoid and paranasal sinuses in an asymptomatic man with habitual performing of the Valsava maneuver and holding of sneeze. A 31-year-old gentleman was referred to Otolaryngology department for epistaxis post assault. In view of a history of loss of consciousness, a CT brain and neck showed a left maxillary bone fracture, left orbital wall fracture and a right temporal subarachnoid haemorrhage which was treated conservatively. On further examination, there were also diffused enlargement of all the paranasal sinuses and mastoid air cells. Patient denied any tinnitus, hearing loss, headache, sign of sinusitis or allergy. However, history of performing repetitive Valsava manoeuvre of at least once or twice a day for a period of more than 5 years especially in crowded places for he believed it improved his hearing. He also frequently tends to hold his sneezes. Nasal endoscopic and otoscopy examination did not reveal pathologic findings. His pure tone audiometry showed normal hearing bilaterally and tympanometry showed a type A bilaterally. Patient was advised not to continue with this Valsava habit and holding sneezes and was discharged home. Although largely asymptomatic and found only incidentally, hyperpneumatisation of temporal bone and paranasal sinuses pose an unique blend of symptoms and complications which is prudent for budding otorhinolaryngologists to identify and to treat.

Infected fungal ball in concha bullosa: A rare cause of headache

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SUMMARY

Concha bullosa is the pneumatization of the middle turbinate and is possibly the most well-known variety of the sinonasal anatomy. This pneumatization occurs when ethmoid air cells migrate to the middle concha. Most often, patients are asymptomatic, however, a small number may present with nasal obstruction and headache. If the concha bullosa obstructs the middle meatus, the patient may even develop sinusitis and facial pain. Although concha bullosa can become infected in some patients, publications on fungal infections are few in the literature. We would like to present a case of a 51-year-old female who presented to our clinic with continuous left hemifacial headache and intermittent vertigo with absence of nasal symptoms in whom we found a large left concha bullosa, filled with pus and fungal ball. After endoscopic resection of the concha, the patient reported no further headaches and vertigo. The improvement of symptoms and quality of life suggests that the endoscopic surgery may promote the rapid resolution of concha bullosa related headache. The clinical presentation, radiological and endoscopic findings and management approach for this case are further discussed.

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The solidarity of sweet and sour of salivary stories. A series of five patients

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SUMMARY

The parotid tumours are the most usual salivary gland neoplasm affecting major salivary glands and most of these are pleomorphic adenomas. Around 80% of parotid gland tumours are benign in nature. The malignant cases account for 20% and mostly involve submandibular glands and minor salivary glands. In these case series, we present 5 different spectrum of parotid tumour pathology, including a case of pleomorphic adenoma of superficial lobe parotid, a case of deep lobe parotid pleomorphic adenoma, a case of mucoepidermoid carcinoma of parotid gland, a case of recurrent acinic cell carcinoma of parotid gland and a case of inoperable advanced poorly differentiated carcinoma of parotid gland with distant metastases. Preoperative fine needle aspiration cytology results of all 5 cases were consistent with postoperative histopathology reports. Facial nerve (FN) sacrifice and injury during parotid operation was occasionally inevitable, but in the preoperatively functioning nerves and tumour not invading the nerve intraoperatively, all effort should be taken to preserve the integrity of the FN function. We aim to share our experiences in terms of the clinical diagnosis and the management outcome of these five different disease entities involving the parotid gland.

Pleomorphic adenoma of parapharyngeal space: Our management

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SUMMARY

Primary tumours arising from the parapharyngeal spaces are rare, comprising less than 1% of head and neck neoplasms. About 80% of these tumours are benign with pleomorphic adenoma being the commonest type. These cases often present as an incidental mass during investigation of other pathologies as they can be asymptomatic. Fifty percent of patients presented with a neck swelling or the growth can manifest with medial displacement of the oropharynx. A 65-year-old lady with rheumatoid arthritis was investigated for chronic neck pain and referred to Otorhinolaryngologist when her magnetic resonance imaging of the spine revealed an incidental finding of a well-defined ovoid mass in the left parapharyngeal region. It was hypointense on T1W and heterogeneously hyperintense on T2W images. She had no other neck swelling and denied any ear, nose, or throat symptoms. Flexible nasopharyngolaryngoscope revealed minimal medialization of the left lateral pharyngeal wall with patent airways and normal pharyngeal mucosa. She was subjected to a computed tomography scan of the neck which showed a well-defined mass in the pre-styloid area with no clear fat plane with the deep lobe of the parotid and the adjacent pharynx with subcentimeter lymph nodes. In view of the unspecific nature of the mass in the scan, malignancy could not be ruled out. The mass was medial to the carotid sheath and located just adjacent to the oropharynx. We decided for an incisional biopsy of the mass via transoral approach in view of the easier accessibility, to avoid the vital structures in the neck and to avoid external scar in the possibility of a malignancy. Intraoperatively, the lateral pharyngeal wall was viewed using the Boyle-Davis mouth gag. A vertical incision was made using a blade, posterior to the left posterior pillar, and we proceed with blunt dissection until the capsule of the mass was encountered. We found the mass to be well defined and were very well encapsulated with the size of 6 x 5cm. Hence, an excisional biopsy was performed, and the mass was removed in total. As the lesion was big, hemostasis was a challenge. The cavity was sutured, and the patient was on nasogastric tube feeding for five days to allow the mucosa to heal. No other enlarged lymph nodes were encountered. The histopathological examination confirmed the diagnosis of a pleomorphic adenoma. The patient has been well with no complications or recurrence. This case illustrates the successful management for a neoplasm of the parapharyngeal space from the investigation till complete removal via transoral approach.

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The Pursuit of Balance

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SUMMARY

Persistent postural-perceptual dizziness (PPPD) is a newly defined chronic dysfunction of the and brain (neuro-otological) and vestibular system that produces persistent non-spinning vertigo and/or unsteadiness. It falls within the spectrum of functional neurological dizziness which can occur as primary or secondary to vestibular syndrome. In most cases, PPPD develops as the acute symptoms of precipitating conditions remit, occurring as their acute vertiginous symptoms fade. Once recognised, it can be managed with effective communication and tailored treatment strategies, including vestibular rehabilitation and cognitive-behavioural therapy. A 44-year-old lady with PPPD post left posterior benign paroxysmal positional vertigo (BPPV); who presented with persistent non-vertiginous dizziness (despite successful particle repositioning manoeuvres – Epley's & Gan's) which affected her psychosocially severely. Upon assessment, noted normal bilateral hearing assessment, negative cerebellar sign, negative Dix Hallpike and supine roll tests with EQ-5D 2 1 2 1 2 – 60%; dizziness handicap index: 84 (severe), DASS 21 – Depression 9 (moderate), Anxiety 12 (extremely severe), Stress 12 (moderate). She was then treated as PPPD and was started on intensive home BAL EX exercise and was referred to psychiatry for cognitive behavioural therapy (CBT). Reassessment of EQ-5D, DSI & DASS 21 after a month a therapy showed marked improvement. On day 7 of treatment noted EQ 5d 11111 80%, DSI 10, DASS 21- D2 (normal), A5 (mild), S 4 (normal); whilst on day 28 of treatment noted EQ 5D 11111 85%, DSI 18 Mild, DASS 21 – D1 (normal), A 2 (normal), S2 (normal). In PPPD, vestibular rehabilitation combined with CBT help patients escape a cycle of maladaptive balance control, recalibrate vestibular systems, and regain independence in everyday life.

Fast and furious: A case of deep neck abscess in pregnancy

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SUMMARY

Deep neck space abscess in pregnancy is uncommon and may lead to serious morbidity and mortality. Management of such infections in pregnancy depicts a difficult challenge, simply due to the fact that it is a possible life-threatening condition to both the mother and the fetus. We report a case of a 35 year-old gravid female at 32 weeks gestation, who presented with 3 days history of fever, change of voice and right neck swelling. Clinical examination revealed trismus and muffled voice, with left level II neck swelling. Intraorally there was medialization of the peritonsillar region and left lateral pharyngeal wall. Patient was subjected to intraoral I&D after which she showed initial improvement, but her condition worsened after 3 days with worsening neck swelling and spiking temperature. Emergent CT Neck was done revealing multiloculated collection involving the left parapharyngeal space, extending to involve the retropharyngeal and right parapharyngeal space, the superior and anterior mediastinum. A multidisciplinary team consensus was made and patient was subjected to an emergency Cesarean section, transcervical I&D of right parapharyngeal abscess and right Chamberlain mediastinotomy drainage of mediastinal abscess. She was nursed in the ICU postoperatively and was given broad-spectrum antibiotics (IV Ceftriaxone). Intraoperative pus cultures were reported as *Klebsiella pneumoniae*. She recovered well post-operatively and was discharged home after completing 4 weeks of IV Ceftriaxone. In conclusion, deep neck space infection, in patients with co-morbidities and immunocompromised states may lead to high mortality and morbidity. Early diagnosis, prompt initiation of appropriate antibiotics, adequate airway management, together with surgical drainage, remains the mainstay of management. A multidisciplinary team approach involving ORL surgeons, fetomaternal specialists, cardiothoracic surgeons, anesthetists and clinical radiologists is also paramount in managing a case of severe deep neck space infection in pregnancy.

Ramsay Hunt Syndrome: Where are the vesicles?

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SUMMARY

Ramsay Hunt syndrome (RHS), a variant of herpes zoster (HZ) is a rare cause of facial nerve palsy in children. This is a case report of a child with unusual non-vesicle RHS. A one-year-10 months old boy developed sudden onset left facial weakness with no otologic symptom. There was no history of trauma, insect bite, upper respiratory tract infection or skin rash. He had a history of varicella infection a month ago. On examination, he had left facial nerve palsy House Brackmann grade V. External ears and otoscopic examinations were unremarkable with no rash. Varicella zoster antibodies were detected. He was diagnosed as RHS without a vesicle and treated with a total of 2 weeks of corticosteroid. Antiviral therapy was not initiated as the onset of the symptoms was more than 72 hours. His facial nerve palsy improved to grade II 2 weeks later. Classic RHS symptoms are facial nerve palsy and vesicular rash at auricle. Otologic symptoms may present in the form of tinnitus, hearing loss, nystagmus or vertigo. It is caused by reactivation of varicella zoster virus at geniculate ganglion. If the infection does not involve sensory neurons, it will not produce classical dermatomal vesicular rash. This is called Zoster sine herpette (ZSH) that produces atypical neuropathic pain, cranial or spinal nerve palsy. This rare condition is often missed and requires a high level of suspicion to diagnose. Diagnosis is confirmed via detection of VZV-DNA via polymerase chain reaction test (PCR) or VZV antibody in serum. Combination of antiviral therapy and corticosteroid has been shown to have some benefit in treating RHS. Varicella vaccination is effective at lowering the overall risk of HZ and it's variant RHS in children. RHS may present without vesicle, predisposing clinician to misdiagnosis.

A rare case of synchronous carcinoma of renal cell carcinoma and tonsillar carcinoma

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SUMMARY

Synchronous malignancies are defined as malignant tumours that present simultaneously or within six months of the diagnosis of a primary tumour. Principally, to label a synchronous carcinoma, both tumours should have a distinctly different pathology, definite features of malignancy and the possibility of metastasis has been ruled out. To date, no similar case has been reported worldwide. In the case of p16-negative tonsil cancer, surgical and radiotherapy remain the mainstay treatment. However, in the case of synchronous carcinoma coupled with the advanced age of the patient, multiple comorbidities and poor ECOG performance status, surgical resection of the renal tumour will not be in the best interest of the patient.

Metastatic cervical lymph nodes from prostate cancer: Is it possible?

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SUMMARY

There is multiple differential diagnosis of neck mass such as malignancy, infection or lymphoid hyperplasia. Distant metastasis mostly from lung malignancy (41.7%) and breast carcinoma (17.6%). It is rarely from prostate carcinoma (1.5%). This is a case of prostate carcinoma initially presented with huge neck mass. The fine needle aspiration cytology (FNAC) was reported as metastatic nodes. Positron emission tomography (PET) – computed tomography (CT) scan reported there was multiple enlarged hypermetabolic nodal groups cervical largest 2.7cm x 3.1cm, mediastinal, axillary and abdominopelvic nodes. Multiple hypermetabolic foci involving the vertebrae, ribs and pelvic bone. Heterogenous hypermetabolic prostate with no obvious CT lesion. Neck mass incisional biopsy demonstrate metastatic carcinoma of prostate. His serum PSA is high. Patient was then referred to urology team and on six cycle of chemotherapy. Currently he is in remission with normal serum PSA and under urology surveillance. PET-CT scan is helpful in finding the cause of metastatic neck nodes. Biopsy with PSA staining and serum PSA is indicated if the patient is male for diagnosis of prostate carcinoma. This is due to prostate carcinoma had good 5 years survival rate.

A pterygoid plexus variant causing recurrent epistaxis: Rare but possible

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SUMMARY

Epistaxis is a common presentation to Emergency Department and it is number one emergency in Otorhinolaryngology. It has primary and secondary causes. We reported an extreme rare case of a 31-year-old female, presented with recurrent left-sided epistaxis. The epistaxis was minimal, intermittent and resolved with Trotter's manoeuvre. She did not have any other nasal symptoms such as nasal obstruction, rhinorrhoea or nasal itchiness. She neither has facial pain nor facial itchiness. There was no other bleeding tendencies such as easy bruising, haematuria, or per rectal bleed. Of note, she was not on any antiplatelet, anticoagulant or traditional medication. A computed tomography scan of paranasal sinuses showed a "starfish-shaped" radiated structure, connected to first and second part of maxillary artery consistent with variant of pterygoid venous plexus. This area was treated with diathermy, using coblater. During follow up, no epistaxis reported by patient. Pterygoid venous plexus variant, although rare should be considered as a possible cause of epistaxis.

Tuberculosis of ear mimicking cholesteatoma

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SUMMARY

Invasion of the temporal bone by the *Mycobacterium tuberculosis* (MB), also known as tuberculosis mastoiditis (TB Mastoid) is one of the rarest forms of extrapulmonary tuberculosis. Jean and Friedmann in 1960 reported that TB mastoiditis accounts 0.04% to 0.9% of all Chronic Suppurative Otitis Media in the developed countries. An increased in immigrants from Southeast Asia has led to the rising trend in MB diseases in our country. Here, we present 2 cases of TB mastoid in immunocompetent and immunocompromised patients that presented to Hospital Ampang with complaint of unilateral otalgia and otorrhea which did not improve with routine antimicrobial therapy. Otoscopic examination showed granulation tissue occupying the ear canal. Both patients were also complicated with ipsilateral facial nerve palsy and hearing loss. Other cranial nerves were intact. Findings of HRCT of temporal bone for both patients reported as suspicious to an early acquired cholesteatoma with evidence of facial canal erosion, however histopathological examination revealed MB detected from the granulation tissue. Both patients commenced on anti-tuberculosis therapy and showed a good outcome. As a conclusion, the importance of considering a tuberculous infection in cases of otitis media and mastoiditis which do not respond to a conventional antibacterial therapy in both immunocompromised and immunocompetent patients. Early diagnosis with proper treatment of antituberculosis therapy is essential to avoid complication of TB mastoid and for favourable outcome.

Bilateral parotid kimura disease: What we should do in this rare entity?

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SUMMARY

Kimura's disease (KD) is a rare idiopathic chronic inflammatory disorder. The disease usually manifests with unilateral swelling in the soft tissues of the head and neck, typically involving the salivary glands. We report a very rare case of KD with synchronous involvement of bilateral parotid glands. A 62-year-old gentleman presented with painless and slow-growing bilateral parotid swelling for about 15 years. Cosmetic disfigurement due to the swelling was the main reason that the patient sought treatment. On examination, there were bilateral parotid masses measuring about 10.0 x 10.0 cm, which were soft with multiloculated nodules. Bilateral facial nerves were intact. He subsequently underwent right superficial parotidectomy and subcutaneous soft tissue excision. Histopathological examination and immunohistochemical test features are compatible with Kimura disease. Post operatively, facial nerves were intact and he was started on oral steroids. He was not compliant to the oral steroid given. Right parotid swelling recurrence noted during follow-up visit at 4 months post-surgery. KD is a rare idiopathic chronic inflammatory disorder that rarely presents with bilateral parotid involvement. Adequate tissue biopsy needed for pathologists to provide the exact diagnosis. There are several ways to treat KD. In symptomatic cases, surgical excision was the treatment of choice followed by oral steroid. Long-term follow up is needed as KD has a constant risk of recurrence.

