



Free paper abstracts

Abstracts of free papers presented at the 25th MAOMS Annual Scientific Meeting on Friday, 19th March 2021

FREE PAPER ORIGINAL STUDIES

OS1

Reliability of Dental Panoramic Tomography (DPT) in Predicting Close Contact Between Inferior Alveolar Canal and Impacted Third Molars and Influence of Additional Cone-beam Computed Tomography (CBCT) on the Treatment Plan

Hui Wen Tay*, Kar Tsyeng Ng, Rithuan Awang, Ferdinand J Kovicpillai

Background: The traditionally established panoramic signs are not equally reliable. Which panoramic high-risk signs indicate a true close contact on cone-beam computed tomography (CBCT)? Is dental panoramic tomography (DPT) alone sufficient for the surgeon to come up with a treatment plan with the least possible risk of nerve injury? The objective of this study is to investigate the i) reliability of DPT in predicting a close contact between inferior alveolar canal (IAC) and impacted M3M; ii) influence of CBCT on the treatment plan. **Methodology:** This retrospective cross-sectional study evaluated the DPT and CBCT images of 130 patients with 158 impacted M3M referred to the Oral and Maxillofacial Surgery Department of Taiping Hospital from 2016 to 2019. One or more of the eight panoramic signs were recorded. On CBCT, the three-dimensional relationship between M3M and IAC – i) absence/presence of cortication ii) bucco-lingual position of IAC to the M3M roots iii) lingual cortex perforation; were also assessed and correlated with DPT findings using Chi-square or Fisher's exact test. The surgeons also independently evaluated the randomized DPT and CBCT images and made a decision of either surgical removal or coronectomy. **Results:** The most common panoramic sign is interruption of white line at 66(41%) followed by 35(22%) of cases showing 2 or more panoramic signs. Interruption of white line, narrowing of the mandibular canal and presence of three panoramic signs are significantly associated with a close contact between IAC and M3M. Approximately 23% of treatment decisions were modified after reviewing CBCT imaging, with the majority being changed from coronectomy to surgical removal.

Conclusion: CBCT influenced the treatment plan for 23% and is recommended for cases showing interruption of white line, narrowing of the mandibular canal or when 3 panoramic signs are present.

OS2

Drug-induced Sleep Endoscopy in the Assessment of Sleep Apnoea and Snoring

Naseem Ghazali*, Gioele Attardo

Drug-induced sleep endoscopy (DISE) is an upper airway evaluation technique where fiberoptic examination of the upper airways is performed under conditions of unconscious sedation. Therefore, DISE can accurately identify structures in the upper airways that can cause obstruction during sleep. Semi-quantification of the severity of airway obstruction using the VOTE classification. Results of DISE can help develop targeted treatment planning, in particular clarifying the role of surgical intervention for snoring and sleep apnoea. This investigation was recently introduced in our unit. This presentation will discuss the set up (i.e. equipment, medication, staffing), the basic and diagnostic manoeuvres, and the VOTE classification. A case series showing our early experience is also presented.

OS3

The Use of Scleral Show to Determine Midfacial Asymmetry

Tee Lun Heng*, Wei Cheong Ngeow

Background: Decision to reduce and fix a zygomatic complex fracture depends on function and aesthetic criteria, which can be difficult in cases where the degree of asymmetry is questionable using subjective assessment. Scleral show is defined as an area of the sclera that is visible between the lower ciliary margin of the iris and the border of the lower lid, and is seen in patients with zygomatic complex fracture. The aim of this study was to determine the scleral show in normal and trauma (zygomatic complex fracture) patients, as difference in

scleral show may provide objective assessment of zygomatic complex displacement. Methodology: This study included 128 subjects; 41 trauma, and 87 normal patients. They wore a special spectacle with measuring rulers, and their front and worm eye view photos were captured with the eyes rolled up. The lower eyelid height, front scleral show and worm eye scleral show were measured. The presence of enophthalmos was determined. Results: The lower eyelid height for trauma patients was 9.02 mm. Their front and worm eye scleral difference was 0.87 mm and 1.21 mm respectively, which is significantly more than normal patients. The sclera show is greater in male. Enophthalmos was present in both normal (13.8%) and trauma (48.8%) patients. Conclusions: The front and worm eye view scleral show highlighted significant right-left eye difference in trauma patients, which correlate with the trauma sustained and enophthalmos present. Either view is useful to elucidate the difference between normal and trauma sites.

OS4

Functional Volumetric Analysis in Paediatric Syndromic Craniomaxillofacial Deformities Following Distraction Osteogenesis

Nor Faizal Bin Ahmad Bahuri*, Muhammad Nazirul Bin Md Yusof, Firdaus Hariri, Jeyanthi Kulasegarah

Management of craniomaxillofacial syndromic patients is complicated and should be tailor-made for each individual patient. Primary focus of treatment is to correct function in three main areas: the skull, the eyes and the upper airways. Advancement surgery via distraction osteogenesis has proven to be indispensable in the modern era. The aim of the study is to analyze the functional volumetric changes of intracranial, orbital and upper airway volumes, following advancement distraction osteogenesis in Malaysia. In this retrospective study, the pre and post operative computed-tomographic scans of 8 patients were analyzed using Materialise Mimics and Maxillo Stratovan software to calculate the pre and postoperative volumes. All patients showed significant volume gain ($p < 0.05$) after the surgery. Distraction osteogenesis has proven to be effective in increasing the functional volumes. To our knowledge, this is the first study of its kind in Southeast Asia.

OS5

Pharyngeal Airway Changes in Class III Malocclusion Orthognathic Surgery and its Association with Obstructive Sleep Apnea

Mohd Faizal Bin Abdullah*, P Shanmuhasuntharam, Norliza Ibrahim and Nik Nazri Nik Ghazali

Background: Orthognathic surgery is applied to correct skeletal discrepancies including class III malocclusion, and changes in the pharyngeal airway have been observed following this surgical procedure. In mandibular pushback surgery, three-dimensional (3D) modification of lower jaw results in a

reorganization of the pharyngeal wall and it has been suggested that this new relationship may compromise the air entry and predispose the patient to Obstructive Sleep Apnea Hypopnea Syndrome (OSAHS). Small Cross-Sectional Area (CSA) of the airway is likely to explain the presence of OSAHS. The volumetric and CSA reduction of the pharyngeal airway should be a good indicator for prediction of OSAHS. Single jaw surgery and bimaxillary surgery has been associated with decreased pharyngeal airway volume (PAS). This is the retrospective observational study involving 23 class III malocclusion patients treated with surgery. The aim of this study is to investigate the three-dimensional (3D) changes of pharyngeal airway space (PAS) using pre- and post-op cone beam computed tomography (CBCT) and MIMICS software and to assess risk of OSAHS in post-surgical correction of class III malocclusion using STOP BANG questionnaire (SBQ) and wrist pulse oximetry. Methodology: Patients were divided into two groups consisting of single jaw surgery, Group B and the bimaxillary surgery, Group A. The post-operative CBCT scans were converted to 3D models using MIMICS software to measure PAS volume and minimum CSA at the three upper airway levels. Screening for OSAHS using SBQ was conducted. Minimum CSA and total PAS volume reduction were shown to be significant in single jaw surgery. Results: Significant oropharynx narrowing was seen in both groups. SBQ screening showed that mild to moderate score. Conclusion: The results of this study suggested that iatrogenic development of OSAHS can be prevented by considering bimaxillary surgery.

OS6

Cone Beam Tomographic Analysis of Maxillary Canalis Sinuosus Accessory Canals in Mongoloids

Abeer Saad Al-Mouallad*, Ngeow Wei Cheong

Background: Damage to canalis sinuosus (CS) and its neurovascular structures can cause bleeding and neurological symptomatology. Cone beam computed tomography (CBCT) is a valuable tool to examine this canal. This novel study aims to investigate the prevalence and characteristics of accessory canals (ACs) of CS in the Mongoloid population. Methodology: The sample included CBCT images of 116 patients, of equal ethnic (Chinese and Malay) and gender distribution. The following parameters were recorded: prevalence, diameter and location of ACs in relation to race, gender and age. All collected data were statistically analysed. Results: The prevalence of ACs was (51%) of 116 patients and significantly higher in Chinese ($n=35$; 60%) than in Malay ($n=24$; 41%) ($P=0.041$). Forty-four percent of the patients presented with at least one ACs. The average diameter of the foramen of ACs was 1.4 mm. ACs were seen most frequently palatal to the right lateral incisor ($n=26$; 23.2%) followed by left lateral incisor ($n=18$; 16.1%). There were no statistically significant differences with regard to age or gender. Conclusion: Surgical intervention in the maxillary anterior region requires preoperative planning. CBCT examination in this region is extremely important to visualize ACs of CS to ensure safe operation, and avoid complications.

OS7**A cross cultural adaptation of CLEFT Q Questionnaire into Malay Language**

Noor Faezah Ismail*, Zakiah Mat Ripen, Marhazlinda Jamaludin

Background: This study aims to undertake a cross-cultural adaptation of the English version of CLEFT Q questionnaire into Malay language and to assess its psychometric properties. **Methodology:** Translation of CLEFT Q into Malay language was done via forward-backward approach following the best practice guideline for translation and cross-cultural adaptation of a patient-reported outcome (PRO) established by International Society for Pharmacoeconomics and Outcomes Research (ISPOR). The translated version of CLEFT Q was administered to 61 convenience samples consisting of 31 cleft subjects and 30 non-cleft subjects. The psychometric properties of Malay CLEFT Q in terms of its reliability and validity were assessed. **Results:** CLEFT Q was successfully cross-culturally adapted into Malay language. Content validity and face validity of Malay CLEFT Q was assessed during its cross-cultural adaptation process. All Malay CLEFT Q domains showed good internal consistency of their items (Cronbach alpha value = 0.91 to 0.98) while the test-retest reliability demonstrated that Malay CLEFT Q had an excellent stability (ICC value = 0.99). The other 3 types of validity test conducted in this study were concurrent validity, construct validity and discriminant validity. Using Spearman coefficient correlation rank, Malay CLEFT Q was found to have statistically significant moderate inverse correlation with S-OHIP (M), where a negative value of 0.58 was obtained. Malay CLEFT Q demonstrated statistically significant ability to distinguish cleft and non-cleft groups with the p value less than 0.05. All constructed validity hypotheses were confirmed with 100% of the results corresponding to itemized hypotheses. For a more sensitive result, the use of a specific tool for cleft (if any) is recommended for future study. **Conclusion:** The Malay version of CLEFT Q is empirically demonstrated to be a valid and reliable tool in assessing surgical impact and treatment outcome on Malay-speaking Malaysian cleft po.

OS8**Reliability of Medical History Taking in Medically Compromised Patients among clinical year dental students at University Kebangsaan Malaysia**

JX Sam*, R Nordin, N Kamarulsaman, S Sazali, NF Mohammed, RK Rajandram

Background: Over the decade, non-communicable disease in Malaysia has shown an increasing trend. This indirectly will increase the number of patients with chronic health comorbidities seen by dentists daily. The current method of history taking which has been indoctrinated in all practising dentists during their undergraduate years may no longer be adequate with this change in our population health status. This study aims to assess the reliability of the current method of medical history taking among clinical year dental students in

accurately risk stratification the medical status of patients according to the American Society of Anaesthesiology (ASA) status. **Methodology:** This cross-sectional study involved all patients that met the inclusion criteria seen at the outpatient clinic attended by clinical year students between January 2019 - June 2019. Each patient was given the European Medical Risk Related History (EMRRH) questionnaire by a blinded examiner prior to them seeing the student on duty. The patient clinical notes documented by the attending student were retrieved after the patient was discharged. The ASA status for comparison was then generated from the patient reported EMRRH (P-ASA) and the students' clinical notes (S-ASA). **Results:** 164 patients were recruited in this study. 60% of the S-ASA generally underestimated the actual patients' health status when compared to the patient reported P-ASA ($p < 0.001$). **Conclusion:** There is a need for all dental schools to re-look at the undergraduate curriculum to ensure that the new generation of dental graduates who will be the first line caregivers are competent in taking a targeted medical history. This is to ensure that they practice dentistry safely in view of the fast-changing demographic health status of our population.

OS9**Incidence of Distal Cervical Caries in Mandibular Second Molar due to Impacted Third Molar**

Hazwan Ghazali*, Norhayati Omar, Shobina Sivanganam

Background: Impaction occurs when complete eruption into a normal functional position is prevented although the growth of the root is complete. Caries in the cervical distal aspect of the second molar can develop in the presence of a neighbouring impacted third molar. The presence of caries remains unnoticed and thought to be partly due to difficulty in its detection via visual examination. **Objective:** To determine the incidence of distal cervical caries in mandibular second molar amongst patients referred for surgical removal of impacted mandibular third molar. **Methodology:** A retrospective cross sectional study involving 475 patients who presented with impacted third molars. Data collection involved analysis of digital orthopantomogram (OPG). The type of impaction, presence of distal cervical caries and extent of distal caries were collated. Data was analysed using SPSS version 21.0. The analysis was done using frequency distribution, cross tabulations and test of significance with chi square. **Results:** Carious lesions developed in the distal aspect of 174/475 mandibular second molars (36.7%) that were adjacent to impacted third molar. There was higher tendency for mesioangular impaction to have associated distal caries on second molar (64.9%) and distal cervical caries (56.8%). The presence of distal cervical caries in mesioangular impaction is significantly relevant ($p < 0.001$). The depth of impaction was also significantly relevant ($p < 0.001$) in association with presence of distal cervical caries. **Conclusion:** Distal cervical caries is most frequently seen in mesioangular impaction of mandibular third molars due to its difficulty in detection via visual examination. The early or prophylactic removal of a partially erupted mesioangular third molar could prevent distal cervical caries forming in the mandibular second molar.

OS10

Pattern of Oral and Maxillofacial New Referrals During COVID-19 Lockdown

Muhammad Aiman Mohd Nizar*, Syed Nabil, Muhd Fazlynizam Rashdi, Khoo Szu Ching, Muhammad Kamil Hassan, Firdaus Hariri

Background: To quantify the impact of lockdown during the coronavirus disease (COVID-19) pandemic on new case referrals to the Oral and Maxillofacial Surgery (OMS) service. **Methodology:** The researchers retrospectively reviewed all new referrals received during a government-imposed 47-day lockdown period and a similar period pre-lockdown as a control group. Demographic and clinical variables were collected. The main outcome was the differences in the number of new case referrals between the two periods. The contributing clinical and demographic factors were also explored. Appropriate bivariate statistics were computed, and the level of significance was set at .05 for all tests. **Results:** A total of 309 referrals were received during the study period. There was a reduction of new referrals due to the lockdown from five to two cases per day. There was a statistically significant reduction of cases referred from outpatient and emergency departments. There was also a statistically significant difference with regard to home address distance to the center. Trauma referral reduced from 83 to 32 cases during lockdown but still formed the majority of referrals received from the emergency units in both periods. Medically compromised and orofacial infection referrals were not affected by lockdown. **Conclusion:** The lockdown imposed due to the pandemic has significantly impacted the pattern of new OMS referrals. Referrals for orofacial infections, the medically compromised and inpatients were minimally affected by lockdown. The absence of non-acute new referrals during the lockdown suggests treatment-seeking delay rather than absolute reduction of incidence.

OS11

Clinical and Radiographic Predictors of Osteoradionecrosis Post Dental Extraction Among Patients Who Received Radiotherapy to the Head and Neck

Khoo Szu Ching*, Syed Nabil, Siti Salmiah Yunus, Roszalina Ramli

Background: Tooth extraction post radiotherapy is one of the most important risk factors of osteoradionecrosis of the jawbones. The objective of this study was to determine the predictors of osteoradionecrosis (ORN) post dental extraction. **Methodology:** A retrospective analysis of medical records and dental panoramic tomogram (DPT) of patients with a history of head and neck radiotherapy and who had undergone dental extraction between August 2005 to October 2019 was conducted. **Results:** Of 73 patients who fulfilled the inclusion criteria, 16 (21.9%) had ORN post dental extraction. Of 389

teeth extracted, 33 sockets (8.5%) developed ORN. A significant association was observed for tooth type, tooth pathology, surgical procedure, primary closure, radiation field, radiation dose, timing of extraction post radiotherapy, bony changes at extraction site and visibility of lower and upper cortical line of mandibular canal. Using multivariate analysis, the odds of developing an ORN from a surgical procedure was 6.50 (CI 1.37-30.91, $p=0.02$). Dental extraction of more than five years after radiotherapy and invisible upper cortical line of the mandibular canal on the DPT have the odds of 0.06 (CI 0.01-0.25, $p<0.001$) and 9.47 (CI 1.61-55.88, $p=0.01$), respectively. **Conclusion:** Extraction more than five years after radiotherapy, surgical removal procedure and invisible upper cortical line of mandibular canal on the DPT were shown the predictors of ORN post extraction.