Atypical presentation of papillary thyroid carcinoma: Highlight of two cases

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SUMMARY

Papillary thyroid carcinoma (PTC) is the most common form of thyroid malignancy. The majority of PTC cases present with a firm and hard thyroid mass with or without recurrent laryngeal nerve involvement. In advanced cases of PTC, it can cause upper airway and digestive tract compression. The most common site of distant metastases are bones and lungs. The occurrence of florid distant metastases in PTC is a rare occurrence. Here we described two cases of PTC with atypical presentation. First case is a 61-year-old Malay male that presented with a painless, long standing diffuse neck swelling for more than 10 years, in which the neck mass then rapidly increased in size within four-months duration with the appearance of multiple nodular lesions on the overlying skin. Otherwise, he denied any obstructive symptoms like dysphagia and difficulty in breathing. On examination, there was a huge and heterogeneous anterior neck swelling that extends from the posterior border of sternomastoid muscle to the contralateral muscle. It was firm in consistency with presence of multiple skin nodules measuring 1.0cm x 1.0cm. Laryngoscopy showed patent laryngeal inlet with normal bilateral vocal cord mobility. The fine needle aspiration cytology (FNAC) was reported as PTC and contrasted CT of the neck revealed a thyroid mass that encasing bilateral carotid sheath and compressed the trachea with poor fat plane between the skin nodules and underlying subcutaneous tissue. The case was deemed inoperable, and he received chemotherapy with good response with the shrinking of the skin nodules. Second case is a 62-year-old Malay mlae, who presented with painless swelling at the left anterolateral neck, anterior chest wall, and right periorbital that gradually increased in size. Due to increasing swelling of the right periorbital, his right sided vision was also gradually reduced. There were no obstructive symptoms such as noisy breathing, dyspnea, dysphagia. There was also no hoarseness and aspiration symptoms noted. Urgent FNAC from the masses revealed metastatic cells in consistence with PTC. CT of the base of skull to thorax showed a lobulated enhancing mass at superolateral wall or right orbit with bony erosions with retro orbital extension. On the neck region, there was an ill defined heterogeneous mass at left thyroid gland which extend inferiorly to the manubrium sterna. There were also multiple metastases to the bone, cervical and mediastinal lymph nodes and lung. This patient defaulted his oncology appointment and represented with progressive orbital, sternum, neck and lung metastases. In both of cases, we highlight the atypical presentation of thyroid malignancy in which the orbital, cutaneous and sternal involvement are extremely rare.

Kawasaki Disease masquerading as retropharyngeal oedema

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SUMMARY

Kawasaki disease (KD) is also known as acute febrile mucocutaneous lymph node syndrome. It can present atypically as retropharyngeal pathology. A previously healthy 6-year-old child presented with fever for 3 days with odynophagia and bilateral cervical lymphadenopathy. Despite the systemic antibiotic, his clinical symptoms did not improve. Fiberoptic endoscopy showed oedematous mucosal tissue over the right posterior naso-orpharyngeal wall. Imaging of the neck showed retropharyngeal oedema with no obvious collection. Over the course of disease, the child developed lips erythema and desquamation. Further blood investigations showed anaemia, leukocytosis, thrombocytosis, raised ESR and hypoalbuminemia. Prompt discussion between otorhinolaryngologist and paediatricians concluded that the child should be treated as incomplete KD, and the child was started on immunoglobulin. Fever subsided and the child improved clinically. Echocardiography showed normal cardiac structures and coronary arteries. No surgical intervention was performed on the child. KD is an acute systemic vasculitis of unknown aetiology, which commonly affects children under 5 years old. Retropharyngeal lesions are formed by local inflammation and oedema or deep neck lymphadenopathy. Positive laboratory criteria include raised CRP and ESR, hypoalbuminemia, anaemia, raised ALT, thrombocytosis, raised WBC and urine WBC of 10/hpf or more. A diagnosis of incomplete KD is made if 3 or more laboratory criteria are fulfilled. The treatment for KD is a single dose of IVIG, and aspirin to prevent cardiac complications. KD can present as retropharyngeal pathology. Early initiation of IVIG is crucial to prevent unnecessary operations and complications of KD.

A combined tracheal opening and endoscopic procedure for removal of an aspirated foreign body

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SUMMARY

Foreign body (FB) aspiration is a common encountered emergency in the paediatric age group. Aspirated FB can be removed via trans-oral route with the assistance of endoscopic instruments and some may require transtracheal opening. An 8-year-old boy was brought to the Emergency Department for choking a piece of toy. He was turning blue, held his neck and started coughing after the incidence. He regained his breath several seconds later after being given several back blows by his father. On examination, he was not tachypnoeic and no audible stridor with equal air entry on lung auscultation. His oxygen saturation only 92% under room air. Flexible Naso-Pharyngo-Laryngoscopy (FNPLS), chest and neck radiograph performed were unremarkable to suggest a FB. He underwent emergency diagnostic and therapeutic direct laryngoscopy and ventilating bronchoscopy for a suspected FB aspiration. The patient regurgitated clear fluid during laryngoscopy which later proceed with intubation to protect the airway and prevent aspiration. A flexible bronchoscopy performed via ETT to confirmed the present of the FB. The ETT was removed and a ventilating rigid bronchoscopy was performed. The FB was grasped with optical forceps, however the withdrawal was halted at the level of subglottis. Small manipulation of the FB will obstruct airflow through the pinpoint hole of the FB resulting in desaturations. Therefore, a decision was made to remove the FB through trachea opening. Tracheostomy tube was inserted in view of possibility of trachea and subglottic edema post procedure. Foreign body aspiration should be suspected in children with history of choking and physicians must have a low threshold to pursue further diagnostic rigid bronchoscopy. A transtracheal route via a tracheostoma in combination with endoscopic procedure should be considered if the FB is too large to bypass the subglottic.

Ceruminous adenoma of the external auditory canal: A rare neoplasm with benign clinical behaviour

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SUMMARY

Ceruminous adenoma is a rare benign neoplastic cell of the ceruminous glands of the external auditory canal. It accounts for less than 1% of all external auditory canal tumours. Most of the cases reported were adult patients. Few are reported to have recurrence and there are no reported incidents of malignant transformation of the tumour. We present a 34-year-old female patient with a history of progressive hearing loss and tinnitus of the right ear for 2 years. The pure tone audiometry test was reported as right moderate conductive hearing loss. Examination of the right ear revealed a cystic mass with serous content arising from the posterior wall of the right external auditory canal. She underwent wide excision of the cystic mass via trans-canal approach. Histopathology showed a glandular pattern neoplastic cell which exhibited monotonous hyperchromatic nuclei with inconspicuous nucleoli. Histopathology and immunohistochemistry of CK7 staining confirmed it to be benign in nature and was sufficient for diagnosis of ceruminous adenoma. Ceruminous adenomas are rare benign tumours of the external auditory canal which can be treated with wide local excision. Thorough investigation with CT imaging should be used to determine the best modality for excision. Immunohistochemical staining is also needed to ensure the correct diagnosis is made for this rare tumour.

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A rare case of extranodal NK-T cell lymphoma nasal type masquerading as acute peritonsillitis

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SUMMARY

Extranodal natural killer / T-cell lymphoma, nasal type (ENKTCL) is a rare, aggressive extranodal non-Hodgkin lymphoma which is characterized by local destructive necrotizing lesions in midline facial structure. It is strongly linked with Epstein-Barr Virus infection and affected predominantly middle age male. Patients have poor prognosis owing to ENKTCL rapid local progression with early distant dissemination. Hereby we report a 41-year-old lady who presented with worsening sore throat for 2 weeks associated with odynophagia, reduced oral intake, fever and weight loss of 5kgs without seeking any medical attention prior to this. Besides, she complained of intermittent nose block for 1 year. Her oral cavity examination showed no trismus, right base of uvula was ulcerated and extended superiorly to soft palate, right peritonsillar region was inflamed however both tonsils were not enlarged. Flexible scope showed crusting over nasopharynx, fossa of Rossemuller (FOR) was not obliterated with large ulceration over left arytenoid and bilateral pyriform fossa. Histopathological examination (HPE) of the biopsy specimen from the base of uvula revealed necrotic tissue consistent with ulcer and culture grew *Pseudomonas aeruginosa*. There is enhancing ill-defined lesion at left FOR with right tonsillar enlargement visualised on CT neck, thus left FOR biopsy was performed and the HPE revealed atypical lymphoid proliferation. Subsequently, an urgent pan-endoscopy with biopsy was arranged and all samples were reported as ENKTCL. The Serum EBV genome was also detected. The patient had undergone 4 cycles of chemotherapy (SMILE regime) with nasopharynx local irradiation. Unfortunately, prior to completion of six cycles of chemotherapy, she was diagnosed with left frontal brain metastasis secondary to recurrent ENKTCL and also pulmonary tuberculosis. She was started on intensive tuberculosis treatment, but developed drug induced hepatitis. She then succumbed a few days later due to septic shock secondary to hospital acquired pneumonia and metastatic refractory ENKTCL. In conclusion, ENKTCL may masquerade as infection, however high index of suspicion for sinister diagnosis if prolong sore throat or non-healing ulceration despite given adequate antibiotic. Initial results of necrotic tissue from the uvula biopsy most likely due to superficial sampling of tissue hence deeper tissue biopsy for diagnosis is pertinent. Localize ENKTCL require multimodality approach whereas advanced or relapsed/refractory ENKTCL has better outcome with L-asparaginase containing regimes chemotherapy than usual anthracyclines-based regimes as ENKTCL express multidrug resistant P-glycoprotein. Therefore, quantification of plasma EBV DNA is mandatory for monitoring response and prognostication.

A diagnostic challenge: Nodular fasciitis as a great mimicker of soft tissue sarcoma

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SUMMARY

Nodular fasciitis, also known as “pseudosarcomatous fasciitis” is a benign soft tissue tumour. Its diagnosis remains a challenge as it is clinically indistinguishable from soft tissue malignancy. We present a case of a 12-year-old boy with the complaint of 1 year history of painless swelling over the left zygomatic region. It was insidious, rapidly enlarging for 2 weeks, with no prior trauma. Clinically, there is an immobile subcutaneous mass over the left zygoma measuring 2x2cm, non-tender, well circumscribed, with firm-to-hard consistency. There is no cervical lymphadenopathy and his skull x-ray was normal. Ultrasound shows superficial ill-defined hypoechoic lesion with vascularity changes. Fine needle aspiration cytology (FNAC) of the lesion shows atypical cells suspicious for malignancy. We proceeded with complete excision of the left zygomatic mass. Its histopathological examination finding is nodular non-capsulated mass, with spindle proliferation arranged in collagenous stroma, in favour of nodular fasciitis. Patient recovered well post operatively and there is no recurrence. Although truly benign, nodular fasciitis can present as painless and rapidly growing subcutaneous mass from underlying muscular fascia mimicking soft tissue malignancy. Generally, histopathological diagnosis is more superior than imaging. Histologically, nodular fasciitis is a spindle cell lesion marked by fibro-myoproliferation within a myxoid stroma. Benign spindle cell proliferations is difficult to interpret using fine needle aspiration (FNA)-smears alone, especially in pseudosarcomatous lesion. Commonly, aspirates are only reported as “atypical cells”. Immunohistochemical stain in a larger tissue sample has more value histologically to exclude sarcomatous lesions. Cellular component of nodular fasciitis demonstrates reactivity towards vimentin (a fibroblast marker), and muscle specific actin. There is limitation of clinical and radiological diagnosis for nodular fasciitis as it mimics the malignant sarcomatous lesion. Interpretation based on fine needle aspiration smears alone is inadequate to confirm benign feature. Hence, immunohistopathological diagnosis by an experienced pathologist greatly help to confirm the diagnosis of nodular fasciitis, differentiating it from a sarcoma.

Surgical approach for a congenital midline cervical cleft: A case report of a rare congenital anomaly

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SUMMARY

Congenital midline cervical cleft (CMCC) is a rare congenital anomaly in neonate with limited cases reported worldwide. It is characterized by a defect in the anterior neck with subcutaneous fibrous cord, a skin tag superiorly, and a sinus tract inferiorly. Treatment is by complete excision and closure of the defect with Z plasty in order to create a tension-free closure and restore contour of the anterior neck. It is recommended from previous literature to perform the surgery as early as possible upon diagnosis for excellent results. We hereby report a Malay boy with CMCC since birth. MRI neck was done at day 19 of life, showing a percutaneous sinus tract extending to the bony surface of the manubrium. Surgery was planned at 2 months of life to prevent contracture formation over the neck. However, it was postponed in view of COVID 19 outbreak. During 4-month follow up, contracture did not set in, however, the serous discharge from the sinus has reduced. He then underwent excision of the midline cervical cleft and Z plasty at the age of 4-months. Postoperative course was uneventful and the patient was discharged well. Follow up at 1 and 3 months postoperatively, showed good wound healing and no evidence of contracture observed. This case highlights that the operation for CMCC can be delayed up to 4 to 6 months of age and the result is similar to early operation.

Nasolacrimal duct malignancy or IgG4 related disease? A curious case report of a nasal vestibule mass and review of literature

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SUMMARY

IgG4-related disease (IgG4-RD) is a fibroinflammatory condition associated with tumefactive lesions at multiple sites which was first recognized in 2001 in a case of autoimmune pancreatitis. We hereby report a rare isolated IgG4-related mass arising from the nasolacrimal duct and hence masquerading as a sinonasal mass. A 59-year-old lady, presented with unprovoked epistaxis over the left nose with a left sinonasal mass on endoscopic examination. Computed tomography (CT) scan of the paranasal sinus, showed a hypodense mass over the left anterior ethmoid sinus encasing the distal septum. Examination under anaesthesia and excision of left nasal mass via endoscopic sinus surgery was done. The histopathological examination showed fibro-inflammatory lesion which consists of lymphohistiocytic infiltrates with a background of vague storiform like pattern fibrosis and presence of emperipolesis. Blood investigation showed raised IgG level pointing towards the diagnosis of IgG4 related disease. Surveillance follow up till 6 months showed no local recurrence on endoscopic examination. This case report highlights the rare case of IgG4-RD arising from the nasolacrimal duct. Nasolacrimal duct tumours tend to be less locally invasive as it grows towards the nasal cavity at its early stages and responds well to systemic steroids after endoscopic excision.

Hidden parapharyngeal extracranial psammomatous meningioma: A diagnostic and surgical dilemma

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SUMMARY

Tumours occurring in the parapharyngeal space are rare and owing to its complex and elaborate anatomy, a variety of tumours may arise in this space. The occurrence of meningioma in this area is uncommon and has been sparsely reported. We report a 36-year-old gentleman with an extracranial meningioma presenting as a chronic painless neck mass of 5 years' duration. It was the recent onset of voice changes and episodes of coughing upon swallowing liquids, that prompted medical attention. Clinically, there was a mass over the right cervical level II extending to the infra-auricular region measuring 4.0 x 4.0 cm, with features of lower cranial nerve palsies evident by deviation of the tongue to the right with immobility of the right vocal fold. Prior fine needle aspirations were inconclusive of cytological interpretation, hence a neck incision biopsy was done which favoured an extracranial psammomatous meningioma. Computed tomography and magnetic resonance imaging demonstrated an enlarging dense heterogenous vascular mass at the right parapharyngeal space with intracranial extradural extension to the skull base. Patient underwent transcervical transparotid surgical exploration to debulk the tumour, which appeared to be laterally adherent to the superficial lobe of parotid. Owing its superior extension to the skull base, partial excision was performed to prevent further unduly complications. The tumour had a bosselated surface measuring 12.0 x 9.0 x 6.0 cm in dimension. A simultaneous right non-selective laryngeal innervation using ansa hypoglossi to the right recurrent laryngeal nerve neurotomy was performed followed by Juvederm® injection laryngoplasty into the right paraglottic space. Post-operatively, neurosurgical consult was attained to address the residual skull base tumour via Gamma Knife stereotactic radiosurgery. Meningiomas and its myriad of presentation poses a diagnostic challenge, particularly when present as a neck mass as seen in this patient, therefore dictating paramount knowledge of its existence in this subsite. The intricacy of surgical removal when intracranial involvement is seen may add to its complexity in managing these patients. With the advent of histopathological diagnosis aided by imaging, methodical treatment strategies may be executed.

Primary nasopharyngeal olfactory neuroblastoma with intracranial extension: A case report

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SUMMARY

Olfactory neuroblastoma (ONB) is a rare malignant tumour commonly arises from basal cells of olfactory epithelium lining the cribriform plate, sectors of the superior turbinate, middle turbinate, and septum. It comprises 2 to 3% of all sinonasal tumours. There are, however, few cases reported where ONB are found to have ectopic origins. We present an unusual case of ONB arising primarily from nasopharynx with intracranial extension. It is in our best interest that only two cases of primary nasopharyngeal olfactory neuroblastoma were reported in accessible English literature, with none reported yet from Malaysia. This is a case report of ectopic ONB arising primarily from nasopharynx from Borneo Sabah. We reviewed English literature published on ONB from 1973 to 2019 and found that there were only 2 reported cases of primary nasopharyngeal ONB. A 53-year-old lady presented to the emergency room with reduced consciousness. She was reported to have one-day duration of severe headache with vomiting, fever for one week, photophobia, neck pain, and altered behaviour for four days. Further history from the family revealed a ten-year history of right frontal headache that was throbbing in nature, with recurrent right sided minimal non-investigated epistaxis for five years. She was subsequently intubated and admitted for intensive care. Urgent CT brain revealed an aggressive nasopharyngeal tumour infiltrating to adjacent sphenoid sinuses, right ethmoid sinus, right nasal cavity, clivus, bilateral greater wings of sphenoid bone, and petrous part of bilateral temporal bones causing expansile bony destruction. The mass also infiltrated the sellar region and cavernous sinus space. Bedside nasal endoscopy was performed and an irregular mass was seen occupying the right nasal cavity, preventing advancement of scope to assess nasopharynx. Histopathological examination of tissue sample taken from the mass confirmed the diagnosis of ONB, Hyams grade 2. Staging CT scan revealed a nasopharyngeal mass extending into the right nasal cavity and paranasal sinuses with base of skull bony destruction and middle cranial fossa extension. No cervical lymph node metastasis - stage group C (Kadish et.al.). No distant metastasis. MRI brain and paranasal sinuses revealed an irregular lobulated enhancing mass, with epicentre within the nasopharynx. The tumour extended into the right nasal cavity, paranasal sinuses and base of skull. Considering the unusual location of tumour origin for olfactory neuroblastoma, a repeated biopsy was performed in operation theatre under general anaesthesia. Histopathological examination of tissue sample supports the diagnosis of ONB. The patient subsequently underwent an operation for tumour debulking. Intraoperatively, most of the tumour was removed, with remnant left at the region of cavernous sinus where bleeding was encountered. Patient eventually passed away two weeks postoperatively at home due to massive bleeding, just before her clinic review date. Primary nasopharyngeal ONB is extremely rare that it has only been reported twice in published literature. Site of origin of ONB can be identified with the help of current radiological investigations. Origin, together with the extent of tumour growth, determine a surgeon's treatment strategy.

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Life threatening cervical necrotizing fasciitis

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SUMMARY

Necrotizing Fasciitis of the head and neck is an uncommon rapidly spreading bacterial infection possibly lethal as it can involve airway. It is frequently seen in immunocompromised patients such as diabetes mellitus and the source of origin usually from oropharynx or teeth. We report a case of necrotizing fasciitis in a diabetic patient who presented to us with shortness of breath and 3 days history of progressive right neck swelling. In view of airway compromised, patient was promptly intubated and admitted in intensive care unit for stabilization prior operation. CT scan revealed extensive emphysema in all neck spaces extending to posterior mediastinal space, right thoracic wall and air fluid level noted in the right retrocrural region. Empirical antibiotic was started and changed accordingly to microorganism isolated. Aggressive wound debridement with proper wound dressing was done. Concurrently, the patient was managed together with cardiothoracic team for mediastinitis and right pleural effusion. Patient was discharged well despite having underlying disease of diabetes mellitus and complicated with airway compromise and descending infection. In order for patient with cervical necrotizing fasciitis to have more favourable outcome, it is crucial to make early diagnosis and the airway cases should be secured promptly. The source of infection can be eradicated with administration of intravenous antibiotic concomitantly with multiple wound debridement and meticulous wound dressing.

Ectopic papillary thyroid carcinoma arising in the background of thyroglossal duct cyst: A case report and discussion on management

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SUMMARY

Carcinoma arising in ectopic thyroid tissue is a rare phenomenon. Ectopic thyroid tissue is most commonly presented in the thyroglossal, lingual and laryngotracheal sites. Only 1% of thyroglossal duct cyst can harbour malignancy, and the majority type identified being papillary carcinoma. Until today, the optimal management of thyroglossal duct cyst carcinoma is still debated. Due to its rarity and unusual manifestation, we present a case of ectopic papillary thyroid carcinoma (PTC) arising in the background of thyroglossal duct cyst with normal thyroid gland tissue. A 43-year-old Malay lady presented with a painless and progressively growing submental mass for 10 months duration. On examination, there was a 3x2cm firm, non-tender mass over submental region. Thyroid function tests results were within normal range. Fine needle aspiration cytology (FNAC) of submental mass showed malignant epithelial cells, with presence of thyroglobulin foci and cystic degeneration. Computed tomography revealed an ill-defined lobulated hypodense lesion seen at the sublingual region measuring approximately 2.9x3.7x3.4 cm with areas of central enhancement associated with calcification. The lesion is just anterior to the hyoid, there was no bony erosion of hyoid bone and the thyroid gland was normal. An enhancing submental and bilateral multiple subcentimeter lymph nodes were noted. The patient underwent excision of tumour with bilateral anterolateral neck dissection. Intraoperatively, the tumour was adhered to the body of hyoid bone, involving mylohyoid muscle and geniohyoid muscle. Tumour was excised along with the body of hyoid bone. The postoperative histopathological report suggestive of a PTC arising in a background of thyroglossal duct cyst in view of focal presence of normal thyroid follicles in the walls of the neoplastic cyst. The hyoid bone is negative for tumor cells infiltration. Bilateral cervical lymph nodes from level I to IV were negative for metastases. After the surgery, the patient was well and scheduled for regular surveillance and follow up. Total thyroidectomy and post-operative radioactive iodine ablation therapy was not done in view of normal thyroid gland on FNAC and ultrasound study. The present case highlighted the possibility of ectopic PTC arising from thyroglossal duct cyst and must always be considered in cases presented with pathological midline mass over the neck. Sistrunk procedure alone is sufficient for those in low risk conditions as shown in this case with uninvolved thyroid gland, size <4cm, age <45 years, no soft tissue invasion, no aggressive malignancy histology, no prior radiation exposure, and no distant metastases. A systematic review has shown that overall prognosis is excellent, with a survival rate of 99.4% and a recurrence rate of 4.3%. Therefore treatment strategies should be based on individualized risk stratification assessment.

Craniofacial fibrous dysplasia: An approach to managing a newly diagnosed benign lesion and a recurrent malignant lesion

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SUMMARY

Fibrous dysplasia is a benign condition where normal bone and marrow are substituted by fibrous tissue and woven bone. Fibrous dysplasia is typically a slow and indolent growth, while a malignant change to sarcoma shows a rapid enlargement and invasion of adjacent vital structures causing functional deficits. Malignant change from underlying fibrous dysplasia to osteosarcoma has been reported in less than 1% of cases. Determining the appropriate treatment in a newly diagnosed fibrous dysplasia and a recurrent malignant osteosarcoma. We report 2 cases of a different scenario. The first case involves a 16-year-old male presented with painless left maxillary swelling for four years, increasing in size and associated with left upper gum swelling. On examination, there was left maxillary fullness of about 2x2cm, bony hard and non-tender. Intraorally noted fullness over the left upper gingiva near 22-23 region. Histopathology report revealed as a benign fibro-osseous lesion. A computed tomography imaging suggestive of left maxillary fibrous dysplasia. After a thorough multidisciplinary team discussion, the decision is for surveillance and monitoring until skeletal maturity is reached. The second case involves a 55-year-old gentleman with recurrent left maxillary osteosarcoma with underlying fibrous dysplasia, who has previously undergone a left total maxillectomy and tumor excision in early 2014 and completed chemoradiation in 2019. The patient presented again with epistaxis for two months associated with left eye protrusion, diplopia, and left-sided headache. On examination, a fungating mass protruding out of the left nostril and intraoral. Radiological imaging shows enlarging tumour in the greater wing of the left sphenoid bone and sphenoid sinus with intraorbital and intracranial involvement. After a multidisciplinary team discussion and considering the risk involved, the patient decided for chemotherapy. The diagnosis and management of craniofacial fibrous dysplasia are partly based on the patient's age and skeletal maturity stage. A conservative approach is mostly encouraged, and surgery to be considered only once skeletal maturity is obtained unless there is malignant transformation or functional deficits.

Schwannoma of the external nose: Report of two cases and literature review

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SUMMARY

Schwannoma, also known as neurilemoma, is a benign neoplasm which takes origin from the peripheral nerve sheath. Such a tumor possesses a slow-growing and protracted nature, mimicking other common occurring benign nasal mass. Herein, the authors report two cases of neurilemoma of the external nose that were successfully excised. The clinical manifestations and management are described along with the literature review. External nasal schwannomas of the nasolabial fold and dorsum were described in case report 1 and 2, respectively. Clinical manifestations of firm, well-circumscribed nodular masses with smooth surfaces were illustrated in both cases. A computerized tomography (CT) of the paranasal sinuses were performed in the second case, revealing a heterogeneous lesion with an ill-defined margin over the nasal bridge, with a clear fat plane between the lesion and the nasal bone. Complete excision of the Schwannomas was achieved in both cases with good aesthetic outcome. Final histopathology findings of Antoni A and B bodies confirmed the diagnosis of schwannoma. The management of a schwannoma of the external nose revolves around the functional and aesthetic outcome. A complete extirpation of an external nasal schwannoma while preserving the cosmesis cannot be overemphasized. Surgical intervention should only be counselled after weighting between its risk and benefits.

Silent massive bleeding from an ectopic lingual thyroid: A case report

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SUMMARY

Ectopic lingual thyroid is a rare embryological defect of the thyroid gland characterised by the presence of thyroid tissue located in a site different from the normal pre-tracheal region. It occurs due to failure of descent of the gland early in the course of embryogenesis. It can be found around the course of the thyroglossal duct from foramen cecum to pre-tracheal region. The lingual thyroid is frequently asymptomatic, but may cause local symptoms such as dysphagia, dysphonia, upper airway obstruction and hypothyroidism. Treatment depends on whether the lingual thyroid is the only functional thyroid tissue and the manner of presentation. Our report is aimed at the rare presentation of life threatening bleeding from an ectopic lingual thyroid. We present a case of a 49 year old lady with more than 30 years history of uninvestigated muffled voice. She presented with sudden onset of torrential hematemesis with a drop in haemoglobin level down to 3mg/dl. In view of her massive bleeding and shock status, emergency excision was done as a lifesaving procedure. Examination under anaesthesia and direct laryngoscopy was done, and revealed a large actively bleeding lingual thyroid. The ectopic thyroid was excised per orally and its base cauterized till bleeding arrested. Massive bleeding in the ectopic lingual thyroid can be life threatening and occasionally fatal. Surgical excision is still the best treatment option in an emergency situation, despite the possibility of it being the only functioning thyroid tissue.

Olfactory neuroblastoma with acute ophthalmic manifestation: An unusual presentation

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SUMMARY

Olfactory neuroblastoma or also referred to as esthesioneuroblastoma, is a rare neuroectodermal malignant tumor originating from the olfactory neuroepithelium. Olfactory neuroblastoma constitutes about 2-6% of all malignancies of the nasal cavity and paranasal sinuses. It has bimodal distribution, highest in the second and sixth decades of life. We report a case of olfactory neuroblastoma with an unusual acute ophthalmic manifestation instead of the common nasal and olfactory symptoms. A healthy 63-year-old gentleman, presented with chief complaint of sudden loss of vision over his left eye and intermittent giddiness for the past 2 months. On examination, there was left lateral rectus palsy. Visual acuity testing and light reflex showed no light perception over the left eye. The right eye examination was normal and there was no palpable cervical lymph node. Rigid nasoendoscopy revealed a huge, lobulated, reddish and non-pulsatile mass over the left osteomeatal complex. A tissue biopsy was taken and reported as olfactory neuroblastoma, Hyams histological grade II. Magnetic resonance imaging of the brain and orbit revealed a large extra-axial anterior cranial fossa tumor with extensive infiltration to the skull base and left orbit, Kadish stage C. Eventually, he was referred to the Oncology team for chemoradiation, as he was not keen for surgery. In contrast to the expected olfactory and nasal manifestation, orbital symptoms may occur in such patients. Therefore, it is important to be aware of this malignancy because some patients may only present with ophthalmic signs such as external ophthalmoplegia, proptosis, or compressive optic neuropathy.

Benign exophytic sinonasal papilloma of the sphenoid sinus mimicking a malignant tumour: A case report

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SUMMARY

Exophytic papillomas frequently arise from the nasal septum. They occur predominantly in younger age group especially in males compared to other subtypes. Most present unilaterally and have exceptionally low percentages of malignant transformation. They rarely present in the paranasal sinuses. In this case report, we discuss a case of exophytic sinonasal papilloma in the sphenoid sinus mimicking a malignant tumour with extensive destruction of the skull base with intracranial extension. A 68-year-old lady with underlying hypertension and diabetes mellitus, presented with a history of blood stained mucous discharge for the past 5 months associated with rhinorrhoea, sneezing, occasional headache and had no complaints of visual abnormalities. Other systemic reviews were unremarkable. Nasal endoscopy revealed a smooth, reddish mass at the left sphenoidal recess. A contrast enhanced computed tomography and magnetic resonance imaging of the brain and paranasal sinuses revealed a large destructive mass in the sphenoid sinus with local infiltration of the skull base and intracranial extension which was suggestive of a malignant tumour. She subsequently underwent endoscopic sphenoidotomy and biopsy. Biopsy revealed a benign exophytic sinonasal papilloma. Sinonasal papillomas are benign epithelial neoplasms arising from Schneiderian mucosa. Age, history of chronic rhinosinusitis and papilloma location were found to be statistically significant predictors for papilloma subtype. The incidence of exophytic papillomas and malignant transformation are extremely rare as they are almost exclusively confined to the septum. With the help of endoscopic advancements, good surgical clearance can be achieved safely even for an extensive sinonasal tumour with skull base and intracranial extension.

Supposed otolaryngology emergency which presents late: Bilateral congenital choanal atresia

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SUMMARY

Choanal atresia is the congenital obstruction of the posterior nasal cavity, and encountered at a rate of 1 in 5000 to 1 in 8000 live births, with slight female preponderance. Bilateral congenital choanal atresia always presents as upper airway emergency where the newborn shows respiratory distress, cyanosis, apnoea which are relieved by crying. We report a rare case of bilateral congenital choanal atresia which has escaped detection of during her neonatal period. A 5-year-old girl presented to our otolaryngology clinic with bilateral persistent nasal blockage and rhinorrhea since birth. Besides, parents noticed that the child had persistent mouth breathing and did not seem to be interested in food stuff that most children were. She had never experienced any respiratory distress or cyanosis thus far. The diagnosis of bilateral mixed bony/membranous choanal atresia was made via endoscopic examination and computed tomography (CT). Transnasal endoscopic surgery was performed under general anaesthesia where a cruciate incision was made onto the atretic membrane with gradual dilatation using modified endotracheal tube and the edges was injected with mitomycin C (0.4mg/ml). Single stent (Size 8 French Ryle's tube) was inserted and removed under general anaesthesia 6 weeks later. Post-operative at 6 months, there was partial restenosis at the right side, but the left side remained wide open. She is currently well and asymptomatic 3 years post-operatively. Choanal atresia is a rare entity especially if it escapes through the neonatal period without being detected. It may be misdiagnosed as allergic rhinitis or chronic rhinosinusitis if not properly examined particularly in children who are not cooperative with office procedures such as feeding tube passage or endoscopic examination. Sensation of smell may not revert to normal after successful surgery, but the relief of nasal blockage and rhinorrhea definitely helps in quality of life of patients.

A curious case of Syphilis causing retropharyngeal abscess with airway compromise: Are we missing a common etiology?