OS12

Anatomical Differences in the Mandibular Molar Region Influence Immediate Implant Placement

Jan Yang Ho*, Wei Cheong Ngeow, Daniel Lim, Chee Soon Wong

Background: There is concern regarding immediate implantation in the molar region because of the big discrepancy between socket size and implant diameter inserted. Moreover, there is a risk of inferior alveolar nerve injury and bone plate perforation. The objective of this study was to understand how differences in anatomical structure of mandibular molar sockets and bone shape may influence immediate implant placement. **Methodology:** In this cone beam computed tomography study, the shape of the 102 mandibles was classified into parallel, undercut or convergent type. The shape of molar sockets were determined based on the morphology of 204 first and 201 second molars. In addition, the crown-root proportions, alveolar and interradicular bone dimensions, and proximity to the inferior alveolar canal were determined. **Results:** The prevalent mandible shape at the first and second molar was the parallel and undercut types, respectively. All first molars had two or more roots while 16% of second molars presented with single roots. The most common variation in socket form was the presence of a third root for the first molar (10.3%) and C-shaped root at the second molar (10.3%). The first molar socket had significantly greater mesio-distal width of interradicular bone and lesser bucco-lingual width of cancellous bone ($P<0.001$). Interradicular bone width of $<3\text{mm}$ was found in 57% of second molars and 39% of first molars. The distance from the apices of the first molar sockets to the inferior alveolar canal was significantly greater than the second molar sockets ($P<0.001$). **Conclusion:** The mandibular second molar sockets presented different anatomical factors including absence (10.3%) or reduced interradicular bone width, higher incidence of unfavorable mandible shape (undercut type that risk lingual perforation) and closer proximity to vital inferior alveolar canal that will complicate immediate implant placement.

OS13

Comparison of Piezoelectric Surgery Insert and Two Other Surgical Bur Upon Direct Contact with Inferior Alveolar Nerve

Yew Len Young*, Wei Cheong Ngeow, Siti Mazlipah Ismail

Background: Piezoelectric surgery (PS) device is claimed by manufacturers to protect any kind of soft tissue, including nerves. However, this claim is yet to be verified. The aim of this study was to compare the effect of direct contact of piezoelectric surgery insert (tip and body of insert) and 2 other rotational burs on inferior alveolar nerve. Methodology: This *in-vitro* study involved 2 different methods, which were direct contact of activated surgical devices on inferior alveolar nerve (open technique, n=23) and contact with nerve after drilling through bony cortex (closed technique, n=21). There were four groups of drills being tested in this study, including PS insert (Piezo insert tip and Piezo insert body), crestal approach sinus (CAS) bur (Osstem bur), and Tungsten Carbide round bur (TC round bur). Intracanal temperature changes were measured during activation of each drill. The extent of injury inflicted by each instrument was measured with Optical coherence tomography (OCT). Results: TC round bur inflicted the most severe damage in open technique, whereas Osstem bur inflicted the most severe damage in closed technique. In both techniques, Piezo insert body inflicted significantly the least damage. Interestingly, no significant difference was found between Piezo insert tip and TC round bur in regards to size of damage inflicted. Overall, closed technique led to more severe damage when compared to open technique. Intracanal temperature was significantly higher when Piezo insert tip was used in closed technique. Six out of twenty-one drillings of Piezo insert tip in closed technique exceeded the critical temperature changes of 10°C. Conclusion: we failed to demonstrate the superiority of PS device over conventional device in soft tissue protection especially in relation to inferior alveolar nerve. Besides, significant intracanal temperature elevation could occur when performing osteotomy in close proximity to an enclosed inferior alveolar nerve with PS device.

OS14

Reliability & Validity of the Malaysian English Version of Diagnostic Criteria for Temporomandibular Disorder (M-English DC/TMD)

Farah Nur Tedin Ng*, Kathreena Kadir, Zamros Yuzadi Mohd Yusof

Background: The Diagnostic Criteria for Temporomandibular Disorder has been recognized as a global standard in temporomandibular disorder diagnosis since 2014. Objective: This study aimed to assess its reliability and validity in view of English as a second language in Malaysia. Methodology: Cross-cultural adaptation was established by rewording items. Content validity was determined by calculating the Content Validity Index of each item. A face-to-face interview with 10 patients was held to assess face validity. A total of 208 samples

were recruited to assess the psychometric properties of the Graded Chronic Pain Scale version 2 and Jaw Functional Limitation Scale-20 domains of the questionnaire. Both domains were correlated with the Brief Pain Inventory and Oral Health Impact Profile for Temporomandibular disorder to establish criterion validity. Convergent and discriminant validity were determined by correlating with the Oral Health Impact Profile for Temporomandibular disorder and the Global Self-rating Oral Health Status. Known group validity was tested by comparing scores of patients with and without temporomandibular disorder. Exploratory factor analysis of principal components for both domains were established for dimensionality assessment. Results: Both domains had high internal consistencies with high intraclass correlation coefficient value for test-retest reliability. Both domains had high content validity index, with moderate to strong positive correlation with all instruments but moderate to high negative correlation with the Global Self-rating Oral Health status. Exploratory factor analysis of one domain identified one factor in contrast to three factors for the other. 1 out of 14 of the constructed hypotheses were rejected. Conclusion: The Malaysian version has been proven to be reliable and valid for use in the diagnosis of temporomandibular disorder in the Malaysian population.

OS15

Undiagnosed Nasal Obstruction Amongst Dental Attendee's and Role of Dentist in Early Breathing Disorder Screening

Steve Maisi*, Jeevanan Jahendran, Rama Krsna Rajandram

Background: Oral health practitioners play a fundamental role in airway screening as we are exposed to more than half of the anatomical factors that can lead to chronic mouth breathing and sleep disordered breathing. Nasal obstruction has been shown to be one of the most common and easily treatable causes of chronic mouth breathing. The most negative impact of chronic mouth breathing is its strong association to sleep disordered breathing. Sleep disordered breathing can lead to neurocognitive and behavioural problems as well chronic systemic health problems. To identify the prevalence of undiagnosed nasal obstruction and possible dental parameters that can be detected among patients seen in a dental outpatient setting to help improve early airway screening with regards to prevention of sleep disordered breathing. Methodology: This a cross sectional study. Patients were randomly selected from the dental outpatient setting. The study involved two phases and the examiners in each phase were blinded from each other. In the first phase they underwent questionnaires and dental clinical while the second phase involved nasal endoscopy to look for nasal obstruction. Results: 156 subjects satisfied the inclusion criteria. Prevalence of undiagnosed nasal obstruction was 90.4%. There was a mixed pattern of dental morphometry changes from the normal breather and significant association between history allergy, tongue scalloping and snoring with the presence of nasal obstruction. SNOT-22 is a reliable questionnaire used for screening of nasal pathology. Conclusion: Undiagnosed nasal obstruction can increase risk for sleep related disorder. Our study shows that dentists can be important screeners to enhance early intervention to treat nasal obstruction.

OS16**Comparison of Speech Intelligibility and Quranic Recitation Proficiency in Malay Cleft Palate Patients**

Siti Nur Nabihah*, Siti Mazlipah, Asma Muhammad

Background: Speech intelligibility is the most important parameter in determining the success of cleft palate repair. Previous studies have shown that adequate speech intelligibility can be achieved after primary palatoplasty. In the Muslim Malay population, there is an additional requirement to read Quran proficiently. The aim of this study is to assess perceptual intelligibility of speech and proficiency of Quranic recitations and to compare if there are differences between the two. **Methodology:** Data collection was done on 30 patients clinically and by recording speech samples while these patients were reading a Malay passage and first verse of the Holy Quran. Both samples were assessed by authors using an assessment form adapted from Cleft Audit Protocol for Speech – Augmented and Quranic Assessment Form adapted from the Malaysian Ministry of Education’s learning module. **Results:** We found that 100% of the patients have understandable speech however only 60% of these patients were able to at least recite Quran fluently with adherence to the Rules of Tajwid. **Statistical analysis** revealed a significant correlation between these two parameters with P-value <0.001. **Conclusion:** The reported speech intelligibility and Quranic recitation result provide important prognostic reference information not just to the professionals in the cleft team but parents and Quranic teachers as well.

OS17**Efficacy of Intralingual Injection of Methylprednisolone in Reducing Discomfort Following Third Molar Surgery – A Randomised Controlled Trial**

Low Li Fong*, Daniel Lim

Background: Third molar surgery is commonly associated with postoperative sequelae like pain, swelling and trismus, which significantly impact patients quality of life. Steroids have been widely studied for their role in alleviating postoperative morbidity with good results observed, however no conclusions could be drawn on the best route of administration. The objective of this study was to compare the effect of intralingual and intramasseteric methylprednisolone injection on the postoperative sequelae after mandibular third molar surgery. **Methodology:** In this prospective, randomized, double-blind clinical trial, seventy patients who required surgical removal of impacted mandibular third molars with similar difficulty index were included. Patients were randomly assigned to one of the three study groups: intra-lingual group which received 40mg methylprednisolone injection into tongue musculature, intramasseteric group which received injection of 40mg methylprednisolone into masseteric muscle and control group which received no methylprednisolone injection. Facial swelling, trismus and pain assessment was performed on post-operative day (POD)1,2,5 and 7. On post-operative day 7, wound healing was assessed. **Results:** Both intralingual and intramasseteric groups showed significant reduction in facial swelling (POD1&2)(P<.001), trismus (POD1,2,5&7)(P<.001) and pain (POD1)(P<.05) compared to control group. There was no significant difference between intralingual and intramasseteric groups in terms of reduction of swelling, trismus and pain. Amount of analgesics consumed was not significantly different between methylprednisolone groups and control groups. No impairment of wound healing was noted in all study groups. **Conclusion:** A single preemptive dose of intralingual injection of 40mg methylprednisolone was equally effective as intramasseteric route in reducing postoperative discomfort. Intralingual route presents a useful alternative route for corticosteroids administration in third molar surgery.

FREE PAPER CASE REPORTS / SERIES

CR1

Bilateral Temporomandibular Joint Reconstruction with Alloplastic Condylar Prosthesis

Vignes Rao*, Jonathan Rengarajoo, Jaswinder Singh Mukhwant Singh, Lim Yee Chin, Ravindran Murugesan

Background: Trauma, tumor, resorption and ankylosis are the common cause of structural damage to the temporomandibular joint (TMJ). The primary goal of temporomandibular joint reconstruction is to reestablish mandibular form, function and prevent further morbidity associated with non-functioning temporomandibular joints. Reconstruction of the condyle can be done with various materials and techniques to achieve a functional and aesthetic outcome for the patient. **Case report:** We present a case of a 30-year old male who was referred to our center for management of bilateral TMJ ankylosis. Patient sustained comminuted anterior mandible fracture with bilateral condylar fracture, however only the anterior mandible was reduced and fixed with titanium reconstruction plates. This caused the lateral flaring of bilateral ramus segment and ankylosis of bilateral condyle, leading to limited mouth opening and loss of function. Alloplastic condylar prosthesis is an option in this patient as his joint structural damage is due to trauma. Bilateral gap arthroplasty with interposition temporalis graft was performed prior to placement of condylar prosthesis. At 6 months of post-operative period, the patient had a good mouth opening of 35mm. **Conclusion:** We present this case, to highlight that with detailed and methodical treatment planning and understanding the functional limitation of condylar prosthesis, alloplastic prosthesis is safe and an effective management option for the reconstruction of TMJ.

CR2

Double-Barreled Osteocutaneous Fibular Free Flap for Oral Rehabilitation: Are We There Yet?

Fadhli Reza Bin Zainal*, Kathreena Kadir, Azhar Mahmood Merican

Background: Mandibular resection and reconstruction are the gold standard for large benign or malignant tumours of the mandible resulting in defect of the mandible. This will lead to not only functional deficit but also aesthetic defect. Most patients will experience reduced quality of life if a large segment of the resected mandible is not reconstructed to gain oral function. Conventionally, mandible defects will be reconstructed with a single barreled vascularized fibular free flap. This will lead to discrepancy with the native alveolar height due to the thickness of the fibula bone itself. With double-barreled fibular bone, we can eliminate that discrepancy, but it can be technically demanding with no proper planning pre-operatively.

Case Report: A 42-year-old lady presented to our clinic with a significant left facial swelling for more than 6 months. Further investigation revealed that the patient has ameloblastoma of the left mandible. She was planned for left segmental mandibulectomy and reconstruction of the defect with double-barreled osteocutaneous fibula free flap, and subsequently oral rehabilitation with dental implants later. Virtual 3D surgical treatment planning was done to obtain optimal accuracy for better reconstruction outcome. **Conclusion:** Double-Barreled technique can reduce the discrepancy of the fibula bone to the native alveolar bone height to provide a good bony base for oral rehabilitation with dental implants to optimally restore oral function and aesthetic in large resection. Due to its technically demanding, a proper pre-surgical work up plan can be addressed via virtual 3D surgical treatment planning to provide and facilitate.

CR3

Case of Bimaxillary Orthognathic Surgery in a Patient with Chronic Iron Deficiency Anemia

Ahmad Anas Ahmad Asmadi*, Sunthari Kanagaratnam, Sherric Chong Mei Yee, Jameela Satar

Background: Chronic Iron deficiency anaemia is a condition resulting from a persistent decrease in the normal amount of circulating haemoglobin due to insufficient iron levels in the body. A Bimaxillary orthognathic surgery, a major elective surgical procedure that is often associated with a significant amount of blood loss. Patients with haemoglobin less than the normal range should be optimized before the surgery to avoid allogeneic blood transfusions because of the many risks and complications involved with blood transfusion. Good management of the chronic iron deficiency will allow the body to produce adequate levels of haemoglobin to allow the surgery to proceed without or minimising the necessity for perioperative and intra operative allogenic blood transfusion in young adults. **Case report:** A 20 year old Malay lady with underlying chronic iron deficiency anaemia since she was fifteen years old complained of a protruded lower jaw and malocclusion. Clinical and radiographic examinations and calculations revealed that she needed Bimaxillary orthognathic surgery to correct her jaw discrepancy. Full blood investigations revealed that the level of her haemoglobin was severely low. Haematinic medications such as Meltofer, ferrous fumarate, and folic acid were given over a period six months prior to the elective surgery. But due to the persistently low haemoglobin levels, an erythropoiesis-stimulating agent was also given two weeks before surgery to boost and optimize the patients haemoglobin. Intraoperatively, an autologous blood salvage machine was used to prevent allogeneic blood transfusion and minimize loss of haemoglobin. **Conclusion:** Allogeneic blood transfusions can and should be avoided in elective surgery where possible to avoid the associated risks. Pre-operative optimization of chronically anaemic young and otherwise healthy patients plus the use of autologous transfusion when necessary will help avoid allogeneic transfusion related complications.

CR4**Mandible Swelling in a Patient with Invasive Klebsiella Syndrome – Coincidence or Sequela?**

SS Sivamuni*, NH Mohamad, SW Chan, K Kadir

An elderly female patient presented to the Oral and Maxillofacial Surgery Department of University Malaya with a complaint of swelling with pus discharge from the mandible. Patient has underlying diabetes mellitus, dyslipidemia, hypertension and bipolar disorder. In 2018, she was diagnosed with Invasive Klebsiella Syndrome (IKS), presenting with liver and chest wall abscess complicated with osteomyelitis (OM) of the sternum. On examination, we noted facial swelling around the right submandibular region with bucco-lingual expansion of the right body of the mandible. CT scan revealed a defined radiolucency at the right body of the mandible with thinning and perforation of the cortical bone. Similar findings were noted from a previous CT scan taken in 2018, hence giving rise to a working diagnosis of odontogenic tumour. Upon biopsy, there was a thin layer of tissue at some areas of the cavity which was sent for histopathological examination, but the result was consistent with inflamed tissue suggestive of chronic abscess and not odontogenic tumour. We performed the incisional biopsy again but the result was the same. There are no reported papers of infection of the mandible due to IKS but there is no epithelial lining in this case to suggest an odontogenic infection either. Taking into consideration our diagnostic dilemma, in addition to antibiotics, we did periodical packing of the lesion. The lesion has been decreasing in size very gradually and the patient is happy with the outcome. In this case report, we share with you this unusual case which will be a first of its kind.

CR5**Transoral Robot-Assisted Resection of Parapharyngeal Intramuscular Lipoma**

Naseem Ghazali*, Mariam Asaad, Gioele Attardo

We present a rare case of an intramuscular lipoma in the parapharyngeal space. The neoplasm was identified incidentally during upper endoscopy examination when it caused snoring. Accessing parapharyngeal pathology can be difficult, and surgery is associated with significant morbidity. In this case, the lipoma was resected via transoral robot-assisted surgery (TORS) and the technique is described. Utilising TORS allowed for superior visualisation of the tumour and surrounding anatomy, resulting in minimal morbidity and early return to function. These advantages underlie TORS as an excellent alternative method to open surgery in accessing lesions in the parapharyngeal space.