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SUMMARY

Retropharyngeal abscess is a deep neck space collection arising from the space bounded by the buccopharyngeal and prevertebral fascia. While a retropharyngeal abscess is a widely known complication of upper airway infection caused by polymicrobial infection, *treponema pallidum* can often be missed as it is rarely associated with retropharyngeal abscess. A 30-year-old gentleman had presented with sore throat, dysphagia, odynophagia, limited neck movement and fever for 3 days. Clinical examination revealed a bulging posterior oropharyngeal wall compromising the upper airway. An intra-oral drainage of the oropharynx was then done and he was kept in intensive care for 1 week. He had responded well to conventional syphilis treatment using penicillin group antibiotics and was discharged after being warded for 2 weeks. RPR yielded a titre of 1:128 and TPPA was positive. Light microscopy revealed characteristic spirochetes based on swab cultures from the retropharyngeal abscess. CECT neck and plain lateral neck radiograph revealed a collection at retropharyngeal region extending from C2 to C4 level with multiple cervical lymphadenopathy. Our case demonstrates the rare case of *treponema pallidum* causing a retropharyngeal abscess. As syphilis is sexually transmitted disease, it is often not the primary choice of investigation in a retropharyngeal abscess. Hence, the authors recommend performing regular viral and *treponema* screening for retropharyngeal abscesses with no known source of extension based.

T-Tube in a complete subglottic stenosis: Is it worthwhile?

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SUMMARY

Laryngotracheal stenosis causes significant morbidity to the airway, and speech. In a complete airway stenosis, open resection and anastomosis surgery remains the mainstay. Airway stenting using T-tube is not a traditional indication for a complete airway stenosis due to lack of epithelized lumen to be augmented. Open surgical intervention such as laryngotracheal resection along with end-to-end anastomosis is the choice of treatment in complete subglottic stenosis. However, this surgical intervention is contraindicated in patients with multiple comorbidities and unacceptable anesthetic risks. We highlight a patient with multiple comorbidities and complete subglottic stenosis following prolonged intubation in a setting where open surgery was contraindicated. He was alternatively managed with T-tube stenting and developed a complicated early postoperative period, which later stabilized after 2 months. Open surgical intervention such as laryngotracheal resection along with end-to-end anastomosis is the choice of treatment in complete subglottic stenosis. However, this surgical intervention is contraindicated in patients with multiple comorbidities and unacceptable anesthetic risks. Hence, we try to provide the alternative way for the patient for airway stenting as well as voice demand.

Primary laryngeal tuberculosis manifested as unilateral irregular vocal fold lesion

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SUMMARY

Introduction: Laryngeal tuberculosis (LTB) accounts for <1% of the cases of extrapulmonary tuberculosis. The absence of pathognomonic symptoms of LTB and its evolving clinical manifestations in recent years causes a diagnostic dilemma and delay in treatment. Combined diagnostic techniques with particular attention to the utility of Xpert MTB/RIF assay may provide a definitive diagnosis of LTB. **Methods:** Retrospective review of the last two years' medical records in a Malaysian tertiary hospital. **Results:** We report three patients aged 31, 70 and 73 years respectively, presented with hoarseness for 1 to 24 months. Flexible laryngoscopy in all three cases showed a similar finding of irregular mucosa involving the entire length of unilateral vocal fold. Mucosal waves were absent on stroboscopic examination. They were diagnosed to have primary LTB by tissue specimen sent for Xpert MTB/RIF assay and subsequently commenced on anti-tuberculous therapy. The clinical course and response to the treatment were diverse, in which the first and third case showed good response whilst the second case developed disseminated tuberculosis during treatment. **Conclusion:** With the emergence of LTB with atypical morphological appearance, otolaryngologists need to be more vigilant on laryngoscopic findings. LTB must be considered as one of the differential diagnoses in vocal fold mucosal lesions. The laryngeal tissue specimen sent for Xpert MTB/RIF assay is exceedingly beneficial for early detection of *Mycobacterium tuberculosis* infection to achieve a favourable outcome.

A report of two unusual cases of extraluminal migrating foreign bodies in the neck

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SUMMARY

Fish bone ingestion is one of the most common foreign bodies encountered in Malaysia and South East Asia due to the cultural practice of eating unfiletted meat. One of the most feared complications of an ingested foreign body is extraluminal migration into the neck, which can cause morbidity and mortality through life-threatening suppurative and vascular complications. We report two cases of extraluminal migrating fish bone. In the first case, the fish bone migrated from the esophagus into the left thyroid gland causing left thyroid abscess, while in the second case, the fish bone pierced the right carotid sheath and was jarred anterolateral to the right internal carotid artery. We discussed the clinical and radiological evidence of migratory foreign bodies in the neck and the surgical approach that leads to successful outcomes. Both cases gave a history of fish bone ingestion with ipsilateral neck pain showing the presence of a foreign body on lateral neck radiograph but negative rigid esophagoscopy. A Computer Tomography scan confirmed the presence of a foreign body outside the upper aerodigestive tract. The first case underwent neck exploration, which revealed a fish bone embedding the left thyroid gland with abscess formation requiring a left subtotal hemithyroidectomy. The second case underwent neck exploration with the removal of fish bone from the soft tissue adjacent to the internal carotid artery. Both showed good recovery post-operatively. These two case reports highlight the need of suspicion of extraluminal migration of foreign bodies when there is clinical and radiological evidence to support the diagnosis after a negative rigid esophagoscopy. A CT scan is a valuable tool to locate the foreign body and provide a roadmap for surgical intervention that can prevent life-threatening complications.

Nasal myiasis following re-irradiation for sinonasal squamous cell carcinoma: A case report

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SUMMARY

Nasal myiasis is caused by infestation of larvae of flies in the nasal cavity. This is more commonly seen in tropical countries. Maggot infestation is usually caused by poor nasal hygiene. It may cause deformities in the face, nose and to serious infection for example cellulitis, meningitis and death if overwhelming sepsis. Case notes were obtained from Electronic Medical Records. This case report illustrates a man with a history of sinonasal squamous cell carcinoma and was treated with chemotherapy and radiotherapy in 2014. However, unfortunately in June 2015, he presented again with left eye proptosis and was found to have recurrence. He subsequently underwent tumour excision followed by re-irradiation with concurrent chemotherapy in March 2016. 4 months after completion of treatment, he presented with left eye swelling and redness. Nasal endoscopy revealed maggots occupying the entire roof of the nasal cavity. Interestingly, the maggots were captured on magnetic resonance imaging (MRI) scan of the brain and neck! Nasal douching was done with turpentine and he was treated with a course of intravenous antibiotics. Unfortunately, all the maggots were dead and we were unable to identify the species. Subsequently, maggot infection resolved however he was treated multiple times for left pre-septal cellulitis. His condition deteriorated gradually. He was admitted for reduced consciousness. A repeated CT brain revealed possibility of temporal lobe radionecrosis/infection. He experienced gross cerebral edema with hydrocephalus. His condition did not improve despite antibiotics and steroids. He finally succumbed to the disease. This case illustrates challenges of re-irradiation therapy of the sino-nasal cavity and the rare incidence of maggot infestation post radiotherapy.

Role of speech therapy for recurrent laryngeal saccular cyst in adult: A case report

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SUMMARY

A saccular cyst of the larynx is a mucous-filled dilatation of the laryngeal saccule, located between false vocal cords and thyroid cartilage which can be congenital or acquired. It is found to be more prevalent in children which may present with alarming symptoms of airway obstruction as compared to cough and mere voice change in adults. Recurrence of cyst following marsupialization is common and complete surgical removal is the mainstay treatment. We report here a case of recurrent laryngeal saccular cyst which improved with speech therapy. A 28-year-old lady presented with hoarseness and voice fatigue for two months preceded by cough and fever without any upper airway obstruction, dysphagia or voice abuse. Fiberoptic laryngoscopy revealed a globular mass over the right false cord with patent airway. Computed tomography (CT) of the neck revealed a hypodense right vocal cord lesion measuring 1.9 x 1.9 x 2.4 cm displacing right thyroid cartilage laterally. Patient underwent marsupialization of the cyst which drained brownish liquid content. Her hoarseness was briefly resolved until six weeks later when her voice worsened. Examination and repeated CT imaging/scan showed similar lesion over the same site. Patient refused for an excision of the recurrent cyst and was referred for speech therapy. After a few courses of speech therapy, she regained her near normal voice with no obvious cyst endoscopically. To the best of our knowledge, there are no reported cases that includes speech therapy as a treatment of recurrent saccular cyst. Most of the literatures suggested endoscopic or external surgical excision as the treatment of choice for recurrence. Therefore, further studies are needed to evaluate the role of speech therapy in recurrent cases.

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Rare chemotherapy-related tracheoesophageal fistula secondary to lymphoma

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SUMMARY

Tracheoesophageal fistula (TEF) is a rapidly fatal condition where patients usually succumb to death from intractable aspiration pneumonia. Acquired TEF due to neoplastic processes are commonly associated with primary oesophageal or pulmonary carcinoma and it usually develops during or after completion of radiotherapy with/without chemotherapy. Here we report a rare case of post chemotherapy TEF secondary to Hodgkin lymphoma. A 27-year-old lady without any underlying medical condition, presented with diffuse painless neck swelling for 3 months. The mass was progressively increasing in size, associated with low-grade fever, progressive dysphagia, and shortness of breath. Clinical examination revealed a diffuse cervical lymphadenopathy, which was confirmed by a contrasted computed tomography (CT) of the neck. There was also diffuse mediastinal lymphadenopathy. The diagnosis of Hodgkin lymphoma was established from the core needle biopsy of the cervical lymph node. No staging of disease was done for this patient. She was started on a chemotherapy regime consisting of Adriamycin, bleomycin, vinblastine and dacarbazine (ABVD). After second cycle of chemotherapy, she developed multiple episodes of aspiration pneumonia with choking, needed intubation to protect the airway. A massive tracheoesophageal fistula of 2 cm in length, 1.2cm in diameter was detected at the level of C7 from endoscopic esophagoscopy and CT of the neck. After intubation, she was managed conservatively with intravenous antibiotics, feeding gastrostomy and anti-sialagogue but to no avail. Endoscopic insertion of dual stentings for both oesophagus and trachea was performed to provide structural support to maintain luminal patency and to seal the fistula. Tracheal stent was used as well because there was mass effect on the trachea from mediastinal nodes. She recovered from pneumonia gradually and remained asymptomatic with normal oral intake after completion of chemotherapy. Acquired TEF is a rare complication associated with Hodgkin lymphoma and chemotherapy. The exact mechanism of chemotherapy in the formation of TEF is still not fully understood. Dual stenting with airway and oesophageal stent insertion is proven to be safe and effective in managing TEF. It improves quality of life and survival of its patients as well.

An extremely rare case of spindle cell sarcoma in neck

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SUMMARY

Most malignancy in head and neck region is squamous cell in origin. Spindle cell sarcoma is a very rare malignant mesenchymal tumour, which accounts less than 10% of all soft tissue sarcomas and only 1% of all head and neck neoplasms. We describe about the aggressive case of spindle cell sarcoma, which complicated to superior vena cava obstruction leading to sudden death eventually. In this case, the tumour infiltrated vital neck structures compromising the airway and caused IJV thrombosis on the ipsilateral side. The rapid growth of the mass led to SVC obstruction. We planned for tracheostomy, direct laryngoscopy and tracheoscopy and excision of the tumour. Unfortunately, the patient succumbed to the illness. Spindle cell sarcoma may present at any connective tissue areas. It can develop de-novo or secondary to irradiation. Patient may present with various clinical features according to the areas involved with or without constitutional symptoms. The rarity of this sarcoma makes diagnosis difficult, as it needs further pathological staining and expertise. The sarcoma management depending on tumour size, extension and patient general well being. Soft tissue sarcomas are usually treated aggressively by radical surgical excision with oncological safe margin. Subsequent chemotherapy and/or radiation may help in preventing recurrence and prolong patient's survival. Short time surveillance interval with radiographic imaging is beneficial to detect local recurrence early. Advanced spindle cell sarcoma has a poor 5-year survival rate. In conclusion, sarcoma should not be excluded as one of the differential diagnosis in head and neck mass despite of its rarity. Prompt management should be taken for early diagnosis as the malignancy is fatal leading to morbidity even mortality.

Rare organism – *Filobasidium uniguttulatum* causing fungal supraglottitis

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SUMMARY

Primary fungal infection of the larynx with cryptococcal particularly *Filobasidium spp.* is extremely rare disorder. In immunocompetent patients, laryngeal mycosis may represent colonization rather than invasion. The diagnosis is important as the presentation can be misleading, mimicking other laryngeal pathology, specifically laryngeal cancer. The isolated involvement of the larynx is even more unusual making the diagnosis even more challenging. We present a 72-year-old man with a history of odynophagia and dysphagia. Direct laryngoscopy and biopsy confirmed the fungal laryngitis caused by *Filobasidium uniguttulatum*. Although the fungal infection was successfully eradicated, the consequence of severe supraglottic stenosis with deformed larynx left the patient with tracheostomy tube dependent. To our knowledge, this is the first article of *Filobasidium uniguttulatum* infection of larynx has been reported. The clinical presentations, laryngoscopic findings and imaging results of laryngeal infection by *Filobasidium uniguttulatum* may mimic a malignant neoplasm. Multidisciplinary approach involving emergency, ORL, infectious disease and pathology colleagues; is very important in managing this kind of case to avoid death and obtain acceptable outcomes preserving some laryngeal function.

Synchronous tumor of larynx and nasopharynx with literature review

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SUMMARY

Second primary tumors that are detected within 6 months of the first tumor diagnosis are termed synchronous tumors, and those diagnosed after are called metachronous. Second primary tumors of nasopharynx among laryngeal cancer patients are exceptionally rare. Herein a case of synchronous larynx and nasopharynx cancer is reported. A rare case of synchronous cancer of larynx and nasopharynx was studied and discussed. Literature review on SPT of laryngeal cancer was done. A 78-year-old man presented with hoarseness for 3 weeks and reduced hearing. An irregular left vocal cord mass was noted by endoscopic examination during the first clinic visit. Computer tomography scan done within the same week revealed fullness of the right fossa of Rosenmüller with ill-defined enhancement. There were also lung nodules noted bilaterally. Biopsy from both larynx and nasopharynx revealed 2 distinct histopathology of moderately differentiated squamous cell carcinoma and nonkeratinized undifferentiated carcinoma, respectively. Tracheostomy was required due to disease progression. In view of old age, synchronous tumors of larynx and nasopharynx with lung nodules which signified advance disease stage, patient was managed with palliative treatment. Past case studies on cancer of larynx have shown an increased risk of second primary tumor in patients with advanced age of diagnosis, male gender, early stage of diagnosis and previous radiotherapy treatment. Synchronous tumor was noted to have a lower 5-year survival rate than metachronous tumor. Large case series on the second primary tumor in laryngeal cancer cases revealed lungs as the most common site (31-73%). However, there were very few case reports on cancer of the larynx with nasopharyngeal second primary tumor, of which 4 are synchronous, 1 metachronous and 1 case of unspecified chronology. Management of SPT is often limited by previous treatment of index tumor or advance stage of diagnosis. If deemed treatable, combination of surgery, chemotherapy, and radiotherapy are given whilst palliative management is opted for advance stage. In conclusion, thorough endoscopic examination of the upper aerodigestive tract is compulsory during diagnosis and follow up to detect atypical sites of second primary such as in nasopharynx and improve patient's long-term survival.

Double bubbles on the neck: Bilateral branchial cleft cyst

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SUMMARY

Branchial arch anomalies is the second most common congenital lesion of the neck. Second arch responsible for up to 95% of the anomalies, which 80% of them presented as cyst. It is present most commonly in children, and bilateral presentation in adults is rare. Misdiagnosing may lead to insufficient treatment and recurrence. We report a 23 year-old lady, presented with bilateral neck swelling for one year which slowly increased in size. Apart from the swelling, she has no other symptoms from ear, nose and throat (ENT), nor was there any family history of cancer. She was a non smoker and non alcoholic. Upon examination of the neck, there were bilateral soft cystic masses over level II. The left-sided mass was slightly bigger than the right (2.0 x 3.0cm, 4.0 x 6.0 cm), with well defined margin, non tender and the overlying skin was normal. Other ENT assessment was normal including the nasopharyngolaryngoscopy examination. Fine needle aspiration cytology of the mass revealed hypocellular smear with scattered foamy macrophages, inflammatory cell and proteinaceous fluid. There were no epithelial cells, atypical or malignant cells seen, which was consistent with a cyst. Tuberculosis workups showed negative results. Initial ultrasound of the neck showed presence of bilateral well defined hypoechoic masses with moving echogenic debris seen within it. Computerized tomography scan of the neck confirmed the ultrasound findings. These results are highly suggestive of bilateral type II branchial cleft cyst. She underwent a complete surgical excision of the cyst. Intraoperatively, straw coloured fluid aspirated from both cyst with no sinus extension from cyst seen to the pharynx. Postoperatively, the patient showed a good recovery and HPE showed a cyst lined by a squamous epithelial cell with stroma containing numerous lymphoid tissues, in which confirmed the diagnosis. As conclusion, this case report highlights the need for suspicion of branchial cleft cyst, as a differential diagnosis for all cases presenting with neck swelling for better treatment outcomes. However, thorough investigations need to be done especially in adults cases as malignancy may come with similar presentations.

Oral lesion in Rheumatoid Arthritis

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SUMMARY

Rheumatoid arthritis is one of the main types of connective tissue disease. Although rare, oral mucosal pathology is known to be part of the disease presentation. Anti-rheumatic drugs used in managing the disease are also known to cause oral ulcers. Furthermore, the immunosuppressive state of the disease also exposes the patient to opportunistic infection and malignancy; which may present as oral lesion. We report a case of a patient with underlying rheumatoid arthritis presented with chronic oral ulcer. A 63 years old lady, presented with a painful tip of tongue ulcer for one month. She denied any history of trauma or frequent biting. She did not smoke or drank alcohol. She has an underlying rheumatoid arthritis, and currently is on weekly oral methotrexate and daily oral folic acid. Intraoral examination showed 0.5cm superficial ulcer at the tip of the tongue, with a whitish bed and induration area surrounding it. Otherwise, no discharge or bleeding seen. No obvious sharp tooth edges seen. Other ENT examinations were unremarkable. Biopsy of the tip of ulcer was reported as consistent with ulcer, no evidence of malignancy and GMS staining for fungal was negative. She was treated with 2 weeks of oral antibiotics, unfortunately the treatment failed. Discussions and referrals were made to the rheumatologist and dentist. The oral methotrexate was temporarily withheld and the patient was advised on compliance to folic acid. She was also arranged for scaling over teeth with sharp edges near the ulcer by the dental team. Subsequently, the case was discussed with the infectious disease team in view of no improvement of symptoms by the third week of watchful follow up. A trial of oral antifungal was commenced. At review after 6 weeks post antifungal treatment, the patient's symptoms subsided and the ulceration resolved entirely. Chronic oral ulcer presented in rheumatoid arthritis patients remains a diagnostic challenge and warranted multidisciplinary management.

Kissing in the retropharynx

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SUMMARY

Aberrancy of the carotid arteries in the neck has interchangeable terms and may present as submucosal masses in posterior pharyngeal wall. Although most of the time are asymptomatic, certain extreme aberrant was associated with increase risk of dissection, stroke and injury during surgery. We report a case of patient presented with 'kissing carotid artery'. A 62years old lady, presented with foreign body sensation over throat for 1 week associated with halitosis. She denied any odynophagia, dysphagia or fever. No history foreign body ingestion, change in voice or stridor. On examination noted patient was alert and not septic looking. Neck and oral cavity examination was normal. Flexible nasopharynxlaryngoscopy revealed bilateral paramedian pulsatile mass over posterior pharyngeal wall, starting at the level of base of tongue till tip of arytenoids, it was not compromising the airway and pulsation was synchronized with the radial pulse. Otherwise, the overlying mucosa was normal, no other mass was seen and vocal cord was mobile. Initial lateral neck xray did not showed any widening of preveterbral space. We proceed with CT neck and angiogram which showed abnormal course of bilateral carotid artery. In the imaging, the proximal portion of both common carotid arteries runs within the carotid space up to C5 vertebral level. At the level of C3/C4, the common carotid arteries course in the retropharyngeal space and abuts the oropharyngeal wall. Here, significant medialization of the left posterolateral pharyngeal wall was seen. The distance between both arteries are 0.4 cm in between, giving the appearance of kissing carotid. Superiorly, both left internal carotid and external carotid artery to run along the normal course of vascular anatomy. On the right side, the proximal segment right internal carotid artery appears to run along the midline of C2/C3 vertebra, for a length of 2cm. Then, superiorly, both right internal carotid artery and external carotid artery appear to run along the normal course of the vascular anatomy. No aneurysmal dilatation, intimal flap or arteriovenous malformation of this vessel. CT result was informed, and reassurance given to the patient. She was then followed up yearly. In conclusion, one must know anatomical variant carotid artery in the neck before embarking on any procedure or surgical intervention as catastrophic complication may arise.

Supraglottic non-Hodgkin B-cell lymphoma – A case report

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SUMMARY

The head and neck are the second most common region for the extra-nodal lymphomas which accounts for 2.5% of total world population. Isolated presentation of laryngeal and hypopharyngeal lymphoma is rare, accounting for about 1% of all laryngeal tumours, predominantly the B-cell phenotype. The most common laryngeal neoplasm is squamous cell carcinoma which accounts for about more than 90% of all laryngeal tumours, hence making the laryngeal lymphoma a rare event. Extra-nodal Non-Hodgkin Lymphoma(NHL) in epiglottis is extremely rare, accounting for 0.7% of all NHL and 1% of laryngeal tumours. In Malaysia there is only 1 case reported in 2018. We are presenting a case of 72-year-old Malay lady with underlying Diabetes Mellitus, Hypertension, and Ischaemic Heart Disease with primary extra-nodal epiglottic lymphoma who presented with a history of foreign body sensation in the throat and throat pain for a month. No shortness of breath or noisy breathing. No history of loss of weight or appetite, and no history suggestive of B symptoms of lymphoma. Intraoral examination was normal, however on 70-degree endoscopic examination of the throat, revealed a mass over the right lingual surface of the epiglottis. Other laryngeal structures were normal, vocal cord were mobile and symmetrical. Biopsy from the mass was taken and reported as diffused large B-cell Non-Hodgkin Lymphoma. CT scan was done and revealed the epiglottic mass with scattered lung nodules suggestive of lung metastasis. She was referred to a Haematologist for further treatment. Due to the small number of cases, no proper treatment guidelines were available, however, there were treatment modalities such as concurrent chemotherapy or just radiotherapy. Patient had undergone 8 cycles of CHOP (cyclophosphamide, Doxorubicine, Vincristine, and Prednisolone) chemotherapy regime, and weekly Rituximab for 4weeks, followed by external radiotherapy. In this case, she started the same regime. Post treatment staging showed improvement over the epiglottic mass but the lung nodules persisted.

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Nasopharyngeal tuberculosis

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SUMMARY

Nasopharyngeal tuberculosis usually presented as a consequence of pulmonary tuberculosis and occurs in 1.9% of patients with pulmonary tuberculosis. However, isolated nasopharyngeal tuberculosis without the lung involvement is extremely rare. We report a recent case of isolated nasopharyngeal tuberculosis which illustrates a diagnostic difficulty. A 30-year-old female healthcare worker presented with one-month history of sore throat, which worsened for 2 weeks and was associated with odynophagia and dysphagia. She denied any fever but has loss of weight. At the presentation she had completed 2 courses of antibiotics. On examination, no cervical lymphadenopathy noted. Rigid nasoendoscopy revealed thick sloughs at nasopharynx extending down to the oropharynx. Multiple tissue biopsies taken for histology, mycobacterium PCR and fungal culture. All were negative as well as infective parameters and connective tissue screening. An empirical antifungal therapy together with antifungal nasal douching were commenced which showed a significant clinical improvement. After 4 weeks, repeated nasopharyngeal biopsy was done and reported as inflamed necrotic tissue with presence of abundant acid-fast bacilli. She was then commenced with anti-tubercular drugs and the symptoms were resolved. In conclusion, symptoms and signs of the nasopharyngeal tuberculosis are not typical, making the diagnosis often difficult and challenging. A proper repetitive tissue biopsy is mandatory in the presence of diagnosis dilemma. Mimicry improvement with antifungal treatment should not deter us from pursuing the diagnosis.

Balloon in the mouth causing congenital stridor

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SUMMARY

Congenital lingual lesions or mass in newborns are rare. A few possible differentials should include congenital lingual cyst, lymphangioma, haemangioma, neurofibroma, lingual thyroid etc. Congenital lingual cyst is uncommon but should be suspected at birth when the tongue appears enlarged by a glistening mass. These anomalies may obstruct the upper aerodigestive tract and can be fatal. A newborn with huge oral cystic lesions must be treated promptly to avoid upper airway obstruction; patients may develop stridor, respiratory difficulties, or swallowing problems. Definitive therapy requires marsupialization or complete excision of the cyst wall under general anaesthesia. We present a case of neonate with a congenital lingual cyst undiagnosed during prenatal follow up. Lingual cysts are a rare congenital lesion. Intraoral cystic lesion should be considered in differential diagnosis in newborn with stridor, respiratory difficulties, or swallowing problems. Early detection and treatment with marsupialization or complete excision of the cyst wall is needed to prevent complication of upper airway obstruction and feeding difficulties.

Recurrent rhinolith: A rare intranasal foreign body in adult male

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SUMMARY

Rhinoliths are an uncommon mineralized deposit (stone like) inside the nasal cavity and often patients are asymptomatic. Rhinoliths are more frequently seen in the paediatric patients. The incidence of adult rhinoliths is rare to be encountered in clinical practise. We report an interesting case of a healthy adult male, who was unaware of the recurrence rhinolith presenting in his left nasal cavity, which was successfully extracted in several pieces by an endoscopic approach under local anaesthesia. From literature review, this is the only second article of recurrent rhinolith in adults that has been reported. Recurrence of rhinolith is very rare, but still a possible entity to occur in adult patients who present with persistent discharge. This is the only second reported case of an uncommon recurrence after the removal of rhinolith. Patients only complain of foul smelling left nasal discharge, without other nasal symptoms. Recurrent rhinoliths in adults may or may not be associated with specific clinical features. The diagnosis was made only after a proper endoscopic nasal examination. Complete removal of rhinolith is the mainstay of treatment.

Vascular sinonasal tumours: A brief experience at Hospital Kuala Lumpur

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SUMMARY

Introduction: Vascular sinonasal tumors are highly vascular, benign, yet locally invasive tumors characterized by a histological diversity. Diagnosis is based on history, physical examination and radiographic findings. Angiography combined with embolization aids surgeons in identifying the main feeding vessels and decreasing intraoperative blood loss. Different approaches to endoscopic surgery would aid surgeons in complete removal of the extensive tumors. **Methods:** Retrospective review of six patients of vascular sinonasal tumor, managed at Hospital Kuala Lumpur was done. All patients had undergone excision through various surgical approaches, preceded by the embolization. **Results:** All patients were male, comprising of various ethnicities, presented with complaints of unilateral nasal blockage, spontaneous epistaxis and hyposmia. These patients presented with advanced tumor stages. The lesions were mainly supplied by the internal maxillary artery. The surgical approaches applied encompassed an endoscopic left wide septectomy, medial maxillectomy and tumor excision for the first case. An endoscopic excision of the sinonasal mass and a right Caldwell Luc approach with right external carotid artery exposure was applied to the second and third case due to the enormity of the tumor. The fourth case was a rare presentation of a 24-year old with a right nasal cavity angiofibroma, in which the endoscopic excision of tumor with a transpterygoid approach was utilized. The fifth case, was a left vascular mass to which a medial maxillectomy, septectomy and a modified Lothrop procedure was performed. Our sixth case was a recurrent angiomatous antrochoanal polyp for which a combined transcranial and endonasal excision was done. All patients recuperated well with no postoperative complications. **Conclusion:** Vascular sinonasal masses do not abide by fixed surgical approaches. Each distinct tumor demands a custom-made approach in its excision. Hence, the surgeon needs to be pliable in his approach towards the tumor. Preoperative angioembolization will minimize the blood loss intraoperatively.

A report of two unusual cases of atypical distance metastasis of breast malignant Phyllodes tumour to oral cavity

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SUMMARY

Malignant Phyllodes tumors are rare breast neoplasms. Dissemination pathways are local with chest wall invasion, regional with lymph nodes metastasis, and distant hematogenous, mostly to the lungs, bones and brain. Metastasis to the oral cavity is rare, one of the complications of systemic cancer and usually develops in the end stage of a cancer. Prognosis for such patients is poor as they are often unresponsive to chemotherapy with high mortality. We report two cases of recurrence of phyllodes breast tumor with metastasis to oral cavity post mastectomy. First case, is a lady diagnosed with phyllodes breast tumor with metastasis to oral cavity within a year of mastectomy and second case, distant metastasis to the tonsil, eight months post mastectomy. They underwent mastectomy and adjuvant chemo radiotherapy however both patients succumb to the disease. The majority of phyllodes tumours carry a good prognosis, however, dissemination to oral cavity tends to have a very dismal clinical outlook oftentimes leading to death.

Carotid Blow-out syndrome: Challenges in management of epistaxis in a post-surgical intervention and radiated patient

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SUMMARY

Recurrent epistaxis is a red flag in post-nasal surgery and previously radiated cancer patients. The incidence of carotid blow-out syndrome is seven times higher in previously radiated patients. Today, nasal endoscopy has become an essential tool in our practice. It helps in identifying the source of bleeding and facilitates therapeutic management. On the other hand, radio imaging is highly sensitive and specific to detect vascular lesions. However, they are not perfect. This paper presents a treated sphenoid sinus carcinoma patient with the right internal carotid thrombosis who presented with sentinel epistaxis. Endoscopic nasal examination and radio imaging failed to identify the bleeder and misled to a wrong source of bleeding. The bleeder was finally detected via the examination under anaesthesia (EUA). The carotid blowout occurred intraoperatively. Management of this patient is extra challenging as the blow-out vessel was the only major blood supply to the anterior cerebral circulation. The haemostasis was secured with a muscular patch and a vascular stent inserted. He was free from the neurological deficit. Unfortunately, profuse epistaxis recurred on post-operative day five. Although nasal packing controlled his recurrent epistaxis, he developed anterior circulation infarct later on and succumbed to death. The authors wish to highlight the importance of EUA if radio imaging does not correlate to the clinical findings. Management options for carotid blow-out should tailor to the patients' medical conditions.

Uncommon initial presentation of nasopharyngeal carcinoma

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SUMMARY

Nasopharyngeal carcinoma (NPC) is a rare malignancy worldwide but relatively common in Malaysia. It usually presents with non-specific symptoms which are not related to the nose. Vision loss as an initial presentation is rare. We report an uncommon presentation of NPC with bilateral visual impairment as initial presenting features. A 47-year-old Chinese gentleman, active chronic smoker with no medical illness, presented to Otorhinolaryngology Department, Hospital Ampang with a complaint of progressive painless bilateral blurring of vision and diplopia for 6 months duration. He developed nose block, epistaxis and neck swelling, 4 months after the initial symptoms. He had significant loss of weight without loss of appetite. On examination, there was fullness over the right cheek but no obvious swelling or mass. His right eye was proptosed, present of esotropia and convergent squint. He was unable to perceive light on the right eye with a counting finger at 2 feet vision on the left eye. Rigid nasoendoscopy revealed a smooth surface friable mass occupying the right nasal cavity and left posterior choana which easily bleed to touch. He also had multiple bilateral cranial nerves palsy (CN II, III, IV, VI, IX, XII) including unilateral left upper motor neuron seventh cranial nerve palsy. CT scan showed a large heterogeneously enhancing mass with epicenter at nasopharynx measuring 9.0 x 7.1 x 6.3 cm with multiple necrotic components. Nasopharyngeal carcinoma may present with a variety of symptoms which are not related to the nose. Patient who presented with visual loss of unknown cause is warrant for nasopharyngeal examination to rule out NPC. Early detection of NPC will improve a patient's quality of life with a good survival rate and better prognosis.

Dermal fat graft for retromandibular depression in salivary glands surgery

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SUMMARY

Salivary glands surgery either parotidectomy or submandibulectomy will result in significant cosmesis deficit due to retromandibular depression postoperatively. This is prominent in the setting of a large salivary gland tumour extirpation. The placement of dermal fat graft will lessen the retromandibular depression, hence enhancing post-operative cosmesis outcomes. This is a case of a 33-year-old Malay lady, presented with a history of right submandibular swelling which gradually increases over 5 years duration. There was no other significant history noted. Clinical examination revealed a 10.0 cm X 8.0 cm right submandibular mass, firm in consistency, and mobile with no other neck nodes palpable. Intraoral examination revealed that the mass was partially ballotable, with no evidence of calculi debris, discharge or inflammation seen at the left wharton duct opening. Ultrasound and fine needle aspiration cytology confirmed it was a pleomorphic adenoma of the right submandibular gland. Right submandibulectomy was performed with abdominal fat grafting. The dermal abdominal fat graft 6.0 cm x7.0 cm, was harvested using a monopolar cautery, after estimating the size of the surgical defect. Both surgical wounds were closed in 2 layers. Postoperatively, at 3 months, there was no significant retromandibular depression observed, and the patient was happy with her aesthetic outcomes. Salivary gland surgery either parotidectomy or submandibulectomy will cause significant retromandibular depression post-operatively. This impairs the cosmesis outcomes which is significant especially in the young patients who had huge tumours. Dermal fat graft has been proven to improve this facial contour defect due to the salivary gland surgery either parotidectomy or submandibulectomy. It is a versatile approach, to improve cosmesis outcomes in post salivary gland surgery. It is easy to harvest and does not cause significant extra time to the surgery.