CR6**Autologous Advanced Platelet-Rich Fibrin (A-PRF) Application as a Surgical Adjuvant in Management of Medication Related Osteonecrosis of the Jaw (MRONJ) Our Experience**

YS Chan*, HY Soh, JR Rajaran, RK Rajandram

Background. Medication-related osteonecrosis of the jaw (MRONJ) due to exposure to bisphosphonates, antiangiogenic and antiresorptive medications has been well documented in the maxillofacial literature. Up till now, there are no ideal established guidelines for the management of MRONJ. Advanced platelet-rich fibrin (A-PRF) has shown promising results in the field of implant dentistry especially with regards to its benefits in enhancing tissue regeneration. This potential should be explored in cases with MRONJ. Clinically, Stage 1 and Stage 2 of MRONJ offer the best window of containing the disease therefore every effort should be made to improve the chance of a positive outcome for the patient. Case Report: We report two cases of mandibular MRONJ treated with combined surgical debridement and A-PRF application. One patient was at stage 3 and another was at stage 2. Surgical success was defined by ability to downgrade the staging of the disease and also by addressing the patient's symptoms of pain. 6 months' post-operative review showed that both cases showed surgical success. Both patients remain asymptomatic with radiographic evidence of new bone formation and improved quality of life. Conclusion: A-PRF can be considered as a viable therapeutic alternative in the treatment of MRONJ with its therapeutic potential in wound healing and bone regeneration. Together with low post-operative complication risk, as well as the ease of obtaining it, A-PRF is a valuable option in patients.

CR7**Usage of Velscope in the Management of Oral Squamous Cell Carcinoma: Is It Reliable?**

Muhamad Imran Bin Abdulah*, Kathreena binti Kadir, Thomas George Kallarakkal

Oral Squamous Cell Carcinoma of the tongue is considered one of the commonest type of oral cancer while wide excision of the Squamous Cell Carcinoma is considered the most common method of surgical treatment, but using the Velscope device as a surgical aid during the wide excision surgery is uncommon. Usually, the Velscope device is used to detect pre-malignant lesions and to act as an early detector for cancer tissue but its usage as a surgical aid is proven to be most useful in this case report. A 67-year-old lady was referred to Oral and Maxillofacial Surgery, University Malaya for management of

her moderately differentiated squamous cell carcinoma at the right lateral border of the tongue. The patient took a Positron Emission Tomography – Computer Tomography scan and the results showed ill-defined Fluorodeoxyglucose avid focus at the right side of the tongue. The stage of the cancer was cT1N0m0. The patient underwent wide excision of squamous cell carcinoma at the right lateral border of the tongue guided by Velscope under general anaesthesia. Post-operative histopathology report indicated that all the margins were clear. The latest post-operative review shows her having a good recovery and the operative site is healing well with no clinical evidence of recurrence and the patient is showing a positive attitude towards life. By using the Velscope device we were able to obtain good excision markings and the wide excisions were done successfully with clear margins. In conclusion, the usage of Velscope which has the advantage of high sensitivity in detecting tissue change is a reliable tool to successfully aid in wide excision cases.

CR8

How Covid-19 Pandemic Changes Benign Jaw Cyst/Tumour Management

Priyantha Pang Lee Yek*, Ngeow Wei Cheong

The impact of coronavirus disease 2019 (COVID-19) in the field of Oral and Maxillofacial Surgery discipline is undeniable. Oral and maxillofacial surgeons have an increased risk of exposure to the virus since surgical procedures performed are usually highly aerosol generating. Therefore, a lot of elective cases have been postponed and only emergency procedures are allowed during the peak of the pandemic. Benign jaw tumour and cyst are common pathologies in the jawbone, with some of them known for their locally aggressive nature. Due to the limited operation theatre slot allocation during this pandemic, a marsupialization can be carried out instead of resection/Enucleation for some of this pathology. Marsupialization is the surgical technique of cutting a slit/window into a cyst/tumour and suturing the edges of the epithelium to form a continuous surface from the exterior surface to the interior surface of the pathology. In some situations, a surgical drain is inserted. By doing this, surgeons can reduce the tumour pressure and encourage bone regeneration. This can also reduce the expansile rate of the tumour while waiting for the next available OT slot. In this case series, the authors present a different outcome of marsupialization treatment modality for cyst and tumour patients referred to Oral and Maxillofacial Surgery Department during this pandemic.

CR9

Facial Profile in Post Le Fort III Distraction Osteogenesis: A Surgeon's Dilemma?

Devi Aulia Aidil*, Associate Prof. Dr. Firdaus Hariri

Apert syndrome is a rare congenital disorder characterized by craniosynostosis, midface hypoplasia and syndactyly of hands and feet. Distraction osteogenesis is applicable to achieve the long sagittal advancement required in syndromic craniosynostosis. However, changes in facial profile post

distraction may need correctional surgical procedure to improve the facial features. A 9 year old Malay boy was diagnosed with Apert syndrome complicated with severe obstructive sleep apnoea (OSA) secondary to craniofacial synostosis. The boy has a history of fronto-orbital advancement which was performed at 2 year 6 months old. His pre-distraction facial features include high and prominent forehead, hypertelorism with right orbital canting and concave facial profile (Class III). The patient underwent Le Fort III advancement via distraction osteogenesis using both external and internal devices. Standard distraction protocol was used with a total advancement of 23mm. Clinically, post distraction showed Class II facial profile with significant protrusion of malar eminences as well as significant antimongoloid slant with depressed nasal bridge. His OSA significantly improved but CT scan assessment showed bony defect at the fronto-nasal junction and lateral orbital rim. Simultaneous bone augmentation and removal of internal distractors was planned for the second stage procedure. Split calvarial bone graft was harvested for nasal bridge and bilateral lateral orbital rim bony augmentation. In addition, bilateral lateral canthoplasty was performed to improve the laxity and position the outer canthal region. The postoperative course was uneventful. Le Fort III distraction osteogenesis produces satisfactory functional outcome in syndromic craniofacial case. In massive advancement, changes in facial profile with a degree of bony deformities should be anticipated. Nevertheless, the deformity can be addressed simultaneously during the removal of internal devices.

CR10

Secondary Facial Reconstruction of Post-traumatic Depressed Zygoma using Medpor Implant: A Case Report

Melvinder Mohan Tyndall*, Syed Iqbal Syed Husman

Background: Medpor is a porous high-density polyethylene implant which is widely used in surgery and orthopaedics. It has been advocated for cranial reconstruction, maxillofacial aesthetics, reconstruction as well as augmentation. This alloplastic materials interconnecting, omni-directional pore structure may allow for fibrovascular in-growth and integration of the patients tissue in comparison to other alloplastic biomaterials such as hydroxyapatite, methylmethacrylate and silicone. Many studies have reported the utilization of Medpor materials for augmentation of chin, reconstruction of ear, etc. Case Report: This was a case of a 19 years old male who presented with a severe deformity of right zygoma. He was involved in a motor vehicle accident on 2nd of October 2017. He sustained right Le Fort III fracture, severely depressed right zygomaticomaxillary complex with orbital blowout fracture. Initially, the zygomaticomaxillary buttress was fixed with Titanium mini-plates on 31st December 2017. In 2019, he was keen to correct his facial appearance as it was affecting his self-esteem; hence, we offered the option of secondary facial reconstruction to correct his depressed right zygoma. Since the fractures have healed, we decided to reconstruct the depressed right zygoma extending up to the right infraorbital rim using Medpor onlay implant which was customized for the patient prior to his surgery under general anaesthesia. The subciliary approach was used to gain access to the right zygoma and

infraorbital rim. The Medpor implant was secured with Titanium screws to increase the prominence of his right zygoma. Finally, the incision was closed with sutures. Conclusion: Medpor implant can serve as an alternative for secondary facial reconstruction as it acts as a scaffold to allow tissue ingrowth. It eliminates donor site morbidity and reduces operation time.

CR11

My Dad Had It, I Have It, Will My Sister Have It Too?

Batmaraj Rawisandran, Siti Mazlipah

Introduction: Gorlin-Goltz syndrome (Naevoid Basal Cell Carcinoma Syndrome) is a rare autosomal dominant syndrome caused by mutations in the PTCH gene with a birth incidence of approximately 1 in 19,000. It has been reported that approximately 70%-80% of individuals with Gorlin-Goltz have an affected parent. The offspring of an affected individual are at a 50% risk of inheriting Gorlin-Goltz syndrome. **Case Report:** In this case report we would like to discuss a 14 year old Indian boy who presented to our clinic with a complaint of swelling in relation to the left facial region for the past 1 month. Upon examination, it was noted that the patient presented with multiple radiolucency in relation to his mandible and maxilla. The patient's father also gives a similar history and was treated previously. The aim of this case report is to highlight the importance of early diagnosis among the offspring of the individuals diagnosed with Gorlin-Goltz which will lead to proper treatment and genetic counseling of the patient. Gorlin-Goltz syndrome comprises a few important triad such as basal cell nevi, odontogenic keratocysts, and skeletal anomalies. A spectrum of other neurological, ophthalmic, endocrine and genital manifestations is known to be variably associated with this triad. **Conclusion:** This case report emphasizes the importance of oral and maxillofacial health professionals in the early diagnosis of Gorlin goltz syndrome and in a preventive multidisciplinary approach to provide a better prognosis to the patient.

CR12

Tessier 7 Facial Cleft – A Report of 3 Cases

Siti Mazlipah Ismail, Azuriyati Baharom

Introduction: Facial clefts are rare congenital deformities with an incidence of 1:175,000 live births. Tessier 7 is also known as the transverse facial cleft is the commonest and most laterally located subtype. It often presents as macrostomia and may be associated with syndromes such as Treacher Collins and hemifacial microsomia. When occurring in isolation, it has the least functional disturbance and may be missed. Surgical correction of the transverse cleft may also be delayed in syndromic cases where other concurrent abnormalities are

prioritized. We report on three cases of unilateral Tessier 7 where functional reconstruction of the modiolus with appositional cutaneous Z-plasty were performed. **Case report:** Case 1: A 10-month-old boy presented with left transverse facial cleft, bilateral preauricular skin tags and pits. He was being investigated for facioauriculovertebral sequence following discovery of a butterfly vertebral type at T8 and 4mm atrial septal defect from echo result. Surgery was scheduled when he was 10 month old with satisfactory results. Case 2: A 2-year-old girl who was referred by the General Paediatrics for a defect at the corner of mouth. The child presented with left macrostomia and preauricular skin tags without other abnormalities. Case 3: A 7-month-old boy presented with left macrostomia without other abnormalities. The early outcome of the repair is satisfactory, however, one case requires a minor revision to address a bulging tissue at the reconstructed commissure. **Conclusion:** Satisfactory repair of transverse facial clefts is possible with careful muscle reconstruction and z plasty to reduce scar contraction. The timing of repair must take into account all associated abnormalities that may supersede the facial deformity. A timely functional repair will facilitate facial development and reduce secondary deformities.

CR13

Cystadenoma of Bilateral Buccaneers Mucosa: A Rare Report

Josephine C*, Lisamarie

Background: Cystadenoma originating in the salivary gland is a rare benign epithelial neoplasm. It can be subdivided into papillary and oncocytic variants. Although cystadenoma is uncommon, it is typically seen in elderly in the age range 70-80 years. Cystadenoma accounts for 4.2-4.7% of all benign tumors, and 2% of all minor tumors of the salivary gland. It usually presents as painless lumps at the most reported sites, which are palate and buccal mucosa. **Case report:** The present study reports an extremely rare cystadenoma of minor salivary glands which involves bilateral buccal mucosa, demonstrating oncocytic features. A 67-year-old Chinese lady was referred to the Department of Oral and Maxillofacial Surgery, Miri General Hospital for management of lump over right buccal mucosa with sinus tract opening. Upon investigations and biopsy, the patient was diagnosed with cystadenoma of minor salivary glands at bilateral buccal mucosa, with persistent mucinous discharge over salivary duct openings. This unique clinical feature of bilateral site involvement is rare and seldom been reported in literature. Thus, a case report of it worth sharing, the scientific knowledge regarding cystadenoma. Surgical excision of bilateral buccal minor salivary glands was done under local anaesthesia. Prognosis of cystadenoma is generally good as it is a benign salivary gland tumour. However, recurrence occurred in this present study over left buccal mucosa, with no lump present but persistent mucinous discharge. **Conclusion:** Regular follow up for this case is warrant and further study is required in view of recurrence on one site of lesion despite its good prognosis.

CR14 Platelet-rich Plasma. The Magic Bullet for Alveolar Bone Grafting?

Paul Leong Weng Kit*, Zakiah Mat Ripen

Background: Platelet-rich plasma (PRP) is an autologous derivative from our own body. The contents of platelet-rich plasma have shown heaps of promising benefits in promoting healing of wounds without the fear of rejection by the patient's own defence system. In today's discussion, we will be sharing our experience on how our team helped a young lady repair her cleft alveolus in an alveolar bone graft (ABG) with the help of platelet-rich plasma and regained her confidence. **Case report:** A 25-year-old Chinese lady was referred to our centre for management of unrepaired cleft alveolus. She has right unilateral complete cleft lip and palate. Lip and palate repair was done in another hospital. Upon examination, the alveolar cleft was noted in between her upper right central incisor and upper right canine. During the procedure, the patient's blood was withdrawn and centrifuged. 2 pieces of platelet-rich plasma membrane were harvested from the collected blood. The membrane was placed on the surface of the harvested cancellous bone at the cleft alveolus. Post-operatively, the surgical site healed promisingly, providing a good seal for the cleft alveolus and a good support for the lip. **Conclusion:** Platelet-rich plasma may be considered as part of a new and improved protocol for alveolar bone graft in the future.

CR15 The Effective Adjunct – Platelet Rich Fibrin (PRF)

Preveena Balakrishnan*

Background: Medication-related osteonecrosis of the jaws (MRONJ) is an adverse effect of anti-angiogenic or anti-resorptive medication. It is defined as exposed bone or bone that can be probed through a fistula in the maxilla or mandible that has been present for more than eight weeks. The quality of life of the patient is significantly affected when associated with MRONJ. The diagnosis and staging of MRONJ has been established, however the treatment of MRONJ has not been outlined with a standard management guideline. **Case report:** A 63 year old Chinese gentleman with underlying prostate cancer with metastasis to the bone was treated with IV Denosumab in 2017. The patient had undergone dental extractions of his tooth 43 and 46. Patient was diagnosed with MRONJ 3 months following an extraction of his teeth 43 and 46. Radiographic evaluation revealed a large lesion spanning from the 41 to 47 region. The patient was then treated with antibiotics and debridement of the sequestra and placement of platelet rich fibrin (PRF) membrane. Patient was monitored periodically. Post debridement 3 months, the patient presented with a well healing bony defect covered with healthy mucosa and minimal anterior bone exposure. No signs of infections noted. **Conclusion:** MRONJ is an adverse effect which is challenging to treat. The aim in treating MRONJ is to control the infection as well as minimize the progression of the bone necrosis to aid the bone healing. As an addition to the standard debridement practice, the use of PRF contributes positively to the surgical management of MRONJ.

CR16 Posterior Cranial Vault Expansion (PCVE) via Distraction Osteogenesis in Early Management of Crouzon Syndrome with Severe Obstructive Hydrocephalus

Kamal Amar Dahlan*, Bhrendtha Subramaniam, Azuriyati Baharom, Tan Yan Rui, Firdaus Hariri

Background: Over the past decade, posterior cranial vault expansion (PCVE) via distraction osteogenesis has become a popular technique in the early management of complex craniosynostosis. This technique has become an established surgical alternative to increase intracranial volume and treat raised intracranial pressure (ICP) in syndromic craniosynostosis conditions such as Crouzon, Pfeiffer and Apert syndrome. Traditionally, the amount of advancement using conventional surgery is limited by scalp tissue and increases relapse due to soft tissue tension. The advantages of PCVE via distraction osteogenesis include providing greater degree of expansion by the ability to simultaneously stretch the callus and overlying soft tissue thus reducing relapse rate. **Case report:** An 8 months old male infant with Crouzon Syndrome was referred to our centre for the management of multiple functional issues of syndromic craniosynostosis namely, obstructive hydrocephalus, upper airway obstruction with bilateral nasal stenosis and bilateral eye proptosis. Multidisciplinary consensus involving discipline of Oral and Maxillofacial surgery (OMFS), Neurosurgery, Otorhinolaryngology (ORL), Paediatric, Ophthalmology and Anaesthesiology has brought to the decision of urgent tracheostomy and bilateral nasal cavity dilatation followed by PCVE via distraction osteogenesis in view of the worsening of the infant's raised ICP due to obstructive hydrocephalus detected from his latest Computed Tomography (CT) scan and evidence of papilloedema on fundoscopic assessment. The surgical procedure was conducted uneventfully. Post-operative follow-up at 1 month showed significant increase in intracranial volume and resolving papilloedema. **Conclusion:** Our case report showed PCVE via distraction osteogenesis is an effective early intervention to treat increased intracranial pressure in syndromic craniosynostosis by providing superior, stable and controlled enlargement of posterior cranial vault.