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When the teeth bites during swallowing

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SUMMARY

Oesophageal perforation post foreign body removal rarely occurs but can lead to fatal complications. The morbidity and mortality related to oesophageal perforation is high, even higher if there is a delay in diagnosis and treatment. The ideal treatment for oesophageal perforation is still controversial between conservative and surgical management. A 44-year-old lady was referred at day two post challenging direct laryngoscopy, oesophagoscopy and foreign body removal (denture) from a nearby hospital. She developed back pain and had an episode of oxygen desaturation two days after the removal of foreign body. Chest x-ray showed a blunted right costophrenic angle. CT scan revealed mediastinitis with air pockets within the mediastinum. She was referred to the upper gastrointestinal surgical team at our centre. Oesophagogastroduodenoscopy was done which confirmed the presence of an oesophageal perforation. Neck exploration and primary repair of the oesophageal perforation was performed. Intraoperatively, there was a long linear full thickness tear over the right lateral wall of the oesophagus with communication into the right pleural cavity at the apex of pleura, measuring 4 cm in length, extending 17cm to 21cm from the incisor. There was another tear at the superficial mucosal over the anterior oesophageal wall, 20cm to 25cm from the incisor. Circumferential dissection was done towards the thoracic inlet. The perforation site muscle and mucosa was trimmed followed by suturing it in 2 layers with absorbable suture 4.0. Continuous suture was performed for the inner layer mucosa and interrupted suture for the outer layer muscle. The proximal and distal end was clipped. The sternal head of sternocleidomastoid muscle was used as a flap to enhance the upper half of the repaired site. Two chest tubes were inserted and size 15 Blake drain was inserted into posterior mediastinum. Post operatively, she was propped up 30 degree, was on nasogastric tube feeding and nil per orally. Chest x-ray post surgical repair revealed no abnormality. One week later, oral contrast study was done which showed no obvious leakage of contrast. She was allowed orally and discharged home well. On subsequent follow up, she was well and able to take a normal diet. Surgical management remains the main modality treatment for a large oesophageal perforation, but for a small perforation, it can be treated conservatively. Mortality rate related to oesophageal perforation ranges between 5% to 40%, worsen by delay diagnosis. If treated after 24 hours of injury, mortality rate can be as high as 50%. A high index of suspicion is required for early diagnosis and intervention.

Anterior advancement flap stomaplasty for stomal stenosis

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SUMMARY

Presence of stomal stenosis post total laryngectomy can impair an effective usage of voice prosthesis for vocal rehabilitation. Thus, it is crucial to address the stomal stenosis with a better surgical technique. A 56-year-old Malay male, presented with a history of hoarseness for 3 months, associated with loss of appetite and loss of weight. Clinical examination revealed a left glottic exophytic mass, extending to anterior commissure and subglottic region. Imaging and tissue diagnosis assessment confirmed it was transglottic squamous cell carcinoma, T3N0M0. Patient underwent total laryngectomy with bilateral selective neck dissection and provox voice prosthesis insertion. At 4 months post-operatively, the patient developed stomal stenosis due to persistent infection at the stoma region. The stomaplasty via anterior advancement flap was performed. The voice prosthesis remains in-situ and the wound heals with a better functioning stomal and the prosthesis remains viable at 1 year post-operatively. Stomal stenosis is a common and dreadful complication of post laryngectomy cases. Once sets in, it is generally progressive and requires active intervention. Optimal function of the prosthesis requires an adequate stoma. The cleaning of the prosthesis also better if patient has sufficient diameter of the stoma. Critical stomal stenosis need surgical widening to facilitate efficient use of voice prosthesis. There are many surgical techniques described but frequently results in re-stenosis. The anterior advancement flap is a simple and effective techniques for stomaplasty. The triangular skin flap is sutured to the laterally splayed trachea to its apex of incision. The resultant stoma is satisfactory which facilitate efficient voice prosthesis usage. Anterior advancement flap is a viable and efficient approach for treating stomal stenosis and facilitate adequate voice prosthesis functioning and vocal rehabilitation.

Overcoming severe upper airway obstruction with lingual tonsillectomy: A case report

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SUMMARY

Tonsillar enlargement can be associated with airway obstruction and is a potential medical emergency. Failure to treat it immediately can be life-threatening. Any form of obstruction then needed to be surgically removed. However, after a routine palatine tonsillectomy, there is a risk of compensatory enlargement of the lingual tonsils causing a more severe upper airway obstruction. A 34-year-old gentleman had a prior history of palatine tonsillectomy following a diagnosis of moderate obstructive sleep apnoea (OSA). There is no history of gastro oesophageal reflux disease (GERD). Over the years, he became more breathless but is tolerable. He presented to us with a month history of worsening of his dyspnoea, with occasional odynophagia, unable to sleep supine and now interfered and affected his daily routines. Flexible fiberoptic laryngoscopy showed a grade 4 lingual tonsils with a Muller's manoeuvre showing more than 50% collapse at the retro lingual level. A computed tomography (CT) scan of neck revealed bilateral and symmetrical enlargement of the lingual tonsils. A repeated polysomnography (PSG) concluded a moderate OSA. A treatment trial with a positive airway pressure (PAP) therapy could not overcome the problem as patient is unable to tolerate the machine. Following a successful lingual tonsillectomy, the patient showed significant improvement in breathing and oral intake while also developing significant dygeusia after the surgery.

Aggressive nodal manifestation of poorly differentiated thyroid carcinoma and its management challenges

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SUMMARY

Poorly differentiated thyroid carcinoma is an intermediate type of thyroid carcinoma with biologic features stands between those of differentiated thyroid carcinoma and anaplastic thyroid carcinoma. It usually manifest at the seventh decade onwards is uncommonly reported in young patient. Nodal manifestation of this disease is common, but none had reported such extensive mediastinal and infraclavicular involvement. We present a 29-year-old male with a long-standing history of thyroid mass which began to develop obstructive symptoms after 4 years. A multidisciplinary team surgery involving total thyroidectomy was performed followed by a challenging neck dissection removing extensive nodal metastasis at the cervical, infraclavicular and mediastinal region. Postoperatively, the patient had a wound break down, hemidiaphragm paresis, and residual neck nodes. Postoperatively, the patient received radioactive iodine ablation therapy and had since been in clinical remission. We have shown that PDTC can present with extensive nodal manifestation and multidisciplinary approach is required especially when there are mediastinal and infraclavicular extensions to achieve locoregional control. In face with extensive nodal manifestation, the role of surgical resection is for a debulking surgery and to improve the efficacy of adjuvant oncological treatment.

Temporalis muscle flap as an option for maxillary defect reconstruction

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SUMMARY

Temporalis muscle is one of the options for reconstruction of intraoral tissue defects following maxillectomy. Using temporalis muscle flap is an advantage especially in elderly, edentulous, and patients that require radiotherapy postoperative where obturator is not possible. A case of a 63-year-old female with a history of nasopharyngeal cancer for more than 30 years completed radiotherapy, presented to our center in September 2019 with a non healing ulcer at the left palatal region communicating with the ipsilateral nasal floor. Intraorally revealed left palate ulcer measured around 2 x 2 cm and endoscopic nasal examination showed left nasal cavity mass which bleed upon touch. The post nasal space was normal and she did not have trismus. Clinically no neck nodes palpable. Histopathological examination of the mass confirmed the diagnosis of non keratinizing squamous cell carcinoma of the palate. CT scan of the base of skull to neck reported as aggressive left palatal soft tissue mass irregular 4.1 x 2.7 x 2.1cm with erosion of nasal septum and extension into contralateral right soft and hard palate. It erodes the inferior medial wall of the left maxillary sinus with intrasinus extension. The left pterygoid bone is eroded with involvement of the left medial pterygoid muscle. The left eustachian tube was obliterated and the ipsilateral nasopharyngeal wall was affected. There were multiple subcentimeter cervical lymphadenopathy. The patient initially refused surgical intervention, therefore underwent 5 cycles of neoadjuvant chemotherapy. The 6th cycle of chemotherapy was withheld due to sepsis. Post neoadjuvant chemotherapy, showed tumour shrinkage. Remnants of the tumour seen at the floor of left nasal cavity. The patient was subjected to extended inferior maxillectomy and the maxillary defect was reconstructed with left temporalis flap. The temporalis flap was used in this case as the patient was edentulous and obturator is not suitable. The operation was uneventful. The patient discharged home a week after operation and was able to take orally after 2 weeks post operative period but limited to a soft and liquid diet without any nasal regurgitation. Otherwise no speech impairment noted. She received postoperative radiotherapy. To date she is at 7 months postoperative period and on regular follow up. The choice of reconstruction depends on many factors that contribute to the outcome including size defect, underlying illness and location of the mass itself. In this case, temporalis flap is an excellent and reliable method for maxillary defect reconstruction as she is edentulous in which the surgical plate/obturator wouldn't be feasible.

Challenges in diagnosing classical Hodgkin's Lymphoma nodular sclerosing type of parotid gland, a rare case: Case report

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SUMMARY

Primary Hodgkin Lymphoma (HL) arising in the parotid gland is extremely rare and only accounts for 4% of primary lymphomas of the salivary glands. Lymphoma is a differential diagnosis for parotid swelling, which can be primarily from parotid parenchyma or intra-parotid lymph nodes. Lymphoma however is a rare entity in primary classical HL. Parotid tumours are usually investigated by FNA (Fine needle aspiration) cytology, FNA may not be able to diagnose lymphoma, leads to parotidectomy to establish the diagnosis of lymphoma post operatively. Here we present a case of a 56 years old gentleman who had superficial parotidectomy done in another hospital, post-surgical histopathological results noted primary classical HL (CHL), nodular sclerosing type. In this case, the diagnosis was made on the surgical specimen following parotidectomy. The FNA of the parotid mass prior to surgery was reactive lymphadenopathy and CT scan revealed features of pleomorphic adenoma. The aim of this case report is to stress the importance of the diagnostic process and combined management of a patient who is diagnosed only after surgery and further being treated oncologically. Histopathological and Immunohistochemistry (IHC) of the parotid specimen revealed nodular sclerosing classical Hodgkin's lymphoma. IHC shows atypical cells are positive for CD30, CD 15 and PAX5. In conclusion, primary CHL of the parotid is extremely rare, and it is very challenging to make a definitive diagnosis of HL by FNA. Lymphoma as differential diagnosis for salivary gland tumors should be considered. It is important for pathologists and surgeons to be aware of this extremely rare entity.

Head and neck reconstruction: The right and the best option

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SUMMARY

Head and neck reconstruction following surgery can be challenging. As cancer patients undergo ablation surgery and chemoradiotherapy, it poses a challenge for a free flap to be successful. Microvascular free flaps have enabled surgeons to achieve functional and esthetic value in a complex defect, however they may face difficulty in micro-anastomosis in case of repeated neck dissection or salvage procedure of free flap failure. Free flap lengthens time of general anesthesia. Furthermore, different skin color and texture of distant donor sites reduce the esthetic value of a reconstruction. Another option to overcome these problems is by using a local flap. We would like to demonstrate some of the local flap success through our case series. First case is a 60 year-old man who is diagnosed with submandibular lymph-epithelial carcinoma. The tumor was localized to a submandibular area, however, it has breached the skin. Primary closure was impossible in this patient thus we decided to use supraclavicular flap. Donor site was closed primarily. A second case was a 40 year-old man diagnosed with squamous cell carcinoma of the lower part of the pinna with involvement of the parotid and ear canal. He underwent lateral temporal bone resection and the defect was reconstructed with cervical flap. In both cases, local flaps were used for reconstruction and it was successful. It shortened operation time and it did not require a reconstructive team to be involved. Esthetically, the flap matched the skin color. In reconstructing head and neck defects, multiple factors such as size, risk of prolonged anesthesia, cosmesis, expertise and function should come into consideration.

Citelli abscess: A rare case

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SUMMARY

Citelli abscess is a complication of otitis media which is rarely encountered nowadays due to the availability of antibiotics. Clinical features include mastoid and occipital swelling, pain and fever. High resolution computed tomography (HRCT) scan of the temporal region can aid in the diagnosis. Early surgical intervention can improve the outcome. A 11-year-old girl presented with a 1 month history of painful right post auricular swelling without any other otological symptoms. On examination, a huge, erythematous and tender swelling involving the post auricular and occipital region was noted. The otological examination was unremarkable. HRCT scan showed right occipital collection with fluid in the mastoid air cells and mastoid wall erosion. The patient underwent a mastoid exploration and right cortical mastoidectomy which revealed copious pus and necrotic tissue at the soft tissue layer overlying the mastoid bone with associated erosion of the mastoid air cells and the bony covering of the transverse and sigmoid sinus. Post operatively, the patient recovered uneventfully after completing 5 days of intravenous antibiotics. At the outpatient clinic visit one month after surgery, the patient was well. Citelli's abscess is rare and may present without any otological clinical features. A high index of clinical suspicion with radiological assessment are essential in arriving at the diagnosis. Early surgical intervention produces good outcomes.

CR-80

Malignancy mimicking as benign neck lesion

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SUMMARY

Thyroglossal duct cysts (TDC) are usually located in the midline of the neck. The coexistence of malignancy in TDC is extremely rare, with the most being papillary carcinomas. Usually, the diagnosis is an incidental finding postoperatively through histopathological examination. Hereby, we report a case of a 30-year-old man presented with painless midline submental swelling for a month. He denies any constitutional symptoms and had no family history of malignancy. A firm swelling measuring around 5 x 4 cm in diameter was palpable and there were no cervical lymphadenopathies. Computed tomography of the neck findings were suggestive of TDC although calcification was identified within the cyst. Subsequently he underwent Sistrunk procedure in which intraoperatively the mass was found to be adhered to the surrounding muscles without clear demarcated capsule. Therefore, a cuff of surrounding tissue was removed during the Sistrunk procedure (wide local excision). The histopathological examination was reported as papillary carcinoma. He was then referred to the endocrine surgeon for further management of TDC papillary carcinoma. The patient was not planned for a total thyroidectomy as yet because he is young (less 45 year old), the tumour size is less 5 cm and margin is negative. To date, which is 4 months postoperative, the patient has been well without evidence of residual disease. TDC malignancy is a very rare tumour which often is only diagnosed postoperatively as an incidental finding on histopathological examination. The initial symptoms of TDC malignancy are indistinguishable from a benign thyroglossal duct cyst. A rapid increase in growth or presence of firm, palpable mass may be signs of malignancy. Computed tomography (CT) or magnetic resonance imaging (MRI), and ultrasound may show a solid mass with invasive features. Surgery remains the cornerstone of treatment. Currently, there are no evidence based consensus clinical guidelines that have been established on the optimal surgical approach and further management of such malignancy. In conclusion, a malignant TDC may mimic a benign neck swelling, hence clinicians should be aware of this disease. The presence of calcification on CT should raise the suspicion of malignancy hence fine needle aspiration cytology is recommended prior to surgery. Currently, there are no evidence based consensus clinical guidelines that have been established on the optimal surgical approach and further management for TDC papillary carcinoma. A multidisciplinary approach should be considered to safely identify high risk patients who require a more aggressive treatment approach and follow up.

A rare extra cardiac rhabdomyoma of the floor of mouth. What can we learn?

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SUMMARY

Extracardiac rhabdomyoma is a rather unusual, slow-growing head and neck tumour. The usual presentation can be neck swelling, foreign body sensation intraoral, or other symptoms based on its location. The primary treatment is a complete surgical incision to avoid recurrence. This is a case of a 56 years old male who presented with floor of mouth swelling for 1 year. The swelling did not cause odynophagia, dysphagia, respiratory problem, or voice changes. He also complained of vague right neck swelling for a few years. On examination, there was a submental swelling measuring 7.0 cm x 2.0cm. There was a firm mass over the right side floor of the mouth. Preoperative MRI reported an ill-defined mass which was isointense on T1W1 and hyperintense on T2W1, involving most of the right hemitongue and extend inferiorly to the right genioglossus, hyoglossus and mylohyoid muscles. He underwent excision of the right submandibular space tumour and transoral resection floor of mouth tumour under general anaesthesia. Histopathology examination reported as extracardiac rhabdomyoma. On subsequent follow-up, there was no evidence of recurrence. Taking a proper history of each patient is very important in managing tumour cases. In a slow growing tumour, benign lesions would be the top list of differential diagnosis. However, we must also rule out malignancy in setting up the diagnosis for this patient because of the patient's age, and most of time, salivary gland neoplasms of the floor of the mouth are more often malignant than benign. Radiological imaging is an essential modality, where we can assess the extension of the tumour to properly plan for a surgery. We must avoid extensive mutilating surgery in managing benign tumours of the floor of the mouth,, but complete excision is definitely the aim of the surgery to prevent recurrence.