CR17 A Proposal for Extension of Screening Imaging to Gluteal Region for Head and Neck Cancer

Siti Khadijah binti Mazlan*, GK Ananda, Sujesh Sreedharan

Background: Screening imaging tools, namely computed tomography (CT) or magnetic resonance are without doubt the mainstay used to stage a malignant disease and to rule out any metastases. The most common sites of distant metastases were the lungs (70%), liver (42%), bones (15%) and skin. We aim to report a distant metastases at the gluteus region in a patient diagnosed with tongue squamous cell carcinoma (SCC). We are proposing screening for distant metastasis (DM) up to the gluteal region for a better prognostic survival rate during pre-operative evaluation. **Case report:** A 40-year-old female

with no risk factors of cancer diagnosed with SCC of left lateral border of tongue. Tongue was reconstructed with a supraclavicular flap after the routine tumour resection and bilateral neck dissection. A standard CT up to pelvic prior to surgery showed no evidence of DM. Post 2 months after completion of adjuvant chemoradiation, we noticed an enlarging cervical nodal at Level Vb which interpreted as metastatic SCC via CT scan and fine needle aspiration. Post 6 months from her initial tumour resection, the patient complained of having excruciating pain at the right gluteal region with evidence of palpable expanding mass. Referral to Orthopaedic was done which prompted an MRI and finally resection of the mass. The gluteal mass showed moderately differentiated SCC. However, due to the advanced nature of the disease, the patient passed away two months later. Conclusion. Screening imaging should be extended to the gluteal region to exclude the incidence of synchronous or metachronous tumour based on our experience. Cancer is already the limiting disease, and therefore the benefits of staging cancer using radiation exposure outweigh the risks.

CR18

Gorlin Goltz Syndrome: A Rare Genetic Disorder

Hema Khriyah Manurgar*, Sathya Sailashinee Sivamuni, Yuen Kar Mun, Tan Mei Nee

This article reports the case of a 30-year-old girl with Gorlin Goltz Syndrome. Patient was referred to our department with a chief complaint of acute pain and swelling over the lower right posterior region. OPG showed multiple radiolucencies in the mandible and maxilla in relation to the impacted third molars representing Odontogenic Keratocysts (OKC). It was noted that patient's father also exhibited several criteria of Gorlin Goltz Syndrome. Patient fulfilled four major criteria and one minor criterion, which was adequate for us to establish a diagnosis of Gorlin Goltz Syndrome. It was decided to treat her by surgical enucleation of the lesions with the removal of associated impacted teeth, peripheral ostectomy, dental clearance along with chemical cauterization using Carnoy's solution. A BIPP pack was placed into all sites of enucleation for a duration of two weeks. Patient is currently being followed up every six months. Gorlin-Goltz syndrome is a rare multi-systemic disease inherited in an autosomal dominant manner with complete penetrance and variable expressivity. This syndrome may be diagnosed early by a dentist by routine radiographic exams, since the OKCs are usually one of the first manifestations of the syndrome. Early diagnosis and treatment are of utmost importance in reducing the severity of long term sequelae of this syndrome. Gorlin Goltz syndrome show variability in the expression. The patient we reported about presented with four major criteria and one minor criterion which can be missed during routine dental examinations and investigations. Awareness about the syndrome plays a significant role in diagnosis. Clinical and radiographic features play a crucial role in diagnosis as well.

CR19

The Nasolabial with Subciliary Extension Approach: A Potential Alternative to the Lip-Splitting Incision for Maxillectomy

Tan Chia Shin*, Sujesh Sreedharan, G. Krishana Ananda Gopalakrishnan

Background: The Weber Ferguson incision has been used routinely for more than half a century for good exposure during total maxillectomy. We report the potential benefit of a nasolabial incision with subciliary extension (NLSE) for subtotal maxillectomy. The incision is well hidden within the nasolabial fold and the natural crease line of inferior palpebral eyelid for the lateral exposure which obviates the need for division of the upper lip. The purpose of this case report was to 1) evaluate the accessibility of tumour intra-operatively and 2) observe the aesthetic and functional outcome post-treatment. Case report: A 41-year-old Malay gentleman presented to our clinic with mobile teeth on the upper left quadrant, associated with fluctuant swelling for months which was increasing progressively in size. An incisional biopsy was performed which was interpreted as Adenoid cystic carcinoma (ACC). Subtotal maxillectomy using the NLSE approach was planned after evaluating the tumour dimension from a standard computed tomography (CT) scan. The accessibility of NLSE incision to the cranial skull base and pterygopalatine fossa was not compromised. The tumour was able to be removed in toto quite comfortably. Besides this, we did not encounter problems of misalignment of the upper lip, unsightly scarring around the nasal vestibule, and ectropion because NLSE uses the natural nasolabial fold without interfering with the configuration of orbicularis oris. Patient required an adjuvant chemo-radiation due to the perineural invasion. Another advantage that we noticed was there was no shortening and loss of bulk of the upper lip secondary to contracture and fibrosis post radiotherapy. Patient's healing was remarkable during subsequent follow-ups and a cobalt-chrome obturator was constructed for a complete oral rehabilitation. Conclusion. A nasolabial incision can be an option for subtotal maxillectomy considering its excellent aesthetic outcomes and without compromising the access.

CR20

Lymphoepithelial Cyst: A Case Report and the Diagnostic Process Behind It

Mohammad Azrin Abd Samad*, Ling Xiao Feng, Yew Ching Ching, Nur Zakiah Shahabuddin

Background: Lymphoepithelial cyst or also known as branchial cyst is a developmental cyst that has a controversial pathogenesis. Lymphoepithelial cyst is the second major cause of head and neck pathology in childhood, although it is considered a rare lesion. Lymphoepithelial cyst is congenital in nature although clinically it presents later in life, usually in late

childhood or early adulthood. The incidence is estimated to be about one per million population per year. Lymphoepithelial cyst manifests as unilateral, slow-growing, fluctuant soft-tissue swelling that typically appears in the lateral aspect of the neck. The thorough history taking and investigations must be done to differ the lymphoepithelial cyst to other types of neck mass. Case report: This report described a case of a 42 year-old, male patient who was referred to our hospital with concern of a painless swelling over the right side of the neck for the past 12 years. The swelling was small initially but claimed increasing in size, 3 years ago. The diameter was 4 cm × 5 cm at the right submandibular region. The lesion was soft, fluctuant, compressible, and not tender to palpation. Diagnostic investigations (Fine needle aspiration cytology and CT scan) were performed to differentiate lymphoepithelial cyst to others neck mass. Surgical excision was performed. Conclusion: The lymphoepithelial cysts are benign in nature and should be treated as early as possible as they can transform to malignant lesions such as malignant lymphoma, adenocarcinoma and mucoepidermoid carcinoma. Thorough history and proper investigations are crucial in order to differentiate lymphoepithelial cyst from others.

CR21

Oral Polymorphous Low Grade Adenocarcinoma

Gary Soon Pausiong*, Ling Xiao Feng, Yew Ching Ching

Background: Polymorphous low-grade adenocarcinoma is a rare type of malignancy of minor salivary glands. Although relatively rare it is the second most common malignancy of the minor salivary glands accounting for 26% of all carcinomas. Commonly found in elderly females in the 5th and 6th decade of life. It is found almost exclusively at the palate and other parts of the oral cavity in which minor salivary glands are located, and is rare in extraoral locations. Case Report: We present a case of a 79 year old lady with a diagnosis of left cheek polymorphous adenocarcinoma that had perforated the skin. Patient underwent wide margin resection followed by local flap reconstruction. Because of the involvement of the commissures, lower lip, and cheek post resection of tumor, a modified Bernard's flap was proposed for the reconstruction of these defects. The flap was designed based on an incision that allows sliding movement of the tissue into the defect by being stretched, in a linear fashion towards it. The flap must be designed so that the advancing border of the flap represents a margin of the defect that it is designed to repair. In our case, an inferior releasing incision and local undermining was sufficient to close the defect negating the need for a superior incision as commonly seen in the Bernards flap thereby avoiding the risk of facial nerve injury and development of lower eyelid ectropion. Adjuvant radiotherapy was prescribed because of the advanced staging of the disease. Patient is currently disease free 24 months post-operatively. Conclusion: In general, PAC has a good prognosis. Metastasis to the neck lymph nodes is rare in PAC and neck dissection should generally be performed only in case of positive lymph node involvement observed clinically and or in imaging.

CR22

Midline Lethal Granuloma: A Rare Case Report

Kesavan Mohan*, Jonathan Rengarajoo, Muhammad Ropi, Stephen Royan, Sutina Kohir

Aetiology of sudden onset of palatal ulceration which leads to perforation of the palate can be attributed to inflammatory, infection, immune-mediated response, iatrogenic and neoplasms. With regards to neoplasm, T-cell lymphomas are not frequently encountered in the head and neck region. The most common subtype, Extranodal NK/T cell lymphoma has a specific predilection for the facial midline structure. Clinically, the patient will present with an ulceration over the midline of the hard and soft palate which then eventually leads to bony perforation of the palate. We present a case of a 20 year old male, who was referred to us for management of the palatal ulceration. He presented with cachexia, bilateral cervical lymphadenopathy, epistaxis, trismus and oral thrush. Biopsy of the ulceration was reported as lymphoid malignancy suggestive of NK/T -Cell Lymphoma. He was then started on chemotherapy, but succumbed to the disease. The objective of the case report is to encourage fellow clinician to have a high index of suspicion when they encounter chronic midline palatal necrotic ulceration, in which Extranodal NK/T cell lymphoma should be ruled out.

CR23

Intraoral Myoepithelial Carcinoma of a 5-Month-Old Infant: A Case Report

Wong Ling Vuan*, Han Fong Siew, Marzuki bin Zainal Abidin, Siti Mazlipah Binti Ismail, Kok Tuck Choon

Background: Intraoral myoepithelial carcinoma is a rare disease. It is frequently misdiagnosed as other benign salivary gland tumours. Case report: A 5-month-old infant girl presented with a rapidly enlarging left cheek and palatal swelling. Computerized tomography revealed the presence of a large expansile, lytic bony lesion in the left hard palate. Histopathological diagnosis of myoepithelial carcinoma was made through a biopsy. Neoadjuvant chemotherapy was delivered prior to surgical resection. Reconstructive surgery was deferred until adulthood when the maxilla and mandible have ceased growing. Strict regular follow-up after surgery was prescribed. Patient was disease free four years post surgery with a symmetrical face, minimal left infraorbital depression and inconspicuous scar. Conclusion: Total clearance of tumour remains the main treatment of intraoral myoepithelial carcinoma. A good outcome was achieved through a team approach. chemotherapy, palatal swelling.

CR24

A Rare Complications Following Surgical Removal of Lower Third Molar

Fahrul Radzi*, Muzaffar Apipi

Osteomyelitis following surgical removal of the lower third molar in healthy patients is unusual. We share a case of osteomyelitis of the mandible following a lower third molar surgery. A 24-year-old gentleman with no comorbidity, no known allergies, was presented with a first episode of right facial swelling with limited mouth opening for the past 2 weeks. Clinically, the swelling was noted extra and intra-orally and was localized to mesioangularly impacted 48 region. Surgical removal of 48 was performed under local anaesthesia in an aseptic technique. Post operatively, persistent swelling was present with no systemic manifestations. An ultrasound taken suggested a right masseter muscle mass query of Rhabdomyosarcoma, hence, the patient was sent for magnetic resonance imaging (MRI). The MRI revealed cortical irregularities and thickened periosteal reactions of the right ramus region which was suggestive of osteomyelitis. Findings from the biopsy and wound debridement affirmed the diagnosis of osteomyelitis. Long term antibiotics regime was commenced with good patient compliance. By virtue of cone beam computed tomography (CBCT), we would be able to narrow down the pool of differentials. Additionally, periodical CBCT aided well in our follow up to monitor the patients recovery. In conclusion, the importance of CBCT cannot be challenged. It significantly aids surgeons in deriving a diagnosis.

CR25

Challenges in Diagnosing Adenoid Cystic Carcinoma: A Case Report

Ng Rou Enn*, Muzaffar Apipi

Adenoid cystic carcinoma (ACC) is a slow-growing salivary gland malignancy composed of epithelial and myoepithelial neoplastic cells that form various patterns, including tubular, cribriform and solid form. It occurs most frequently in the major salivary glands and accounts for <10% of all salivary gland neoplasms. This is a case report of a 61-year-old Malay male, without comorbidities, was referred to us by Otorhinolaryngology Department for second opinion and biopsy in view of a left submandibular swelling. He was presented with pain and swelling over the left submandibular region since 2 years ago. It was reported to have increased in size gradually without causing functional difficulties and fever. On examination, a tender indurated left submandibular swelling was present, extending to the chin, measuring 6.0cm × 5.5cm. Intraoral examination revealed obliteration of the lower buccal sulcus. Orthopantomogram showed a diffuse radiolucency at the left body of the mandible with cortical destruction. Fine

needle aspiration biopsy performed by an Otorhinolaryngologist had revealed suspicion of non-specific malignancy. Computed tomography with contrast was taken and reported the presence of an irregular heterogeneously enhancing mass at the floor of the mouth with local infiltration to the adjacent muscles along with cortical destruction at the left body of the mandible, highly suggestive of salivary gland malignancy. Cervical lymphadenopathy, lung and bone metastasis are also reported. Incisional biopsy was done underneath the skin at the inferior border of the left mandible, removing a firm, whitish soft tissue for histopathology examination (HPE), which was initially suggestive of myoepithelial carcinoma. The specimen was sent for second opinion and strongly malignant salivary gland neoplasm favouring ACC was detected.

CR26

A Tale of Weeping Fistula: Dead Bone or Calculus?

Khoo Su Ee*, Kathreena Kadir, Zakiah Mat Ripen, Ngeow Wei Cheong

Medication-related osteonecrosis of the jaw (MRONJ) is a serious adverse effect of antiresorptive and antiangiogenic agents that occurred on the jaw bone, which can manifest as exposed bone or bone that can be probed through an intraoral or extraoral fistula in the maxillofacial region that has persisted for more than 8 weeks, in the absence of previous radiation therapy or obvious metastatic disease to the jaws. We report a case of a 43-year-old Chinese female who is a known case of myasthenia gravis with thymoma that had metastasized to the bone. She was on long-term Etoposide and intravenous Denosumab. Patient underwent dental extraction of symptomatic tooth 14 following failed root canal treatment. She came back after almost a year with a new complaint after losing to follow-up due movement control order (MCO) in response to the COVID-19 pandemic. Clinically, the extraction site appeared healed well without apparent bony exposure. However, there was sinus opening with pus discharge in relation to tooth 12-13 region and gingival dehiscence which was covered with thick calculus on tooth 17 region. A comparison of dental panoramic tomography (DPT) taken shows worsening of the localized osteolytic lesion in a few regions which initially appeared as periodontal disease. Although most of the MRONJ were related to dental extraction, this case intends to highlight that periodontal disease can be one of the major risk factors for development of the disease. In view of the nonspecific symptoms, clinical manifestation, and radiological findings of the disease at the early stage, it is challenging for the dental practitioner to manage MRONJ. Nevertheless, it is crucial for the oral healthcare provider to be able to identify patients who are at risk and able to carry out the necessary preventive measures, as well as being familiarized with diagnostic criteria and management strategies of such cases.

CR27**Surgical Decompression of Multiple Odontogenic Keratocyst of the Mandible in Medically Compromised Patient: A Case Report**

Mohd Hafiz Bin Mat Saman*, Muhamad Fadzlyazwad Bin Kaider

Background: Odontogenic keratocyst (OKC) is rare, benign tumour of odontogenic origin with potential of aggressive and infiltrative behaviour. It is one of the most aggressive odontogenic cysts with a high recurrence rate. Multiple surgical approaches were introduced including decompression, marsupialization, enucleation and resection. OKC is most commonly occurring in the mandible, demonstrating unilocular, round, oval, scalloped radiolucent area, while large lesions may appear multilocular. In this case we were not able to perform the ideal treatment option because the patient is medically compromised and anticipated with risk of postoperative bleeding and complications. Patient also refused any extensive procedure under general anaesthesia. Hence, we present a case of multiple unilocular OKC over right and left side of mandible shown to have eroded cortical bone with soft tissue involvement, that was satisfactorily managed via surgical decompression. Patient was given periodic follow up to monitor lesion progress. This treatment aimed to inhibit the lesion expansion via surgical decompression under local anaesthesia with periodical monitoring via clinical and radiological evaluation, anticipating size reduction and bone ossification within cystic cavity. **Case report:** A 57 years old Malay lady presented with left lower jaw swelling for 2 weeks. Surgical decompression was done by making 2 small openings on both sides of the mandible and keeping it open and drain with a plastic tube. Radiographic examination over following months showed new bone formation and further year later showed good ossification. **Conclusion:** Management of extensive OKC in medically-compromised patients is a surgical dilemma, gold standard treatment option via surgical resection is restricted by anticipated complication. Therefore, decompression with periodical monitoring proved to restrict lesion expansion thus improving the quality of life.