Hole in the neck! A case of cervical necrotizing fasciitis

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SUMMARY

Cervical necrotizing fasciitis is an uncommon, life-threatening, involving single or polymicrobial infection. It spreads along the fascial planes and subcutaneous tissue resulting in extensive skin and tissue necrosis and lethal death. Management includes early diagnosis, prompt surgical debridement, controlling underlying illnesses; broad spectrum antibiotic coverage and proper wound dressing. We report a rare case of a young and fit gentleman presented with cervical necrotizing fasciitis. A 33-year-old Indonesian male with no significant co-morbid, presented with progressive neck swelling, associated with pain and discharge over 2 weeks duration. There were neither signs of airway impairment nor tooth infections. On examination showed a huge anterior neck defect with absence of skin and necrotic surrounding edges; measuring about 10cm x 8cm exposing the underlying muscles with foul smelling discharge. His blood parameters were impeccable including his blood sugar. However, there were noticeable signs of aspiration with mild dehydration. He was admitted, broad-spectrum antibiotics empirically administered. A computed tomography (CT) scan neck was done which showed extensive air pockets at the level of hyoid until the sternal notch, involving anterior and bilateral lateral neck region, extending into deep fascia and pretracheal layers. No hypodense collection seen. Neck exploration and wound debridement was performed. Subsequently, he received special dressing for his wound and was finally discharged home safely. Unfortunately, he did not return for follow-up. Cervical necrotizing fasciitis is a severe and fulminant infection. Early diagnosis and treatment are necessary to reduce mortality. Quick and prompt surgery associated to antibiotic therapy is the most important factor in improving prognosis.

The Baby Cries..”What Happened To Your Face?”

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SUMMARY

Facial paralysis in a child is rare, and can be congenital or acquired. A majority of cases resolve on their own, as commonly it is a result of Bell's palsy. Bell's palsy with cytomegalovirus is not common. Therefore, making it the first ever encounter at our centre. An 11-month-old boy who presented with facial asymmetry for 2 days. He had no history of trauma or evidence of recent ear infection. Parents noticed significant changes in the child's expression during playing and feeding, which alerted them to seek medical attention. Otherwise, the child was healthy. Antenatal history was uneventful. On examination, the patient had a lower motor neuron, right sided facial nerve palsy, House Brackmann (HB) Grade IV. Neurological assessments including the cranial nerves were intact. Other ENT assessments were unremarkable, including hearing tests. Right-sided Bell's palsy was diagnosed and was started on a 5-week course of oral prednisolone, in tapering doses and a short course of empirical antibiotics. Facial physiotherapy was given for muscle strengthening. Many laboratory tests including immunological and infectious screening were done on the 3rd day of illness, which later resulted in positive serum Polymerase Chain Reaction (PCR) for cytomegalovirus. High-resolution computed tomography (HRCT) scan of temporal bone showed a normal course of the facial canal with no significant abnormalities. Initial recovery was slow, but progressed well to complete resolution after 3 months of rehabilitation. Bell's palsy is rare in infants. Its causes are unknown or idiopathic. Therefore, careful diagnostic workout is essential in order to rule out other serious illnesses which may cause serious morbidity to the child.

Fungal sinusitis with unresolved facial nerve palsy

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SUMMARY

Fungal sinusitis is an infection of paranasal sinus caused by the fungi. The commonest pathogens are Aspergillosis and Mucormycosis. The maxillary and ethmoid sinuses are the most common sinuses to be affected. However, it may be present in sphenoid sinus as well. Involvement of frontal sinus is rare. Fungal sinusitis can be divided into an invasive and non-invasive form, depending on invasion of mucosal layer and bone destruction. Predisposing factors are immunocompromised patients who for example have uncontrolled diabetes mellitus, malignancy, end stage renal disease and prolonged corticosteroid use. We report a case of a 55-year-old woman initially admitted under medical and OMFS team for diabetic ketoacidosis secondary to right buccal abscess. She presented with 3 weeks history of right facial asymmetry and right cheek swelling. Patient had a history of tooth extraction for tooth pain 5 days prior to the onset of the symptoms. Case was referred to the ORL team later as noted the CT brain showed soft tissue lesion at right maxillary sinus with bony erosion of the wall of right maxillary and sphenoid sinuses with right infraorbital foramen. Despite completing antifungal medication (itraconazole) and undergoing operation (Functional Endoscopic Sinus Surgery), the facial nerve palsy still showed no improvement. Rigid right nasal endoscopic findings during follow up showed clear right maxillary antrum with no new mass or remnant seen. Swelling at the right cheek also completely resolved. It is important to diagnose and start treatment early as late diagnosis and treatment may cause severe or even fatal complications.

Primary laryngeal lymphoma, mistaken identity of laryngeal polyp in an upper airway emergency. A Case Report

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SUMMARY

Upper airway obstruction is an emergency; it is secondary to laryngeal mass. Can be due to benign or malignant. The onset of symptoms and progression of the disease is the main presentation to highlight that can guide clinicians in the differential diagnosis. An unusual condition, extranodal lymphoma involving the larynx is exceedingly rare, estimating about less than 1% of all primary laryngeal. Salivary glands, thyroid, nasopharynx, and tonsils are the most lymphomas involved compared to the larynx. In emergency medicine, an important skill is to recognise uncommon diseases that can prevent a fatal outcome. We report a case of primary laryngeal lymphoma because, despite rarity, the consequences of missed diagnosis as laryngeal polyp during performed bedside flexible scope and warrant surgical excision of mass despite the contraindication in laryngeal lymphoma because of management of airway obstruction. In a nutshell, making a diagnosis of primary laryngeal lymphoma is not easy based on the clinical presentation and tumour appearance. Laryngeal lymphoma presents clinically in a similar manner to squamous cell carcinoma (SCC), with symptoms such as foreign body sensation throat, hoarseness, stridor or dyspnoea. Uncommonly, it may present devastatingly with acute airway obstruction requiring immediate surgical intervention, as presented in our case. Clinician tends to make a presumptive diagnosis of laryngeal squamous cell carcinoma instead of the laryngeal lymphoma due to its rarity. Nonetheless, we should always consider lymphoma as one of the differential diagnosis when dealing with head and neck neoplasm even though it is rare. Primary laryngeal lymphoma showed a good response if treated with chemoradiotherapy. Hence, histology examination with ancillary studies of the biopsied tissue is mandatory to establish the diagnosis and avoid unnecessary surgical intervention.

Basaloid squamous cell carcinoma of soft palate: A rare case report

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SUMMARY

Basaloid squamous cell carcinoma (BSCC) is a histologically distinct variant of squamous cell carcinoma (SCC). It occurs in various sites of the head and neck region and is believed to carry a dismal prognosis. The palate is a rare site of BSCC development. The objective of this case report is to present a rare site of BSCC, the importance of complete ENT examination and early histopathological diagnosis especially in high risk patients. We describe a case of a 46-year-old Indian man who presented to us with right ear pain for two months. He is a smoker and consumes alcohol occasionally. Otoscopic examination revealed signs of acute otitis externa. During oral cavity examination, there was leukoplakia over the left soft palate extending to the anterior pillar which was an incidental finding. The patient denied having dysphagia, odynophagia, hoarseness or neck swelling. Flexible nasopharyngolaryngoscopy examination showed no abnormal findings. Biopsy of the lesion was done under local anesthesia and histopathological examination (HPE) of the specimen revealed microinvasive SCC. CT neck depicted minimal mucosal thickening of left soft palate with no local extension or distant metastasis. The patient underwent wide local excision of the soft palate lesion where the HPE was reported as BSCC. The recommended treatment for BSCC and SCC after wide local excision is selective neck dissection, with postoperative adjuvant radiotherapy and chemotherapy in selected cases. However, the patient was not keen for further treatment planned for him. He was then offered palliative radiotherapy by the oncologist. We emphasize on the importance of complete ENT examination to be done for patients who presented with chronic otalgia. In patients presenting with leukoplakia in the oral cavity, the diagnosis of BSCC although being a rare variant should be considered.

Tonsillar tuberculosis with coexisting lymphoma: A case report

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SUMMARY

The co-existence of tuberculosis (TB) and lymphoma share similar presentations and both may masquerade each other leading to diagnostic dilemmas. Herein, we would like to report a case of an elderly man with existing TB in whom failing to respond to treatment led to investigations that unveiled the coexistence of a non-Hodgkin lymphoma. A 71-year-old man presented to our department with a one-month history of odynophagia and left submandibular swelling. He was treated with multiple courses of antibiotics but symptoms not resolving. Physical examination showed enlarged tonsils bilaterally with exudates. There was also a left cervical lymph node enlargement. Biopsy taken from both tonsils and histopathological examination (HPE) showed no malignancy. Biopsy was also sent for a Genexpert test for tuberculosis and the result was positive for *Mycobacterium tuberculosis*. A fine needle aspiration was taken from the neck mass and the result was non-diagnostic. As the result from the Genexpert test was positive, he was started on anti-TB treatment. After three months of treatment, the tonsils were still hypertrophied and the left neck nodes never resolved. Suspicion was raised and a second biopsy was done with an incisional biopsy taken from the left neck nodes. The tonsils biopsy still showed no malignancy but the HPE from the neck nodes showed diffuse large B-cell lymphoma. Patient was counselled for chemotherapy but refused. He succumbed to the disease three months after refusal of chemotherapy. The co-existence of extrapulmonary tuberculosis and lymphoma is rare, which leads to a diagnostic dilemma especially if one was not known to have underlying lymphoma. Tuberculosis will usually be suspected first due to our endemic nature and in this case, further investigations were only done when the symptoms were not resolving with anti-TB treatment. Therefore, suspicion of both conditions occurring concurrently should arise early if treatment was unsuccessful.

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Giant pleomorphic adenoma of submandibular gland

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SUMMARY

Benign tumours of submandibular glands are rare, however pleomorphic adenoma (PA) is the most prevalent type among all of them. Although there are a lot of publications, giant pleomorphic adenoma is extremely rare. These tumours are usually painless and slow growing but when neglected on some occasions, they can be disfiguring and mandate surgical excision. This is a report of a rare and large, unusual case of a giant submandibular pleomorphic adenoma with the management process there after being discussed. A 46-year-old male non-Malaysian presented to Hospital Lahad Datu recently with complaint of a large mass on the left side of the neck for the past 12 years. There was no history of difficulty in breathing, odynophagia, dysphagia and facial disfigurement. Physical examination showed a lobulated mass, non-tender and firm over the left submandibular region. No skin changes noted. Movement of the tumour mass can be palpated bimanually. No palpable lymphadenopathy. Fine-needle aspiration cytology of the mass was inconclusive. Computed tomography (CT) of the neck revealed a large mass arising from left submandibular gland measuring 9.1cm x 8.9cm x 9.1cm with clear margin near the carotid sheath and sternocleidomastoid muscle. The tumor was surgically excised. Intraoperatively, noted there were a lot of dilated vessels due to stretching of the capsule as a result of the enlargement of the mass. The patient recovered well and was discharged on day 5 post-operative. No recurrence was observed during the five months of post-surgery. Histopathological report came back as PA. It is a formidable challenge for a surgeon to manage a huge PA. Neglecting such tumors can cause disfiguring appearance due to the gigantic mass and in a worst case scenario may even cause airway obstruction and chronic neck pain if it continues to enlarge towards the neck.

Case of suprastructure maxillectomy: A new classification beckons?

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SUMMARY

Maxillectomy has been classified in the literature broadly as limited, subtotal and total maxillectomy. "Limited" refers to any maxillectomy which primarily removed one wall of the antrum. (ie, palate, anterior wall, medial wall) "Subtotal" refers to a maxillectomy which removed at least two walls, including the palate. "Total" refers to excision of the entire maxilla, which may include removal of the orbit and sphenoidectomy and resection of the pterygoid plates and resection of the lamina papyracea. Rarely does a maxillectomy involve removal of all walls except the hard palate. We present a case that necessitated such a procedure. Our patient had a recurrent solitary fibrous tumor of the lacrimal sac that involved the orbit and suprastructure portion of the maxilla but spared the hard palate. He underwent a right suprastructure maxillectomy with right orbital exenteration and anterolateral thigh (ALT) myocutaneous flap reconstruction. This case demonstrates that suprastructure maxillectomy is necessary in the appropriate oncologic case. This case brings to question the need for a change in nomenclature and definition of types of maxillectomy.

Acute rhinosinusitis with complications: Gold standard of imaging

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SUMMARY

Acute rhinosinusitis is defined as infection of the mucosal lining of the nasal cavity and paranasal sinuses not exceeding twelve weeks. The course of the disease is usually self limiting and resolves with conservative management. However, they are known to cause life threatening complications such as meningitis and cerebral abscess. Intracranial complications need to be detected rapidly and timely intervention saves life. This case report highlights the diagnosis dilemma and detection of intracranial complications. We report a case of a 72-year-old gentleman with underlying hypertension, diabetes mellitus and bilateral hearing impairment who were initially referred to the ophthalmology team with complaints of headache, drooping of right eyelid and malaise for three weeks. Besides that, the patient had an incomprehensible speech for 3 days. A CTA cerebral was done and it showed aggressive right orbital apex soft tissue lesion with local infiltration which includes the possibilities of direct extension of adjacent right sphenoid soft tissue lesion or secondary metastasis with a possibility of paranasal sinus aggressive soft tissue tumour. Patient was subsequently referred to us for biopsy and further management. On our examination, the patient was not orientated to time and place, unable to obey command and was restless. We managed to scope the right nasal cavity, however no mass or mucopus noted. Due to the dilemma in taking a biopsy, the case was discussed with a rhinologist and HRCT PNS were planned. However patients' GCS worsened and the patient was referred to the neurosurgery team. MRI brain and paranasal sinuses was subsequently done and it was suggestive of pansinusitis with regional inflammatory changes and multiple subdural empyema. Despite coverage with antibiotics, patient succumbed to secondary sepsis and intracranial complications. This case report highlights the dilemma in diagnosing acute rhinosinusitis with complications versus aggressive sinonasal tumour. Different imaging modalities will assist in early diagnosis and management of patients.

Case report of parapharyngeal abscess with vocal cord palsy secondary to trauma

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SUMMARY

The parapharyngeal space is a rare site for infection. Parapharyngeal infections carry a significant risk of extensive suppuration and airway compromise. Majority of patients develop it as a complication of tonsillitis or tonsillectomy, or as a result of either infection or extraction of lower molar teeth. Based on our literature review, no case of parapharyngeal abscess with vocal cord palsy secondary to single assault by hand to neck area, has been reported. Hence, we present a rare case of a parapharyngeal abscess and vocal cord palsy secondary to assault by hand. We describe a case of a 35 year old man with underlying diabetes mellitus, who presented to us with left facial and neck region pain following an assault of a single slap to left side of neck by hand of his friend. Patient also complained of odynophagia with fever and hoarseness. Neck examination noted loss of laryngeal crepitus with tenderness over the left cervical region and fullness of the left supraclavicular area. FNPLS noted inflamed left arytenoid and left vocal cord palsy. A CT neck was done and the report stated that an enhancing collection noted at left parapharyngeal space extends to the retropharyngeal area, which most likely can be due to collection or infected hematoma. DL, EUA and I&D of left parapharyngeal space abscess was done and 5cc pus drained from midline incision and there was minimal bulge at left lateral pharyngeal wall. The intravenous cefuroxime and flagyl were continued for the patient. Subsequently, the patient was fully recovered and the vocal cord palsy resolved. In case of trauma to the neck no matter how trivial, the possibilities of developing parapharyngeal abscess or hematoma is still possible.