CR28**Herpes Zoster Infection Following Bilateral Sagittal Split Osteotomy (BSSO) Procedure**

Mohammad Suhayl Mohd Sofee*, Mohamad Hamidie Saari, Muhamad Ropi Mamat, Muzaffar Apip

Herpes Zoster or shingles is caused by reactivation of varicella zoster virus that remains latent in dorsal root ganglion. Primary infection of varicella zoster virus causes varicella zoster infection or commonly known as chicken pox which later remains latent. The predisposing factors that reactivate the virus are increasing age, physical trauma, psychological stress, chronic corticosteroid usage and immunocompromised state. This disease results in a characteristic skin rash that forms small, itchy blisters which eventually scab over. The virus will remain dormant over the infected nerve branches once the rashes healed which will usually take a period of 2 to 4 weeks.

The most common distribution is thoracic, cranial, and cervical where the ophthalmic is more common in trigeminal nerve distribution. We report a case of a young lady with herpes zoster infection at right mandibular distribution after bilateral sagittal split osteotomy (BSSO) of mandible.

CR29**Reconstruction of Large Lower Lip Defect in a Toddler with Buccal Mucosa Rotational Flap and Buccal Fat Pad: A Case Report**

Lim Chin Kai*, Tan Chuey Chuan, Chan Siew Wui, Zainal Ariff Bin Abdul Rahman

Background: Haemangioma is the most common benign tumour of vascular origin, occurring especially in newborn and infants. Haemangioma involves the head and neck region at 60% of the time and common sites include lips, tongue and palate. Most of the lesions resolve spontaneously and need no surgical intervention. Larger lesions that do not resolve or affect function will require surgical excision. This usually results in large defects and causes unsightly secondary healing with compromised aesthetics. Utilization of vascularized free flap will help with aesthetic in the wound closure but is significantly difficult in paediatric patients. **Case report:** A 1-year-old boy was presented to us with worsening swelling of the right lower lip. The swelling has been present since birth and increasing in size progressively. On examination, a large, well defined purplish lesion of the right lower lip with visible pulsation was noted. The lesion was completely excised and the large soft tissue defect was repaired with right buccal mucosa rotational flap and buccal fat pad. The surgery was uneventful and the patient did well postoperatively with a satisfactory aesthetic and function of the lower lip. Patient is currently on our 6 monthly follow up. **Conclusion:** Buccal fat pad is a simple and a reliable flap for oral soft tissue defect closure. This case showed that buccal fat pad is very versatile and can be utilized to repair the defect up to the angle of the mouth which also provides the fullness to the lower lip. Additionally, with the buccal mucosa rotational flap, we are able to achieve primary closure of the lower lip defect with good aesthetic and functional outcome.

CR30**Caliber Persistent Labial Artery of Upper Lip – A Rare Case Report and Literature Review**

Shalini Jagadisen*, Yew Ching Ching, Ling Xiao Feng

Background: A caliber-persistent labial artery (CPLA) is a vascular anomaly of the labial artery that penetrates into the submucosa of the lip without a reduction in diameter. It usually presents as an asymptomatic papule with bluish or normal-colored elevated soft tissue mass with lateral pulsation exhibited only by arteries on the lower lip. In contrast with a mucocele, which appears in dome shaped papule and fluctuant with bluish translucent color, whereas arteriovenous malformation appears as localised swelling, bleeding tendency and pulsatile due to its high vascular flow while hemangioma may vary in size with soft mass, sessile or pedunculated and

usually deep red. Caliber persistent artery of the lip is clinically diagnosed and confirmed histologically. External factors, such as trauma, pressure from pipe stem, sun exposure and continuous pressure produced by the pulsating artery over the epithelium, may cause chronic ulcer associated with caliber-persistent labial artery. Non-invasive tests, such as colour Doppler ultrasonography, can also be useful to confirm the diagnosis. Case report: This report described the case of a 69-year-old female patient who complained of an upper lip lesion for 10 years. A lesion measuring 10 mm × 8 mm noted at upper right lip which was sessile, pulsatile, dark bluish in colour, fluctuant in consistency, non-tender and no sinus tract noted. An excisional biopsy was done under local anaesthesia. A pulsatile labial artery was carefully identified and ligated with a suture vicryl 4/0. Conclusion: Clinician should include caliber-persistent labial artery as one of the differential diagnosis for any raised soft tissue lesion of the lip, as it is usually misdiagnosed as a mucocele, arteriovenous malformation and hemangioma especially so if pulsation is observed. The rarity of caliber-persistent labial artery is highlighted so surgeons can identify and manage the vascular anomaly successfully.

CR31

Immediate Reconstruction of Pediatric Orbital Roof Fracture: A Case Report

Farah Hanan Abd Wahid*, Ramizu Shaari

Background: Orbital roof fractures are commonly seen in young children. Majority of this fracture can be treated conservatively and have generally good outcomes. However, severely displaced or comminuted orbital roof fracture can cause ophthalmic or neurologic complications. Surgical intervention with a multidisciplinary approach is indicated in this situation. Immediate reconstruction is crucial to restore the defect, improved cosmetic and functional results and prevent further sequelae. Case report: A 10 years old boy sustained right orbital roof fracture due to extruded metal rod, was referred to our centre. Multidisciplinary team attended the case and subsequently decided for examination under general anesthesia. Intra operatively, right ocular pulsation was noted upon removal of the metal rod. Frontal craniotomy was done and the comminuted bone fragment of the orbital roof was removed. Immediate reconstruction then decided in view of the large defect and bulging of the orbital content into the cranial fossa. Orbital roof was reconstructed using the autogenous bone obtained from the craniotomy. Post-operative recovery was uneventful and during follow up, no ocular functional deficit was seen. Conclusion: Early recognition and immediate treatment of orbital roof fracture can reduce ocular and intracranial complications. Orbital roof reconstruction using autogenous bone can be a versatile method to provide good functional and cosmetic results.

CR32

Out of the Pan and into the Fire: A Rare Case of Intraoperative Malignant Hyperthermia with Postoperative Pulmonary Embolism

Alia Mohd Ghazali, Md Arad Jelon, Nur Ikram Hanim Abdul Rahim, Mohammed Adzwin Yahiya, Lee Chee Wei

Background: Malignant hyperthermia is a rare complication of general anesthesia appearing as an acute and potentially lethal hypermetabolic state in people carrying a genetic anomaly expressed in skeletal muscles. The incidence ranges from 1:10,000 to 1:250,000 anesthetics. Postoperative pulmonary complications are common and result in prolonged hospital stays, higher costs and increased mortality. However, data on the incidence and predictors after major oral and maxillofacial surgery with microvascular reconstruction are rare. Case Report: A 56 year old Indian lady referred to our centre was diagnosed with squamous cell carcinoma of the buccal mucosa with underlying diabetes mellitus, hypertension, dyslipidemia and bronchial asthma. This patient was planned for surgical removal of tumour and reconstruction with free flap. 4 hours into the surgery, patient developed increasing end tidal carbon dioxide, tachycardia and rapid increase in temperature and diagnosed as Malignant Hyperthermia. Surgery was halted and anaesthetic emergency activated in which inhalational anaesthesia was turned off, Intravenous Dantrolene boluses were given with active cooling and cool saline run fast. Patient was stabilised after 1 hour. Surgery was resumed with a different reconstruction plan. Patient was then monitored in the post anaesthesia care unit for 2 days post operative. On day 3 post operative, the patient developed tachycardia and tachypnea when attempted to ambulate. Computed tomography pulmonary embolism was taken stat and imaging shows pulmonary embolism. The patient was attended immediately and anticoagulant was started followed by close monitoring of vital signs. Conclusion: Malignant hyperthermia and pulmonary embolism are both considered rare complications with high mortality rate in cases of oral oncology and reconstruction tumour. Early detection and prompt management in this case along with the change of treatment plan mid surgery, to reduce risk of long anaesthesia, collectively added into increasing patient's survival rate.

CR33

Small Can Be Big: A Case Report of An Unusually Huge Fibrous Epulis

Liau Ee Jye*, Khoo Su Ee, Yuen Kar Mun

Background: An epulis is among the more common tumour of the mouth. 1 According to the prevalent histological component, 4 different types of epulis are identified: fibrous, granulomatous (pyogenic granuloma), angiomatous and giant cells epulis. 2 Most of the patient tend to sought for treatment when the epulis had attained to certain size. **Case Report:** We report a remarkably huge fibrous epulis measuring about (10×8) cm² in a 67-year old Malay woman who only seeks for treatment after 4 years. A deformed facial features and history of loss of weight, loss of appetite, unable to chew properly as well as paraesthesia on left infraorbital region has alarmed the general practitioner to refer to oral and maxillofacial surgery to rule out malignancy rather than a fibrous epulis. **Conclusion:** This case report highlighted the unusually huge fibrous epulis which has caused unpleasant feelings to her neighbour to encourage the patient to seek treatment. The lesion has caused a 67 years old Malay woman to experience loss of weight, loss of appetite, unable to chew properly as well as paraesthesia on the left infraorbital region.

CR34

Facial Emphysema Following Closure of Oroantral Fistula

Muhammad Aiman Mohd Nizar*, Syed Nabil

Subcutaneous emphysema (SE) is a swelling which develops due to air entrapped underneath the subcutaneous tissue and facial planes. It causes distention of overlying skin. SE can develop as a result of trauma, surgery or infection. The diagnosis of SE can be made based on clinical findings of crepitation upon palpation of the swelling. SE are usually managed by close observation but in some cases it may require surgical decompression and antibiotic prophylaxis. Here we are reporting a rare case of SE of left malar which develop following closure of oroantral communication using buccal pad of fat.

CR35

Actinomycosis Mimicking as a Neoplasm Like Lesion – A Case Report

S Thangarajah*, S Maisi, RK Rajandram

Background: Rheumatoid arthritis (RA) is a chronic systemic autoimmune disease that affects the small joints leading to progressive disability. Pharmacological management is based on immunosuppression to ensure control of active disease to maximise joint function by prevention of joint destruction. The common first-line management drugs are corticosteroids and disease-modifying antirheumatic drugs (DMARDs). Recently, newer second generation drugs have been introduced to manage

this disease. **Case Report:** A 42-year-old female with recalcitrant rheumatoid arthritis was referred for the management of a chronic right facial swelling that was associated with pain. The swelling developed after extraction of her retained root tooth 45. The extraoral facial swelling and pain gradually increased over 2 months. Intraorally, the extraction socket presented with compromised healing and a buccal discharging sinus. The swelling failed to resolve with multiple courses of oral antibiotics and localised wound debridement. Radiographically, the cone beam computed tomography (CBCT) scan findings did not show an intrabony pathology. An incisional biopsy of the mass was then performed. Histopathological results confirmed the mass to be of an infective origin which was acute suppurative inflammation with Actinomyces colonies. The patient was on second-line management drugs due to the recalcitrant RA. This caused severe immunosuppression leading to susceptibility to opportunistic infection. The patient received a six-month course of 2g Amoxicillin two times a day and had full recovery. **Conclusion:** Oral and maxillofacial surgeons need to be updated on these potent second line new generations of immunosuppressive drugs. Any treatment that can lead to an introduction of a portal for entry intraorally, especially tooth extraction can lead to this chronic, difficult to treat infection.

CR36

Glandular Odontogenic Cyst of Mandible – A Case Report

Yeoh Wen Li*, Cri Saiful Jordan, Ch'ng Lay Ling, Hoe Ai Sim, Zarina A. Karim

Glandular odontogenic cyst is an unusual developmental odontogenic cyst with an unpredictable, potential aggressive behavior and a high rate of recurrence. It was first described as a definite pathology in 1988 by Gardner et al. This is a case report of a glandular odontogenic cyst of the mandible diagnosed in a 27-year-old Indian female and its surgical management. Patient was presented with the complaint of swelling over the right mandible region which was of insidious onset, associated with mild throbbing pain. The lesion is present at the right anterior mandible extending posteriorly involving the body of the mandible with cortical perforation. Glandular odontogenic cyst poses a diagnostic dilemma as it has non-pathognomonic clinical and radiographic features. Histopathological examination is crucial in the final diagnosis which in itself is also challenging as it may mimic other lesions such as lateral periodontal cyst, botryoid odontogenic cyst and low grade central mucoepidermoid carcinoma. Glandular odontogenic cyst is managed with surgical intervention which may range from conservative approaches such as enucleation and curettage to a more aggressive approach involving marginal or segmental resection. In conclusion, diagnosis of this rare entity is important to ensure adequate treatment is provided in view of its aggressive behavior and high tendency for recurrence.

CR37

Orofacial Shingles in a Young Adult: A Rare Occurrence

Namkabir Singh*, Ng Kar Tsyeng, Tay Hui Wen, Ong Wan Choon, Rithuan Awang

Background: Varicella-zoster virus (VZV) causes both primary and recurrent infection. VZV is associated with two major clinical infections in humans, Chickenpox (varicella) and shingles (Herpes Zoster). Chicken pox is a primary infection that occurs the first time an individual is affected by the virus. After the primary disease heals, VZV remains latent. Reactivation produces Herpes Zoster infection, commonly called shingles. Oral and facial lesions result from Herpes Zoster of the trigeminal nerve. Case report: A 29 year old gentleman had pain and swelling over the right side of his face. He initially went to a medical clinic and was prescribed oral antibiotics. However, his condition worsened and he was referred to the OMFS Department, Taiping Hospital. Clinical examination showed crusted vesicles with pus discharge over the right side of his face, involving right side of the philtrum, right upper lip, right side of nose, right cheek and right infraorbital area, accompanied by a large swelling. Intra orally, he had multiple vesicles on the right side of his palate, not crossing the midline. He was started on oral acyclovir 800mg 5 times daily for 7 days and intravenous antibiotics. 2 weeks later, regression of lesions were noted with formation of scar tissue and scab. However, the patient complained of numbness and discomfort on the right side of his face and upper right gingiva, possibly indicating post herpetic neuralgia. In conclusion, even though shingles is a self-limiting disease, early and accurate diagnosis can initiate treatment that can reduce severity and complications.

CR38

Technical Issues in Managing Severe Comminuted Orbital Fracture: A Case Report

MF Isa*, SSM Yunus, Nazimi AJ, Zuryany MZ

Fractures of the orbit are common yet challenging to manage. They deserve special consideration as surgical or observational management may result in unfavorable outcomes. We hereby present a 22 year old Malay lady who had an alleged Motor Vehicle Accident and sustained a left comminuted Orbital Zygomaticomaxillary Complex Fracture. She underwent 2 reconstruction surgeries at 2 different centres. However, the overall result of the reconstruction surgeries was still unsatisfactory. The objective of this case report is to highlight important technical issues in orbital reconstruction surgery, as well as to discuss treatment options that can help prevent and overcome complications based on our experience and relevant literature. The 2 highlighted technical issues are the materials used and surgical techniques. Although the management of orbital fractures remains controversial, the main goal of treatment is to restore orbital volume and anatomically reduce the orbit. Precision and attention to detail are vital in managing orbital fractures. Inadequate initial management may result in irreversible changes to the anatomic facial profile, resulting in unfavorable outcomes. The authors hope this case report can

be used as a reference for surgeons to achieve the best treatment in terms of technical preparation and delivery for the patients in future.

CR39

'The Hungry Ulcer': A Case Report of Noma and Literature Review

Sri Shoban Raaj*, Yuen Kar Mun

This is a case report of a 73 years old male, with an underlying uncontrolled diabetes mellitus and hypertension, who presented to us with a swelling which was increasing in nature on his right cheek region. Patient claimed that the swelling was already present for the past 6 days of his initial presentation to us. The swelling was manifested as an acute necrotic infection affecting his right cheek with obliteration of his right labial and buccal mucosa, orbicularis oris and zygomaticus muscle. He has impairment of function even during the early and initial stages of the acute phase of the infection due to the aggressive nature of the disease. The patient was started on IV Cefuroxime and IV Metronidazole and vigorous wound debridement was done with Dermacyn. This treatment modality was able to cease the progression of the disease. Noma is an anaerobic bacterial infection which leads to the necrosis of the affected tissues and is classified under World Health Organization (WHO). Cancrum oris or Noma is acute gangrenous stomatitis which obliterates the tissues of the oral and para-oral structures. It begins as a gingival ulcer and spreads rapidly through the tissues of mouth and face which disrupts anatomic barriers and spreads through muscle and bone. It affects predominantly malnourished children and less commonly adults in poor environmental sanitation. It is reported to have a high mortality rate but could promptly be controlled with appropriate treatment management which includes broad spectrum antibiotics. Early detection is utmost important as clinical manifestations of this disease are most commonly misdiagnosed.

CR40

Metastatic Papillary Thyroid Carcinoma to the Mandible with Hyperthyroidism: A Case Report

Peh Ge Tan*, Ahmad Kamal Tarmizi Zamli, Chen Loong Soh, Abdul Rahim Ahmad

Background: Metastasis of tumour to the orofacial region is exceeding rare with thyroid tumour metastasis accounting for 6% of all oral metastasis. This study presents a rare occurrence of right mandibular metastasis from a primary papillary thyroid carcinoma with hyperthyroidism. Case report: A 55 year old lady was referred to our department for management of right mandibular swelling. She had a history of nodular hyperplasia treated by total thyroidectomy. Recent thyroid function tests indicated stable T4 and TSH levels corresponding with thyroid suppression therapy (TSH: <0.005uIU/mL; T4: 19.30-20.1pmol/L). However, she complained of worsening palpitations and loss of weight since the swelling started. During

incisional biopsy, the patient complained of severe palpitations and appeared agitated and sweaty. Severely elevated blood pressure and tachycardia was noted and the procedure was halted immediately. Impression of an impending thyroid storm was made and hyperthyroidism was confirmed (TSH: <0.005uIU/mL; T4: 62.20pmol/L). Histopathological examination confirmed metastatic thyroid tumour to mandible consistent with papillary thyroid carcinoma. Aggressive right body of mandible expansile mass with extensive adjacent bone destruction and metastasis to lung, left hip and liver was noted in computed tomography (CT). Patient was counseled for radioactive iodine therapy but opted for palliative treatment. Conclusion: Although rare, papillary thyroid tumors can metastasize to the mandible. Oral metastasis may be the first indication of metastasis. All clinicians should be aware of the risk of thyroid storm when operating on patients with symptoms of hyperthyroidism and to carry out thyroid function test prior to surgery.

CR41

A Case of Displaced Fracture at the Right Parasymphysis and Left Body of the Mandible

Victor Paulo C. Tacadao*, Mendelssohn T. Manalaysay, Lea R. Alcantara

Background: Mandibular fractures, one of the frequent injuries at maxillofacial area. Its incidence rate and etiology differ from other countries. Although management of these maxillofacial injuries has been long established; there are still innovations that are advantageous in the improvement of management of these fractures. This case report aims to know the importance of stereolithographic model as a diagnostic tool in an open reduction internal fixation procedure, emphasizing the use of intermaxillary fixation technique in aiding the reduction, stabilization of occlusion and establishing the utilization of intraoral approach combined with transbuccal system approach for the management of simple fractures of the mandible. Case report: This is a case of a 19 year-old male patient with an anterior open bite of 2 weeks history of assault. CT-scan shows a simple fracture at the right parasymphysis and left body of the mandible. Stereolithographic model was fabricated for pre-bending of plates. Intermaxillary fixation technique was facilitated. Intraoral approach started with vestibular incision at the buccal mucosa of left body of the mandible and symphyseal area then reduction of the fractured segments was done. Followed by transbuccal system approach for the placement of plates. Lastly, ligature wire fixation was shifted to elastics. Post-operative follow-up shows acceptable results with good healing, facial symmetry, improved mouth opening and reduced open bite. Panoramic radiograph shows proper placement of miniplates without violating any tooth structures. Conclusion: This case exhibited the advantages of combined conservative management of mandibular fractures using stereolithographic model as diagnostic aid prior to management of mandibular fracture.

CR42

A Case of Squamous Cell Carcinoma at Left Lateral Border of the Tongue

Trisha A. del Mundo*, Mendelssohn T. Manalaysay, Maria Lilia R. Alcantara

Background: Squamous cell carcinoma of the tongue is the most common intraoral malignancy, which accounts for 45% of tongue lesions. The lateral borders of the tongue are at high-risk for the development of squamous cell carcinoma. Objectives: The aim of this case report is to discuss the importance of early detection in cancerous lesion and significance of rapid frozen section during excision biopsy. Case report: A case of 52 year old female with recurrent non-healing ulcer at left lateral border of the tongue, for 6 months with no noted pain, no lymphadenopathy. Smoker for 16.5 pack years and occasional alcoholic beverage intake. Initial excision biopsy revealed squamous cell carcinoma, well-differentiated. Partial glossectomy of the left lateral border of the tongue was done with a rapid frozen section revealed the antero-inferior border of the specimen was positive, and the remaining borders were negative. Further incision was made to secure margins free from cancer cells, followed by primary closure. Results: S/P left partial glossectomy, procedure, well-tolerated. 1-week recall showed granulation tissue at the surgical site. PET/CT scan revealed post-left hemiglossectomy changes of the left lateral aspect of the tongue without evidence of recurrence. No hypermetabolic tongue lesion. 9-months recall showed no recurrence of tongue lesion. Conclusion: Early detection of cancerous lesions provides better prognosis in malignant neoplasms, which are often aggressive in behavior. Prevention of metastasis, and permanent damage from tissues were avoided. Rapid frozen section aids in determining the margins of cancerous lesions as it provides rapid diagnosis of margin involvement during surgery which guides the surgeon during biopsy, securing the margins free from cancer cells.

CR43

A Case of Multicystic Ameloblastoma at the Symphysis, Left and Right Parasymphysis of the Mandible

Svetlana Malabed*, Mendelssohn Manalaysay, Lea Alcantara

Background: Solid/Multicystic ameloblastoma is defined as a benign, slow growing tumor of the jaw often presenting clinically as an intraoral swelling. Management of these benign yet aggressive odontogenic tumors are complex and often controversial. The correlation of the clinical, radiologic and histopathologic findings in the treatment of a multicystic ameloblastoma. The significance of managing a patient with an ameloblastoma concurrent with a condition of anemia and its management. Case report: A 31 year old female came in our institution due to a 2 year history of swelling at the left floor of mouth and radiographically appears as an irregularly shaped

radiolucency with multiple cortications. Incision biopsy revealed to be consistent with Solid/Multicystic ameloblastoma. A diagnosis of iron deficiency anemia was made thus a transfusion of 4 units of pRBC was done. Placement of pre-bended 2.4 reconstruction plates then marginal resection of the mandible and application of Carnoy's solution. Rapid frozen section to ensure all remaining margins are free of tumor then radical marsupialization. 1 week after the surgery, granulation tissue was seen at the marsupialization site indicating good healing process, yet there is numbness of the overlying skin of the anterior mandible due to the ligation of the mental nerve. Conclusion: The need for the correlation of the histopathologic with the radiographic and clinical findings is significant in the formulation of proper treatment for these tumors such as Ameloblastoma. Such presentation accompanied with an existing medical condition such as anemia necessitates a close co-management with various medical specialties to deliver the best treatment that will both address the patient's anemia and eradicate the tumor.

CR44

Oral Histoplasmosis Masquerading as a Gingival Lesion in an Immunocompetent Patient: A Case Report

Amir Ridzuan Hamzah*, Saravanan Gopalan,
Fairuz Abdul Rahman

Histoplasmosis is a systemic fungal infection by histoplasma capsulatum organism which primarily affects the pulmonary system with a rare disseminated form that can occur in the oral cavity. These diseases usually occurred in severely immunocompromised patients as the host immunosuppressed system cannot contain the spread of the germination leading to opportunistic infections. However there is still a possibility for this disease to occur in immunocompetent individuals. Clinically, presentation of the disease in oral mucosa may mimic oral squamous carcinomas or blistering disease that caused difficulties for clinicians in diagnosing the disease based on its clinical appearance alone. Therefore biopsies, histo-pathological examination, and fungal cultures played a significant role in guiding clinicians to the final diagnosis of histoplasmosis. These fungal organisms are easily detectable with histo-chemistry studies (Grocott-Methenamine Silver, GMS & Periodic acid-Schiff, PAS) as the fungi clusters seen in both extracellular and intracellularly within the macrophages. Apart from the histopathological examination, radiographic examination such as chest X-ray and CT scan also could provide the additional finding that may help clinician in diagnosing the disease.

CR45

Series of Oral Manifestation Secondary to Cutaneous Adverse Drug Reactions: Muar Experience

Nur Syafikah Nasaruddin*, Nor 'Izzati bt Mohtar

Background: Current medications used to treat diseases may cause unwanted systemic induced allergy reactions. These include cutaneous adverse drug reactions (CADRs) which have

a wide spectrum of reactions including drug reaction with eosinophilia and systemic symptoms (DRESS), Stevens-Johnson syndrome (SJS), and toxic epidermal necrolysis (TEN). Common drugs causing CADRs include anti-convulsants, antibiotics, NSAIDs, and allopurinol. Exact pathogenesis is not well defined however recent study shows that reactive metabolites and immunological processes have a role in causing these syndromes. The aim is to showcase suitable management for oral manifestation of CADRs patients. Case series: Here we report a case series of six of CADRs (4 SJS, 1 TEN and 1 DRESS) that was seen with extensive oral lesions that results in reduced or difficulty in oral intake. Most patients presented with fever for two to three days prior to visiting the hospital. Five were associated with generalized rashes, eye discomfort, mouth and genital ulcer while one with erythroderma with skin scaling and eye puffiness. All were admitted in hospital for further management of symptoms. Combinations of topical and systemic agents such as Benzylamine gargle, hyaluronic acid gel, Maxitrol eye ointment, Potassium Permanganate wash and IV hydrocortisone were given. Hospitalization varies from less than a week up to a month. Average healing of patients ranges from 2 weeks to 2 months. Follow up as outpatient based was continued for up to 1-month post discharge from the ward. Conclusion: CADRs may cause life-threatening complications and localised pain which lead to discomfort such as odynophagia. Prompt recognition followed by immediate withdrawal of offending drugs and appropriate management is critical.

CR46

Primary Reconstruction of Composite Oro-mandibular Defect with Sliding Osteotomy and Fasciocutaneous Radial Forearm Free Flap: A Case Report

Hui Wen Tay*, Nur Ikram Hanim, Mohammad Adzwin,
Chee Wei Lee, Md Arad

Reconstruction of large composite defects involving the mandible and lower lip is often challenging. Mandible reconstruction to restore form and function can be achieved by titanium reconstruction plate and/or vascularised or non-vascularised graft and less commonly, sliding osteotomy. This case report aims to present the authors' experience in using the sliding osteotomy technique as an alternative in mandibular reconstruction and also highlight the reconstructive challenges faced and how they are overcome. A 36-year-old Burmese lady presented to us with a chief complaint of growth associated with pain at the lower left alveolus for the last four months. Mass was increasing gradually in size and affected her oral intake. On examination, an ulcerated exophytic mass was noted at the lower left alveolus; extending from tooth 36 crossing the midline to tooth 41. Skin at the left labio-mental region was also involved. Computed tomography revealed subcentimeter lymph nodes and left mandible erosion but no involvement of the floor of mouth (T4N0M0). The patient has underlying persistent depressive disorder and general anxiety disorder but was otherwise stable psychologically and motivated for surgery. Subsequently, following bilateral selective neck dissection and tumour ablation, reconstruction of the composite mandibular defect involving the lower lip, chin and mandible was accomplished using the mandibular sliding osteotomy

technique bilaterally, combined with a fasciocutaneous radial forearm free flap. The mandibular sliding osteotomy technique, combined with a microvascular free flap could be considered as a good alternative for a one-stage immediate reconstruction of large mandibular defects involving the lip, chin and anterior mandible; with satisfactory outcomes.

CR47

Management of Chyle Leak: A Learning Curve

Muhammad Nadzri Ahmad Sabri*, Md Arad Jelon,
Nur Ikram Hanim Abdul Rahim, Mohammad Adzwin Yahiya,
Lee Chee Wei

Background: Chyle leak is uncommonly encountered during head and neck procedure and it comes with serious complications. Therefore, early identification of chyle leak and necessary intervention is needed to rectify the problem. Expert management is important to have better clinical outcomes. Here, we will discuss management of chyle leak that occurred intraoperatively and postoperatively. Case report: A 60 year old gentleman diagnosed with squamous cell carcinoma at left lateral border of tongue underwent selective left neck dissection, wide local excision of tumour with primary closure. Chyle leak was suspected intraoperatively due to persistent pooling of clear fluid in the surgical field. The thoracic duct was not able to be visualised. Suturing and ligation were attempted to control the leakage. The supraclavicular region was then obliterated with sternocleidomastoid muscle. An accumulation of fluids in the neck was noticed on day 5 post surgery. Conservative management was initiated with octreotide and diet management but to no avail. In view of persistent high drain output, the case was referred to the Cardiothoracic team for surgical intervention. Video-assisted thoracoscopic surgery (VAT) and thoracic duct ligation was performed. The chyle leak was resolved immediately. However, the patient developed transaminitis and duodenal ulcer bleeding that leads to hypovolemic shock. Patient had to undergo esophagogastroduodenoscopy and emergency laparotomy. Patient was put under postoperative intensive care for a few days. However, he recovered well and eventually discharged home. Conclusion: Chyle leak is a rare complication during head and neck surgery and there is a line of treatment that is available to provide patients with best quality care involving a multidisciplinary approach. Poor management of this complication will prolong hospital stay and may contribute to short-term morbidity.

CR48

Perforated Peptic Ulcer: A Postoperative Complication in Head & Neck Surgery

Ahmad Zhafri Zayani Muhammed*

Head and neck surgery may carry serious postoperative complications especially in long duration surgery and comorbid patients. Peptic ulcer disease is a rare complication that can also result after head and neck surgery. Early detection of symptoms and interventions are essentials to improve patient outcomes. A 24 years old fit and healthy lady with a recurrent ameloblastoma of right mandible underwent right segmental

mandibulectomy and reconstruction with left fibula graft and skin paddle in a 12 hours long uneventful surgery. Patient was maintained with opioid analgesic, antihistamine, anticoagulant for DVT prophylaxis and steroids for the subsequent 3 days. The opioid and antihistamine was stopped on day 4 and replaced with IM Voltaren. On day 7, the patient complained of generalized abdominal pain associated with 2 episodes of vomiting and fever. Laparoscopic surgery showed a perforated gastric ulcer and subsequently underwent omental patching with peritoneal wash-out. Patient recovered well, completing a 1 week course of antibiotics. Besides Helicobacter Pylori, Non steroidal anti inflammatory drug (NSAID) is a known risk factor for peptic ulcer disease. Stress during the surgery can also contribute towards ulceration though its pathogenesis is still not very clear. It is therefore important to assess perioperative risk factors for Peptic Ulcer Disease such use of NSAIDs, steroids, and physiological stress in these patients. Clinicians must be alert for any patient undergoing major operative procedure for peptic ulcer disease complication.

CR49

Trigeminal Neuralgia Secondary To Cerebellopontine Angle Tumour – A Case Report

Dharma Raj Mohan*

Trigeminal neuralgia (TN) is also known as tic Doloreaux, is a nerve disorder of the face presenting with sudden usually unilateral severe pain in the distribution of the fifth cranial nerve. The severe pain can be triggered by a mild cutaneous stimulus on the face or ‘trigger zone’. Based on aetiology, Trigeminal Neuralgia is classified into idiopathic TN, classic TN and secondary. Here we report a case of trigeminal neuralgia in a 32 years male patient presented with severe intermittent stabbing pain on the right side of face that radiated down to the distribution of the second and third division of the right trigeminal nerve. Patient treated with oral medications with only short term relief .subsequently the patient underwent neuroimaging (MRI brain) and was found to be having an uncommon space occupying lesion in the right cerebellopontine angle suggestive of vestibular Schwannoma with differential diagnosis includes Meningioma and trigeminal Scwannoma. Patient was then referred to the neurosurgical team for consultation and management of the tumour. This case report shows MRI study in trigeminal neuralgia patients can greatly help in diagnosing the etiology and further management of the patient’s symptoms.

CR50

Swelling of The Floor of The Mouth – A Rare Case

M Komalam*, S Maisi, RK Rajandram

Background: Floor of the mouth swellings often present in maxillofacial clinics. Clinical differential diagnosis often includes infection related, salivary gland neoplasm, sialolithiasis and neural tumours. Spindle cell lipoma are rare occurrences in this location and may often be forgotten by clinicians. Case report: A 71 year old female presented with a unilateral floor of the mouth swelling which enlarged gradually over one year.

Clinically, a 10mm × 10mm whitish, firm and sessile swelling which radiographically appears radiopaque seem to point to a calculi. However, during the biopsy, the lesion was noted to be well encapsulated and upon sectioning the specimen seem to represent a pleomorphic adenoma. Histopathological examination revealed mature adipocytes separated by stroma and spindle cells were CD 34+ and S100-. The final diagnosis was a spindle cell lipoma. To date, there have only been 65 cases of spindle cell lipoma of the oral cavity reported. Clinically it is difficult to diagnose with its diverse overlapping histologic manifestations. Spindle cell lipomas are treated by complete surgical excision with no reported recurrence in literature. Conclusion: Spindle cell lipoma in the floor of the mouth can be easily mistaken for other salivary gland related neoplasm and if not taken into consideration may lead to unnecessary surgical exploration of the sublingual or submandibular glands. This case serves to further explicate the clinical and histologic features of this rare variant of lipoma found in an atypical location.