Persistent Tracheocutaneous Fistula (PCTF) sequelae of tracheostomy decannulation: A pictorial description of repair with conchal cartilage graft and literature review

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SUMMARY

Persistent tracheocutaneous fistula (PTCF) is a common sequela following decannulation of prolonged use of tracheostomy tube. In most cases, a simple removal of the tube and the application of occlusive dressings over the stoma produce acceptable functional and aesthetic results. However, PTCF can occur in certain patients. This condition develops when the squamous epithelium from the skin migrates into the trachea creating an epithelialized tract that fails to close. A neglect to identify the presence of a fistula can be associated with significant morbidity and even fatality. PCTFs lead to difficulties in secretion clearance, vocalization and recurrent respiratory infections as well as social and cosmetic problems. Many methods of PTCFs repair have been described varying from closure by secondary intention, primary closure, layered primary closure, local tissue, muscle flaps, and free flaps. In larger tracheal defects, reconstruction with rib and conchal cartilage grafts have been reported and described. We describe here steps and pictorial descriptions of the successful closure of PTCFs in two patients with large persistent tracheocutaneous fistula using a simple closure technique with conchal cartilage. A review of the other closure techniques will also be discussed regarding the advantages and the disadvantages of each type of repair. The closure of a small TCF is often simply, safe, and accomplished by performing limited local procedures, whereas the treatment of a large persistent TCF is potentially complicated. We demonstrate that large PTCF can be closed safely with a conchal cartilage graft with good outcomes.

Endoscopic excision of an intraluminal granulation tissue using a microdebrider

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SUMMARY

The development of granulation tissue within a tracheostomy tube is the most common late tracheostomy complication. Granulation tissue formation causes complications during routine tracheostomy care, potentially triggering airway stenosis or occlusion. Here we present the successful excision of a granulation tissue within a fenestrated tracheostomy tube using a microdebrider. It is crucial to choose the right type of tracheostomy tube in patients who require long standing tube placements. The microdebrider was successful in the excision of the granulation tissue in a fenestrated tracheostomy tube however it is crucial that the right choice of microdebrider is made based on respective procedures in order to ensure preservation of normal anatomy, thereby avoiding complications.

Coblator assisted transoral posterior cordectomy and partial arytenoidectomy in bilateral vocal cord abductor palsy: A case report

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SUMMARY

Bilateral vocal cord paralysis (BVCP) is a serious complication of thyroidectomy. Patients with BVCP commonly experience significant impairment in breathing due to obstructed glottic airway. Historically, tracheostomy is considered as the only option for this condition. However, nowadays there are various treatment options available that are primarily transoral such as partial arytenoidectomy, arytenoidopexy, transverse cordotomy and partial cordectomy. Posterior cordectomy with partial arytenoidectomy is a procedure that commonly performed using CO₂ laser in the treatment of BVCP to widen the glottic airway. However coblation has also emerged as an alternative method that has shown to be safe and effective. We present our experience performing a posterior cordectomy with partial arytenoidectomy using a coblation instrument on a 68-year-old lady with underlying multinodular goitre who had undergone total thyroidectomy three years prior to the presentation of airway impairment. The thyroidectomy was complicated with bilateral vocal cord abductor paralysis. The patient was not keen for tracheostomy when the glottic airway became smaller causing breathing issues. We used a 30-degree rigid scope and a Procise™ laryngeal wand, which provides us a precise area of surgery. The patient had significant alleviation of breathlessness and stridor post operatively. In conclusion, coblation is a safe and efficient approach in the treatment of bilateral vocal cord abductor paralysis in centres which do not have laser facilities or trained surgeons in transoral laser surgeries.

A case of right tonsillar non-keratinizing squamous cell carcinoma with involvement of contralateral nasopharynx

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SUMMARY

Tonsillar carcinoma is the most common oropharyngeal malignancy. It is strongly associated with the increase of Human Papillomavirus (HPV) related malignancy. It commonly metastasizes to the neck lymph nodes and lung. We would like to demonstrate a case of a tonsillar cancer (p16 positive) which metastasised to the ipsilateral neck lymph nodes and contralateral nasopharynx. The patient presented with painless right neck swelling for one month which increased in size. He was otherwise well with no other active complaint. Examination showed right tonsil enlargement and right neck matted, swelling at the level II, III and V. Nasal endoscopy showed left nasopharynx mass. Biopsy was taken from all the abnormal sides. Histopathology examination (HPE) revealed an undifferentiated carcinoma of the right tonsil and the right cervical lymph node. HPE also commented that the left nasopharynx mass origin is from the right tonsillar malignancy. Patient was referred to the oncology unit and underwent radiotherapy combined with weekly chemotherapy. This case showed an atypical metastatic pattern of tonsillar cancer. Fortunately, p16 stain was positive indicating that the disease will respond well with the radiotherapy. It is very important to do a complete examination for all cancer patients to look for metastasis as this will ensure appropriate treatment being delivered to the patient.

Synchronous metastatic nasopharyngeal carcinoma with thoracic spinal metastasis

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SUMMARY

Nasopharyngeal carcinoma (NPC) is the most common malignant tumor among head and neck cancer that is usually presented with unilateral neck mass. Southeast Asia including Malaysia is the area with high prevalence of NPC cases. Although most NPC patients have been diagnosed in the advanced stage, unusual presentations of NPC can be presented as a diagnostic dilemma and cause a significant delay in the introduction of definite treatment. Herein, we present an unusual case of vertebral metastasis as the sole presenting symptom of NPC in a 39-year-old Malay female suffering from backache and progressive lower limb weakness. She had neurological deterioration with reduced motor power and decreased sensation at T6 level. No symptoms related to NPC in specific or ENT in general. A magnetic resonance imaging performed and showed thoracic spine lesions for which she underwent laminectomy and biopsy that reported as an undifferentiated carcinoma of unknown primary. For detection of unknown primary tumor, a contrast-enhanced computed tomography scan from the neck to pelvis was performed and revealed a mass in the left nasopharyngeal recess. Endonasal endoscopic examination showed an irregular mucosal lesion in the left nasopharyngeal recess. A histopathological examination (HPE) of the lesion reported as an undifferentiated carcinoma of NPC. The Histological compatibility of both primary and metastatic lesions confirm the NPC as the primary site. The patient was diagnosed with synchronous metastatic NPC (smNPC) Stage IVC. She was referred to medical oncology for concurrent chemoradiotherapy as a definitive treatment.

A malignant lymphoma presenting as a non-healing oral ulcer

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SUMMARY

Lymphomas are the second most common non-epithelial malignant tumour in the oral and maxillofacial region. Non-Hodgkin lymphoma (NHL) is more frequently diagnosed even though oral cavity involvement is less than 4% of all NHLs. Usually, the oral manifestation of NHL is secondary to the widespread involvement. Primary oral NHL is relatively rare and difficult to diagnose in clinical setting as it presents as local swelling, pain, discomfort and mimics pyogenic granuloma, periodontal disease, osteomyelitis and other malignancies. A chronic, solitary non-healing ulcerative lesion of the oral mucosa is often misdiagnosed as non-neoplastic especially in a previously healthy young adult. We report a case of a 22-year-old healthy gentleman with no known medical illness who presented with complaint of three-month painful ulcer over the right soft palate, which was aggravated by opening of the mouth during talking and chewing food. It was also associated with bilateral neck swelling which had similar onset with the sore throat. There was no family history of malignancy nor constitutional symptoms reported. Physical examination revealed an ulcer with irregular edge over the right soft palate measuring 3 x 3 cm, with multiple bilateral cervical lymph nodes enlargement, largest was at right cervical level II measuring 3 x 3 cm. He was investigated earlier as bilateral non-exudative tonsillitis with infected ulcer of the soft palate at the previous hospital with infectious mononucleosis being one of the differential diagnoses. However, due to the persistent ulcer of the soft palate, biopsy was taken and diagnosis was established by our hospital as extranodal DLBCL. In conclusion, the diagnosis of chronic oral ulceration is always challenging and has been the source of difficulty because of the remarkable overlap in their clinical presentations, thus meticulous clinical evaluation and complete investigations are required for prompt diagnosis, timely treatment which carries better prognosis.

Metastatic lung adenocarcinoma to the oral cavity

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SUMMARY

Metastasis from primary tumours to the oral cavity is very rare. These tumours may metastasise to the soft tissue of the oral cavity and to the jawbones. We report a case of an oral cavity mass with initial complaint of toothache and neck swelling with multiple neck nodes. Biopsies taken from the left retromolar trigone and supraclavicular lymph node revealed poorly differentiated metastatic adenocarcinoma. Computed tomography scans suggested primary lung cancer. Early detection of lung cancer should be the clinician's concern. The appearance of an oral mass already represents a late stage of lung cancer and very poor patient prognosis.

Herpes simplex supraglottitis: Presentation & management

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SUMMARY

Viral epiglottitis (supraglottitis) is a rare entity but its presentation can mimic that of bacterial epiglottitis. Regardless of the causative agent, supraglottitis is a serious disease mostly affecting children and rarely seen in adults. Early suspicion and proper evaluation are mandatory to prevent a life-threatening crisis. In both children and adults the infection aetiology is predominantly bacterial while viruses are rare, especially in adults. Furthermore supraglottitis secondary HSV is a rare entity with few reported cases in the literature, hence we report this rare case and management. We describe a case of supraglottitis in an adult woman. A 56-year-old woman present with symptoms of supraglottitis were odynophagia, dysphagia, hoarseness of voice and blood indices. Flexible nasopharyngo-laryngoscopy (FNLPS) examination revealed generalised edema of supraglottic structures mainly over epiglottis and bilateral arytenoid. There are also ulcers over the right pyriform fossa, right site of aryepiglottic fold and left arytenoid which raised suspicion of malignancy. Biopsy of supraglottic structures was performed under general anaesthesia. HPE was positive for Herpes simplex virus (HSV). Oral acyclovir commenced for 2 weeks subsequently repeated FNPLS shows remarkable resolve of disease. In the presence of HSV supraglottitis, prognosis is good with adequate and proper treatment.

CR-100

A rare case of epidermoid cyst of the parotid gland and mastoid cavity

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SUMMARY

Epidermoid cyst, also known as a sebaceous cyst, are encapsulated subepidermal nodules filled with keratin. Although most commonly located on the face, neck, and trunk, epidermoid cysts can form anywhere on the body. They arise following a localized inflammation of the hair follicle and occasionally after the implantation of the epithelium, following a trauma or surgery. The presence of benign cystic lesions in the salivary glands and mastoid cavity are rare. We present a rare case of a 73-year-old male who presented with a soft swelling on the left side of the face extending to the mastoid and post auricular area. He has a history of left modified radical mastoidectomy done in 2018, complicated with facial nerve palsy, grade III. He was well till he had a parotid area swelling for 6 months duration prior to the visit. On examination, there was parotid swelling measuring 5.0 cm x 5.0 cm extending to the mastoid and post auricular area which was soft and non tender. Fine needle aspiration was done and cytology revealed a benign squamous lining cyst lesion with differentials of epidermal cyst. CT scan revealed an enlargement of the left parotid, laterally it stretches out the SCM muscle, medially it pushes the carotid spaces more medially, and the mass extends inferiorly until the level of hyoid bone. In addition, there was aggressive left external auditory meatus and middle ear cavity soft tissue lesion causing bony dehiscence. Epidermal cysts of the parotid gland and mastoid origin are extremely rare and causes a diagnostic challenge, but still, epidermal cysts should be considered as a differential diagnosis in cases of patient with painless and long-standing enlargement of parotid gland with previous history of operation. Based on previous history of operation, FNAC and CT scan findings, provisional diagnosis of epidermal cyst was made and the patient referred to the otology centre for further management.

Glottic *Staphylococcus aureus* in a patient with systemic lupus erythematosus: Videolaryngostroboscopic characteristics

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SUMMARY

Chronic laryngitis in systemic lupus erythematosus (SLE) patients may be caused by opportunistic organisms. Here a case of SLE who presented with bilateral whitish lesions on the true vocal folds for one month, is presented. The chronological images of videolaryngostroboscopy images were shown. The videolaryngostroboscopy evaluation showed severe asymmetry, reduced amplitude, and aperiodic mucosal wave bilaterally. The duration of closure of a glottal cycle was 'always open'. The lack of improvement of the videolaryngostroboscopy findings after two weeks of initial treatment with antifungal led to the decision to perform biopsy for histopathological examination, and culture and sensitivity, which showed *Staphylococcus aureus*. Results: Cloxacillin was prescribed. The duration of 6 weeks of cloxacillin was guided by the serial evaluation with videolaryngostroboscopy until the normal mucosal wave of the true vocal folds was visualised. Conclusion: The case depicted the importance of videolaryngostroboscopy in leading to the diagnosis and optimum treatment for glottic *Staphylococcus aureus*.

Facial nerve palsy following bee sting. A case report

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SUMMARY

One of the most common insects poisoning is bee sting. It can produce local symptoms such as pain, redness, and fever following a local pain. Rarely, anaphylaxis, myocardial infarction, organ failure, epilepsy and other neurological diseases have been reported. Lower motor neuron facial nerve palsy is one of the common diseases of the Otorhinolaryngology clinic. Although it is usually idiopathic, trauma and tumors are the two most common causes. Usually it is diagnosed clinically and the grade of palsy is based on House Brackmann Classification. We present a case of left facial nerve palsy due to bee sting. A 21-year-old male patient was referred to our clinic for persistent incomplete eye closure for two weeks duration. Upon further history, he complained that prior to the left sided facial weakness he was stung by a bee the night before on his left toe and developed the facial weakness when he woke up in the morning. He did not get immediate treatment. Clinically he had Grade III left lower motor neuron facial nerve palsy. Other ear, nose and throat examinations were unremarkable. He was treated with oral steroid and eye care. One week upon follow up, his facial weakness was completely resolved.

Brachytherapy as definitive radiotherapy in an advanced stage adenoid cystic carcinoma of the buccal mucosa

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SUMMARY

The practice of brachytherapy for the treatment of head and neck cancer; as part of combined modality or as a sole treatment had been well established. A 78-year-old woman who was referred to our centre for radiotherapy treatment. She was initially diagnosed with node negative locally advanced left oral cavity adenoid cystic carcinoma (ACC) with extension to the left mandible and was not keen for surgery in view of multiple comorbidities and high-risk consent. Intraoral examination revealed a 4 cm irregular mass that was hard, fixed, and non-tender at the left lower vestibulo-buccal junction. Radiological imaging showed a mass measuring 1.9 cm x 2 cm likely arising from the left sublingual extending laterally to submental region with the possibility of erosion of the adjacent mental of the left mandible. The tumor was staged as cT4aN0M0. We offered her high dose palliative brachytherapy, 36Gy in 6 fractions twice daily for 3 consecutive days with High Dose-Rate (HDR) Brachytherapy using Ir 192 source delivered to the tumor via 5 brachytherapy applicators inserted under general anaesthesia. She had a clinically complete response after 3 months and continues on remission at 1 year follow up confirmed by imaging. To date, there is no published case of locally advanced intra-oral buccal ACC treated with upfront high dose palliative intent brachytherapy. This method could potentially be an option in a non resectable or non-surgical candidate of buccal mucosa malignancy.

Hybrid Brachytherapy Followed By Intensity Modulated Radiation Therapy (HyBIRT) Technique for the definitive management of localized tongue cancer: A case series

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SUMMARY

Introduction: Regimens that incorporate interstitial brachytherapy (IBT) in the definitive management of tongue squamous cell carcinomas (TSCC) have comparable local control (LC) rate to surgical series. Published definitive radiotherapy (RT) series that combined external beam radiotherapy (EBRT) and IBT followed a sequence of upfront EBRT followed by IBT. Since lower EBRT dose was used in these series, a significant proportion of patients had to undergo salvage or planned neck dissection due to persistent disease in the neck. **Methods:** This manuscript describes the novel HyBIRT (Hybrid Brachytherapy followed by Intensity Modulated Radiation Therapy) technique and the toxicity, functional, and disease outcome of our first two TSCC patients who were treated with this reversed order of delivering high-dose-rate IBT (HDRIBT) followed by adoptive Intensity-modulated radiation therapy (IMRT) in definitive setting at Advanced Medical and Dental Institute, Universiti Sains Malaysia. **Results:** Treatment related toxicity resolved by six months after treatment. After more than a year of follow-up, both patients are in clinical and radiological disease remission. The tongue function is reasonably well preserved with mild taste and speech impairment. **Conclusion:** HyBIRT technique has the advantage of easy identification of tumor margins during IBT applicator insertion and the ability to maneuver the subsequent IMRT plan to account for the under or overdosed region in HDRIBT. Tumor control probability (TCP) is also increased by shortening the overall treatment time (OTT) and delivering tumoricidal radiation dose to gross disease. These two patients had complete response with good tongue function at 1 year post treatment follow up which showed the abundance potential of this technique.