CR51

Large Expansile Unilateral Submandibular Swelling: A Case Report with Diagnostic Dilemma

ZD Koon*, RK Rajandram, HY Soh, AJ Nazimi

Background: Oral and Maxillofacial surgeons often encounter a submandibular mass which may require surgery depending on the diagnosis. Clinical differential diagnosis often includes developmental, neoplasm, inflammatory, and autoimmune causes. A reactive fibrolipomatous lesion is a very rare occurrence and scarcely reported in the literature as cause of an enlarging mass at the submandibular region. Case report: A 41-year old male presented to us with a slow growing extra-oral swelling on the left submandibular region. The lesion was painless and lobulated with a firm consistency extending from the left body of the mandible to the left submandibular region causing asymmetry. Overlying skin and oral mucosa was found normal. The initial working diagnosis was lymphoma. Incisional biopsy was complicated by massive intraoral bleeding requiring hospital admission, leading to suspicion of a mass of inflammatory or vascular in origin. PET-scan, however showed high FDG focal uptake suggestive of malignancy. The dilemma in this case was formulating a treatment plan due to nonspecific biopsy findings that did not correlate with both radiographic and clinical findings and in which neoplasm cannot be ruled-out. Multiple modalities were used to come to a concrete diagnosis but to no avail thus making it a surgical dilemma. The final diagnosis was a reactive fibrolipomatous process, gathered following complete excision which was treated with antibiotics and steroids. The patient made an uneventful recovery. Conclusion: Surgeons need to be aware of this rare possible diagnosis especially in cases where clinical, radiographic and histopathology investigation do not seem to correlate. Increased suspicion of a possible rare diagnosis like this will avoid surgery that may lead to unnecessary surgical morbidities.

CR52

Shot in the Temporomandibular Joint (TMJ): A case of Endoscopically-Assisted Surgical Debridement of Gunshot Wound

Noor Azura Hani Abdul Razak*, Lisamarie Alice Luhong Sagan

Background: Gunshot trauma to the face is a rare case in Malaysia. However, it seems to be occurring every year. While it may be or may not be a challenging surgical emergency, prompt care must be given. It often comprises notable soft and hard tissue defects. Emergencies such as bleeding and swelling are common situations which must be given attention promptly. Literature has shown that immediate treatment is the standard treatment. Case report: The objective of this case report was to conduct a bibliographic review as well as highlighting this rare incident and management of gunshot wound to maxillofacial region. We present a case of a 58-year-old Iban male, who was allegedly shot in the face by accident while he was working in a palm oil estate. This case report will discuss an isolated gunshot trauma to the facial region, specifically the temporomandibular joint, where it fractured. The fragments of coronoid process of the mandibular bone and bullet fragment was removed using the endoscopic-assisted surgical debridement via the puncture wound and from the ear canal which was co-managed with the Otorhinolaryngology Department. Post-operatively, patient recovery was uneventful and was able to regain his temporomandibular joint function but also suffered from vertigo and slight hearing loss. Conclusion: Gunshot wound treatment varies depending on the severity of the case. In this case, due to the nature of the injury, a conservative method was employed where an endoscope was used to locate the ballistic object / bullet and debride the bony fragments.

CR53

Bilateral Intentional Replantation of Poor Prognosis Mandibular Second Molars in a Single Patient: A Taiping Experience

Kar Tsyeng Ng*, Hui Wen Tay, Namkibir Singh, Jie Han Wong, Vivian Ong

Unfavorable impaction of the lower third molar results in the occurrence of distal caries on the mandibular second molar. Most often than not, patients only present to the dentist with large, extensive caries which warrants extraction. Other factors such as cost, time and logistic issues play a role in patient's decision making, which often favors extraction. Intentional replantation is regarded as the last resort prior to tooth extraction. However, studies on it have shown success rates to be as high as 95%. Objectives: To report the outcome of intentional replantation after extra oral root canal procedure on two poor prognosis mandibular second molar. Findings: A 6 months and 1 year follow up showed a good healing outcome despite several shortcomings in the treatment. Conclusion: Poor prognosis teeth with large carious lesions and mobility should be given a second chance at life, instead of just extracting it!

CR54

Malignant Transformation of Odontogenic Cyst: The Unusual

Shahrul MS*, Muntill NM, Mahdah S

Dentigerous cyst is the most common type of developmental odontogenic cyst associated with an unerupted tooth. The clinical presentation of dentigerous cyst and other forms of pathology such as Odontogenic Keratocyst may be mis-conceived by radiological findings. Therefore, histopathological input by performing biopsy is the gold standard in assisting the definitive diagnosis. The prognosis for dentigerous cyst is usually excellent, and the recurrence is rare. Although odontogenic cysts are benign lesions, estimated 0.13% and 3% could undergo malignant transformation with lesser occurrence on the maxillary region. The growth rate may be quite rapid after the biopsy is done. We report a case of 52 year old gentlemen who presented with a malignant transformation of odontogenic cyst into squamous cell carcinoma.

CR55

Distraction Osteogenesis In Treating Pediatric Patient Presented With Midface Hypoplasia

Sharifah Nor Aishah Syed Yussof*, Lee Chee Wei, Md Arad Bin Jelou, Nur Ikram Hanim Abdul Rahim, Muhammad Adzwin Yahiya

Background: Jackson-Weiss syndrome is a rare genetic disorder characterized by premature fusion of certain bones of the skull (cransynostosis), which prevents further growth of the skull, affecting the shape of the head and face. Jackson Weiss syndrome patients will usually develop distinctive facial appearance, such as midfacial hypoplasia, ocular hypertelorism, palpebral fissures, ptosis, flat nasal bridge, cleft palate and malformed ears. Some patients may be associated with hydrocephalus which often results in increased fluid pressure and abnormal enlargement of the cavities within the brain. If left untreated, patients may experience complications such as obstructive sleep apnea, headaches, visual disturbances, along with compromised aesthetics which will affect their quality of life. Case report: A case of an 8 year old Chinese boy, diagnosed with Jackson-Weiss syndrome FGFR2 related, with characteristics of cransynostosis, allergic rhinitis, hearing impairment, and obstructive sleep apnea secondary to maxillary hypoplasia, adenotonsillar hypertrophy, and childhood obesity. Patient has class III malocclusion on a class III skeletal profile with severe maxillary hypoplasia and 5mm reverse overjet. Patient underwent LeFort III osteotomy via bicoronal flap for midface advancement with internal and external distraction

osteogenesis, aiming to increase the nasopharyngeal airway and possibility of weaning off his continuous positive airway pressure therapy (CPAP). Distractor was activated for 2 weeks, twice daily. 1 month post-operative review shows significant improvement on the facial profile, good nasopharyngeal airway and class I anterior malocclusion with positive overjet. Conclusion: Distraction osteogenesis in managing midface hypoplasia in growing children is a simple, yet effective and safe surgery procedure. It allows expansion of the nasopharyngeal airway, with the hope of enabling the patient to breathe well without depending on CPAP or tracheostomy.

CR56

A Supraclavicular Artery Island Flap in Oral Maxillofacial Reconstruction: A Case Series

Lim Keat Yin*, Mohammad Adzwin Yahiya, Nur Ikram Hanim Abdul Rahim, Md Arad Jelou, Lee Chee Wei

Background: Reconstruction of oral and maxillofacial defects post-surgical resection is highly challenging and require complex surgical undertaking. Various reconstruction techniques have been used to rehabilitate the esthetic as well as the functional component of oral and maxillofacial region after the ablative surgery. Among these techniques, microsurgical techniques with free flaps are considered the 'gold standard' for reconstruction of head and neck defects. However, this technique requires a high degree of specialisation, cost, and careful patient selection. Hence, in the recent years, with better understanding of the skin vascular anatomy and technical refinement, the 'forgotten' regional flap like supraclavicular artery island flap has gained back the popularity, providing a good option for selected oral and maxillofacial reconstruction due to its reliability, easier to harvest and favorable color match. Case Report: We are presenting a case series of six patients who had oral and maxillofacial reconstruction using supraclavicular artery island flaps in Hospital Kuala Lumpur. Five patients had tumor ablation surgery due to oral cancer and one patient had tissue loss due to necrotizing fasciitis. The supraclavicular artery island flaps were used to reconstruct buccal mucosa and cheek defect, tongue, and submandibular region. Two patients had partial flap necrosis requiring debridement and wound care. No remarkable morbidities in all donor sites. Conclusion: The outcomes of our supraclavicular artery island flap reconstruction are comparable to previously published outcomes. It provides an alternative to vascularized free flap in soft tissue reconstruction of oral and maxillofacial defects. It is a thin, versatile, reliable flap that is easy to harvest with good esthetic and functional outcomes at both recipient and donor sites. Its simplicity and straightforward flap harvest process makes it a valuable reconstruction modality for beginning surgeons.

CR57**Management of Bisphosphonate related Osteonecrosis of Jaw**

Priadhashini Pekasarouf*, Nurlidiah Md Ghazali,
R. Sundrarajan Naidu

Bisphosphonate related osteonecrosis of the jaw (BRONJ) was defined as the presence of exposed bone persisting for more than 8 weeks in the oral cavity of an individual treated with bisphosphonate with no history of radiation to the head and neck. Bisphosphonate is a class of agent used to treat osteoporosis and the complications associated with malignant bone metastases which unfortunately compromise the healing potential of the jaw. The management of BRONJ usually poses a great challenge due to its profound inhibition of osteoclast function and bone remodeling properties. We report 2 cases of BRONJ involving maxilla and mandible in which progressive healing is achieved by using Whitehead's varnish (WHV) dressing. Both patients were referred to our department in 2016 presented with non-healing sockets following tooth extraction. It was noted that both had underlying malignancy who have a history of IV bisphosphonate given more than 2 years. Clinically, necrotic bone and pus discharge were noted over the extraction region with over the time, extraoral fistula developed in one of these patients. Broad-spectrum antibiotics were given followed by daily home saline irrigation, however it showed no positive outcome. Thus, regular WHV dressing was placed over the intended region after surgical removal of the necrotic bone. The goal of the treatment is to render the progression of the disease and this is achieved with diverse properties of the WHV itself. Both patients are still undergoing regular follow up under our department and up to date has a positive improvement.

CR58**Post-kidney Transplant Lymphoproliferative Disorder Manifesting as Cheek Swelling**

Nurul Husna Ab Razak*, Juliana Khairi,
Sherrie Chong Mei Yee, M. Thomas Abraham

Introduction: Post-transplant lymphoproliferative disorder (PTLD) is a heterogenous group of lymphoid malignant neoplasms that can arise either after solid organ transplantation or haematopoietic stem cell transplantation. Many studies have suggested that post-transplant patients were more at risk to get infection-related cancers such as Kaposi sarcoma and Non-Hodgkin Lymphoma compared to the general population due to immunosuppressive therapy. When adjusted for age, immunosuppressive therapy provided and the recipients' Epstein-Barr virus serology status, the risk of post-transplant patients of getting PTLD is 20 times higher than that of the general population. **Case report:** A 62-year-old lady presented to the Oral and Maxillofacial Surgery Department, Hospital

Tengku Ampuan Rahimah, Klang with swelling on her left cheek. She had a living non-related renal transplant in 1998 and subsequently has been on an immunosuppressive drug consisting of cyclosporine, prednisolone and azathioprine. Her other known comorbidities were diabetes mellitus, ischaemic heart disease, bronchial asthma and hepatitis C. Since the swelling did not resolve with antibiotic therapy, an incisional biopsy was done. The histopathological examination turned out to be a high-grade lymphoproliferative disorder of B-cell subtype. **Conclusion:** Due to the heterogeneous nature of post-transplant lymphoproliferative disorder, the disease may present in an unusual location and may mimic various infections. Since this may pose diagnostic difficulties and to avoid unnecessary delay in treatment due to misdiagnosis, a high degree of suspicion is needed to establish diagnosis early.

CR59**Tetanus Infection following Dental Implant Surgery: Case Reports**

Gerald Joseph*, Tan Chuey Chuan

Background: Tetanus, a vaccine-preventable disease, that is caused by the toxin produced by *Clostridium tetani*. Despite the rareness of tetanus in developed countries due to proper immunization, this issue is still quite alarming in developing countries. A well-known fact is that an open wound establishes a pathway for tetanus infection. This potentially fatal infection can be presented as generalised tetanus, neonatal tetanus, cephalic tetanus, and localized tetanus, the latter two being much rarer. We would like to report 2 cases of tetanus which developed after a dental implant placement surgery; one as cephalic tetanus and the other being localised tetanus. **Case report:** Case 1 is a 68-year-old Chinese, male, upon placement of dental implants, he presented with symptoms of trismus, dysphagia, slurred speech and right facial paralysis which later worsened and developed generalised muscle spasm and difficulty in breathing. He required care in the intensive care unit with an emergency tracheostomy to secure his airway. Upon symptoms recovery, the patient was discharged home after 43 days of hospitalisation with outpatient rehabilitation care. Case 2 is a 57-year-old, Chinese, female seen in the Emergency Department who was initially treated as trismus secondary to left masseter myositis following implant placement. However, she came back with worsening trismus & involuntary spasm localised to the left masseter. A total of 20 days care in the hospital with a course of tetanus treatment was given. She was discharged home with vast improvement in presenting symptoms. **Conclusion:** Tetanus infection following dental implant placement is considered a breach in sterility of the procedure. Thus, the occurrence of occasional cases should alarm all dental practitioners to a higher level of hygiene practices. Furthermore, practitioners should stay alert to identify early symptoms of tetanus infection so proper measures can be taken to prevent fatality.

CR60

Decompression of Multiple Odontogenic Keratocysts in a Young Patient: A Case Report and Review of Literatures

MA Hamzah*, HY Soh, JR Rajaran, RK Rajandram

Background: Management of odontogenic keratocyst in the pediatric population is often a surgical dilemma in view of balancing disease-free status versus negative impact of intervention on dental and skeletal growth. Case report: A 15 years-old female patient presented with delayed eruption of multiple permanent teeth. Radiographically, finding of multiple radiolucencies was noted on her mandible and maxilla. Histopathological results confirmed all lesions to be odontogenic keratocyst. All the lesions were managed initially by decompression and followed by enucleation 6 months later. Patient has subsequently been on regular follow-up with only one reported recurrence at a single localized region. 3 years radiographic and clinical follow-up showed full bony remodeling of the affected regions with spontaneous eruption of permanent teeth into their position. Conservative management by initial decompression has the advantages of preserving vital structures such as nerves and developing teeth. This is particularly beneficial for young patients and growing children in a mixed dentition. Regular follow-up and good patient compliance are important when deciding on conservative treatment options. Conclusion: Initial decompression can provide good clinical outcomes in a young and growing patient. Our technique has shown to be effective in ensuring a good functional outcome without compromising disease control.

CR61

Cervical Chyloma Following Neck Dissection: The Unexpected

Ng Ja*, Mahdah S.

Cervical chyloma occurrence following neck dissection procedure is one of a very rare complication. Chyloma is formed as a result of chyle leak due to injury to the thoracic duct, with the left side being more common than the right. This may be due to trauma, iatrogenic or an unknown cause. During neck dissection, it is usually presentable within one to two days postoperatively. Extensive or prolonged chyle leak may lead to poor nutrition, resulting in immunosuppression. This in turn renders the patient vulnerable to infection-related complications such as sepsis and pneumonia. Awareness and the ability to identify this rare complication is vital for timely diagnosis and thus, further treatment and management. We present a delayed presentation of left cervical chyloma of a patient with squamous cell carcinoma of the Tongue.

CR62

The Versatility of Submental Island Flap in Oral Cavity Reconstruction: HKL Experience

Muhammad Syamir Kamru Shaufi*, Mohammad Adzwin Yahiya, Md Arad Jelon, Nur Ikram Hanim Abdul Rahim, Lee Chee Wei

Background: Submental flap was first described by Martin et al in 1993. It has excellent skin colour match, near to oral cavity, wide arc of rotation, and can extend to the whole ipsilateral face except the forehead. It is an axial fasciocutaneous flap that includes skin, subcutaneous tissue, platysma, fat and is pedicled on the submental artery and veins. It can also be used as a free flap. To illustrate our experience with submental flap in reconstruction of oral cavity defects at various tumour subsites. Case series: Three cases of oral cavity reconstruction with submental flap were done at Oral & Maxillofacial Surgery Department, Hospital Kuala Lumpur in 2019. Case 1: 72 years old female, known case of ameloblastoma at the anterior (body) mandible. Tumour decompression was done to reduce the size of the tumour. This was followed by segmental mandibulectomy and reconstruction with submental flap and reconstruction plate. Case 2: 36 years old male, known case of recurrent ameloblastoma at the right posterior (ramus) mandible. Multiple enucleation was done but recurrence noted at the right ramus area. Segmental osteotomy was done with disarticulation and reconstruction of the defect with submental flap. Case 3: 65 years old female with squamous cell carcinoma of left hard palate. Left selective neck dissection, left inferior maxillectomy and reconstruction with submental flap and surgical plate placement were performed. No consensus was made regarding the need for adjuvant chemoradiation. All patients' recovery was satisfactory with minor complications. The flap healed well and provided the bulk and adequate coverage for the defect. Conclusion: This preliminary experience showed that submental flap is an excellent alternative for reconstruction of intraoral defects due to its versatility, reliability and applicability for various tumour subsites. It shows great potential as a surgeons' armamentarium especially when other complex microvascular expertise is not possible.

CR63

Undifferentiated Pleomorphic Sarcoma of Left Mandible

Sachin Khanecksha Karunanithi*, Sherrie Chong Mei Yee, Juliana Khairi

Undifferentiated Pleomorphic Sarcoma previously described as Malignant Fibrous Histiocytoma, is a highly malignant tumour which commonly affects soft tissues, but rarely in the oral cavity. Occurrences in the mandible only accounts for 3% of all cases of Undifferentiated Pleomorphic Sarcoma within bones and is usually aggressive with a high rate of local recurrence. Clinically patients may present with a slowly enlarging soft tissue mass with various non specific symptoms. This article aims to report a rare case of Undifferentiated Pleomorphic Sarcoma in the mandible, its histological features and surgical management.

CR64**Oral Manifestation of Lymphoma: A Series of 4 Cases**

Nur Athirah Farzana Ibrahim*, Muhammad Amir Firdaus Wan Hasamudin, Aezy Noorazah Omar, Sharifah Munirah Al-Idrus

Lymphoma is a cancer of the lymphatic system which is a part of the body's defence mechanism particularly lymphocytes. This type of malignancy happens when disease-fighting white blood cells undergo mutation that can cause rapid proliferation of abnormal white blood cells. Lymphoma is mainly categorized into two forms: Hodgkin's Lymphoma and Non-Hodgkin's Lymphoma. Treatment modalities for lymphoma are chemotherapy, immunotherapy, radiation therapy, bone marrow transplant or a combination. Lymphoma can present with multiple signs and symptoms. Oral cavity lymphomas are the third most common malignancy in the oral cavity, after squamous cell carcinoma and malignancies of the salivary glands. However, they are rare and only comprise 3% of all lymphomas in the general population and 4% on patients with AIDS. Oral lymphomas are often difficult to diagnose because their clinical presentation may mimic other diseases such as periodontal disease, odontogenic infection, osteomyelitis, oral ulceration and other malignancies. Often histopathological examination requires special staining which may take time to confirm the diagnosis. This may lead to delay in providing the correct treatment, hence worsening the prognosis. Here, we present 4 cases of oral cavity lymphomas in order to alert the medical and dental community the possible differential diagnosis to consider when faced with such lesions.

CR65**Managing Oral Squamous Cell Carcinoma in A Chronic Kidney Disease Patient**

Ain Zubaidah Hussein*, Aezy Noorazah Omar, Mohammad Adzwin Yahiya, Sharifah Munirah Al-Idrus

Chronic Kidney Disease (CKD) is defined as the presence of kidney damage, manifested by abnormal albumin excretion or decreased kidney function, quantified by measured or estimated glomerular filtration rate (GFR), that persists for more than three months. CKD is a common and serious problem worldwide. According to the National Health and Morbidity Survey in 2011, the prevalence in West Malaysia was 9.07%. This prevalence has since increased to 15.5% in 2018. Although the incidence of cancer in CKD patients has increased, there is a paucity of available information on the optimal management of CKD patients with cancer. Because of uncertainty, general treatment goals may vary widely with clinician and patient preferences. This report describes the management of a patient who was diagnosed with Oral Squamous Cell Carcinoma with underlying CKD who has been on dialysis since 2018. The treatment involved a multi-disciplinary approach in order to give the patient the best possible quality of life. This required close surveillance for his renal condition and cancer management. This involved close monitoring of electrolytes, cardiovascular, pulmonary and nutritional status, psychological support, as well as close surveillance for infection and other complications.

CR66**Garre's Osteomyelitis of Mandible: A Case Series**

Anis Najihah Mohd Ismail*, Nurliza Abd Razak

Garre's osteomyelitis is described as a type of chronic osteomyelitis that is commonly found in children and adolescents. This condition is recorded in the literature as chronic non-suppurative sclerosing osteomyelitis, periostitis ossificans and osteomyelitis with proliferative periostitis. It was first described in the mandible by Pell in 1955. We reported a case series of Garre's osteomyelitis in patient at age of 7 to 17 years old initially presented with facial asymmetry related to odontogenic origin. The diagnosis of Garre's osteomyelitis was concluded through clinical examination and radiographic imaging including plain radiograph and contrast enhanced computed tomogram. Histopathological analysis was carried out in suspicious cases to rule out other bony pathology. Management of the condition was customised in each patient which consisted of extraction and also endodontic treatment in a good prognosis case. At present, in modern antibiotic era, Garre's osteomyelitis is rarely reported. Nevertheless, its clinical presentations may mimic other pathological diseases such as fibrous dysplasia, Ewing's sarcoma, Caffey disease, osteosarcoma and osteoma. Therefore, in this case series, we highlight the diagnosis and management of Garre's osteomyelitis of mandible.

CR67**Challenges In Chemotherapy Patients In A Non-Oncology Hospital**

Ashvini A.*, Mahdah S.

Chemotherapy is often an advocated treatment for oral cancer patients. Combined chemotherapy with radiotherapy has been shown to improve local control due to its direct cytotoxic effects and its potential systemic effect in targeting the malignant cells. As every treatment carries a set of side effects, patients undergoing chemotherapy are anticipated to experience multiple discomforts, complications and associated lesions. They are usually multifactorial such as type and dose of chemotherapeutic drugs and patients health status. As a non-oncology hospital, we faced many challenges while managing oral cancer patients undergoing chemotherapy that came from both patient and primary physician. Patient's awareness, socio-economic background, psychological status and personal beliefs are some of the major challenges we faced. Meanwhile, communication with the Oncology team, limited diagnostic tools and non-ideal facility environment becomes the hiccup on our part. This case series summarizes the challenges and how we tackled them so the patients will benefit from optimum treatment care.

CR68

Malignant Mixed Germ Cell Tumour of Mandible: A Case Report

Tharmentheran Pitchaimuthu*, Lee Chee Wei, Mohammad Adzwin Yahiya, Nur Ikram Hanim, Md Arad Jelon

Background: Germ cell Tumours (GCT) are neoplasms derived from germ cells. GCT usually occurs inside the gonads. Extragonadal GCT are rare. Most common GCT associated with the head and neck region are the teratomas. Mixed germ cell Tumours occur in many forms. Teratocarcinoma refers to a germ cell tumor that is a mixture of teratoma with embryonal carcinoma, or with choriocarcinoma, or with both. Of the few teratomas found in the head and neck, malignant transformation of a teratomatous element is very uncommon, and primary bone involvement within the head and neck is even rare. We present a case of primary malignant mixed germ cell Tumour involving the mandible. **Case Report:** A 7 year old Malay girl was referred to Department of Oral Maxillofacial Surgery, Hospital Kuala Lumpur for management of rapid progress of swelling with presence of active bleeding of the mandible. Patient was initially presented with a pain over lower right back tooth. Clinically, swelling on the right inferior border of mandible extending past the midline with exophytic mass noted over the 85 region measuring 3cm × 2.5cm with irregular margins and corrugated edge. Initial Histopathology examination (HPE) suggestive of malignant epithelial tumour of right mandible. Following a CT TAP shows similar impression as the HPE with no evidence of distant metastasis. Treatment rendered was emergency tracheostomy was performed together with right hemimandibulectomy of the mandible with primary closure. **Conclusion:** Malignant mixed GCT of mandible is one of the rarest entities and requires prompt multidisciplinary care for therapeutic outcome. Treatment rendered to this patient is discussed.

CR69

A Rare Case of Synovial Sarcoma of Maxilla in an Infant

Ihsan Maidin*, Nurlidiah MdGhazali, R. Sundrarajan Naidu

Synovial sarcoma of head and neck region is extremely rare, it accounts for about 10% of all soft tissue sarcomas. Surgical dissection remains a great challenge as it is difficult to achieve a clear margin due to complex anatomy of the head itself. Multimodal approach is needed to obtain a good outcome. We present a case of a 7-months old infant diagnosed with synovial sarcoma of right maxilla referred to our department for the management of the tumor. Patient was presented with a right facial swelling without any other significant symptoms. A biopsy was performed and it was diagnosed as synovial sarcoma in November 2018. After completing the 3rd cycle of chemotherapy, surgical excision of the tumor was done via Bramley-Alkayat with modified Blair technique. Histopathologically, the mass was seen <1mm from all outer surfaces. Patient has undergone regular follow up and repeated Magnetic Resonance Imaging (MRI) showed no signs of recurrence up to date. Synovial sarcoma of the maxilla in an

infant is a rare entity, and usually pose a great challenge due to the rarity and diverse clinical behaviors. A thorough clinical investigation, a good surgical approach and multidisciplinary care are needed to produce a good outcome.

CR70

Not Your Average Bubble: A Case Report of Acinic Cell Carcinoma

Phoon Kheng Yoke, Nor 'Izzati Mohtar, Md Arad Jelon, Nurliza Abd Razak

Background: The acinic cell carcinoma (ACC) was first mentioned by Godwin et al. It's defined by the World Health Organization (WHO) as a low grade malignant epithelial salivary gland neoplasm. This tumour is predominantly seen in women and commonly involves the parotid gland, and for the intraoral region over the buccal mucosa, lips and palate. **Case report:** We report a case of a 21 year old Malay lady, who came to us in early 2020, complaining of a small and soft swelling over lower lip. She claims the painless swelling was there since 2018, for around 2 years with no changes in size. Past history of swelling over the same site and was removed uneventfully in 2016. Provisional diagnosis was mucocele and excisional biopsy was performed. Upon review, the surgical site failed to heal and was ulcerated, associated with pain and occasional pus discharge. Concurrently, her histopathology resulted as acinic cell carcinoma. Wide excision of primary tumour over lower lip, with primary closure via bilateral advancement and left selective neck dissection was performed under general anaesthesia. Radiotherapy wasn't initiated after consultation with the oncologist. She is currently free of disease and on periodic follow up with us. **Conclusion:** This case report serves as a reminder to all clinicians not to underestimate any pathological changes seen routinely in the clinic. By coming to proper diagnosis, ACC can usually be managed by complete surgical excision and followed by adjuvant radiotherapy if needed. Due to its risks of local recurrence and metastasis, strict routine long term follow up is recommended for these patients.

CR71

Odontogenic Myxoma of Posterior Maxilla: A Case Report

Mohd Nor NA*, Parumo R, Zainal NA

Odontogenic myxoma is a rare odontogenic tumour and is believed to arise from odontogenic ectomesenchyme. It comprised 3%–6% of all odontogenic tumours. The tumour can be found in any area of the jaws, more commonly found in the mandible compared to maxilla. We present a case of odontogenic myxoma with involvement of posterior maxilla in a 32-year-old Indonesian gentleman. This gentleman was referred to our clinic from a peripheral clinic in Pontian district with a complaint of swelling over the right upper gum for more than 2 years. The swelling increased in size without disturbance to his daily activities. However, pain was only associated a week prior to his dental visit. On clinical examination, ill defined diffuse swelling with fullness of cheek till zygoma area extra-

orally and large smooth surface swelling over maxilla with displacement of posterior teeth intra-orally. Clinical working diagnosis was Lymphoma and urgent incisional biopsy was performed and revealed as an odontogenic myxoma. Enucleation of tumour done with peripheral osteotomy. Reconstruction of maxilla done with surgical plate intra-operatively followed by obturator with teeth two week post-operatively. We present this case to alert clinicians of this possible odontogenic tumour and despite it being rare, odontogenic myxoma should be included in the differential diagnoses.

CR72

Complications In Complex Oromandibular Reconstruction Using Rib-Pectoralis Major Osteomyocutaneous and Tendinofasciocutaneous Radial Forearm Free Flaps

Ainil Husna Amin*, Mohammad Adzwin Yahiya, Md Arad Jelon, Nur Ikram Hanim Abdul Rahim, Lee Chee Wei, Narasimman Sathiamurthy

Background: Oncology resection of head and neck can leave a composite defect, which is challenging to reconstructive surgeons. Various techniques utilizing single flap have been suggested for reconstruction of oromandibular defect. However, a single flap might not be sufficient to restore the 3-dimensional hard tissue and soft tissue structures when involving extensive tumor resection. Few dual flap techniques have been mentioned in the literature. One of the options is a combination of free flap and pedicle flap to reconstruct intraoral and extraoral complex wound defects. Here we would like to share our experience using rib-pectoralis major osteomyocutaneous flap and tendinofasciocutaneous radial forearm free flap to reconstruct composite oromandibular defect and its complications. Case report: A 60 years old Indian female diagnosed with squamous cell carcinoma of lower anterior alveolus with cutaneous involvement was referred to Oral & Maxillofacial Surgery, Hospital Kuala Lumpur. We performed bilateral neck dissection, wide excision of tumor and anterior segmental mandibulectomy. Soft and hard tissue loss in the oromandibular region was reconstructed with rib-pectoralis major osteomyocutaneous flap whilst lower lip and chin defect was then reconstructed with tendinofasciocutaneous radial forearm free flap. Postoperatively, there was intraoral wound dehiscence between flaps and gingiva and managed by local measure. Postoperative one month, the patient developed oro-cutaneous communication which required wound debridement under general anesthesia. The rib graft was infected and had to be removed. Conclusion: Rib-pectoralis major osteomyocutaneous flap is an option to reconstruct composite oromandibular defect in selected cases. Tendinofasciocutaneous radial forearm free flap was used to reconstruct lower lip to preserve oral seal and prevent sialorrhea. These dual flap techniques may be considered in selected cases but not without its complications.

CR73

Giant Peripheral Ossifying Fibroma on Right Maxilla

Menaga Balakrishnan*, Sabrina Peter

Peripheral ossifying fibroma (POF) is a focal, reactive, non-neoplastic lesion which occurs in response to trauma or irritation. POF develops in the interpapilla region and is believed to arise from the periodontal ligament. Literature reports POF as a painless mass on gingiva not exceeding 2.0cm in size. It has been suggested that POF represents a separate clinical entity rather than a transitional form of pyogenic granuloma or irritation fibroma. We hereby report a rare case of a POF in a 57 years old malay lady in which growth exceeds more than 2 cm with erosion of the maxillary alveolar bone. The lesion was adequately excised and healing was uneventful.

CR74

Odontogenic Fibromyxoma of Mandible: A Case Report and Review of Literature

Harshinie Audimulam*, Jonathan Rengarajoo, Jaswinder Singh Mukhwant Singh, Lim Yee Chin, Ravindran Murugesan

Background: Odontogenic fibromyxoma or odontogenic myxofibroma, is a relatively rare neoplasm that accounts for only 3-8% of all odontogenic cysts and tumors of the jaws. Derived from embryonic mesenchymal elements, fibromyxomas of the head and neck region may arise from either soft tissue or facial skeleton. Clinically, it commonly presents as a locally aggressive, non-specific painless swelling. Surgical treatment options include: conservative surgical excision, enucleation and curettage, en-bloc resection and wide resection with and without bone grafting. Case report: A 46-year-old gentleman, who presented to the Department of Oral and Maxillofacial Surgery, Selayang for evaluation of a progressive, painless pedunculated mass of the right posterior mandible associated only with numbness of the right chin and lower lip. Radiological investigation with computed tomography (CT) scan revealed a lobulated mass extending laterally into buccal space and lingually displacing tongue, along with septation of right angle of mandible with no buccolingual expansion. Subsequent incisional biopsy confirmed a diagnosis of odontogenic fibromyxoma. In view of the large tumour size causing mass effect and pressure induced erosion of maxillary sinus, as well as reported increase in recurrence rate with conservative surgical approach, marginal mandibulectomy along with en-bloc resection of tumour was carried out. Conclusion: Albeit being of rare incidence, odontogenic fibromyxomas should be considered as part of the differential diagnosis. The locally aggressive nature of tumour progression and high recurrence rate should be taken into consideration in treatment planning, management and long term follow up of this tumour.

CR75 Necrotising Fasciitis Over Oral & Maxillofacial Region: A Case Series

Choudhry Sundaram Padiachee*, Nurlidiah Md Ghazali, Sundrarajan Naidu

Necrotizing fasciitis is a rapidly progressive, destructive and potentially fatal soft tissue infection. It infects and moves along the fascial plane with involvement of the overlying subcutaneous tissue and skin. Necrotizing fasciitis over the maxillofacial region is said to be uncommon. We would like to report unique cases of necrotizing fasciitis involving the Oral & Maxillofacial region. The patients presented to us mostly have Diabetes Mellitus as the most common underlying co-morbidity. Most of them initially presented with a history of long standing toothache with involvement of facial swelling before progressing into Necrotizing Fasciitis. Clinical presentation of these patients includes odynophagia, reduced oral intake and limited mouth opening. There are patients that were misdiagnosed initially and a delay in surgical intervention resulted in a more debilitating outcome. Baseline blood samples taken revealed there is a marked increase of White blood cell count. Microbiological laboratory results show that Klebsiellapneumoniae (Extended-Spectrum-Beta-Lactamase) is commonly found in these patients. Multiple extensive wound debridement under general anaesthesia coupled with a wide spectrum of antibiotics therapy were needed in order to combat this disease. Daily wound dressing with Dermacyn once the infection settled down was done to aid in the healing process. Due to the rarity of this disease, early diagnosis with prompt aggressive treatment plays a vital role to reduce morbidity and disability.

CR76 Treatment of Recurrent Oral Pyogenic Granuloma: An Alternative Therapeutic Approach

D Thambirajah*, MB Chai, K Anwar Tahir, N Mohammad

Background: Oral Pyogenic Granuloma is a non-neoplastic inflammatory hyperplasia of the soft tissue in the oral cavity. It is commonly known to involve the gingiva. The aetiology of the lesion is not known, though it was originally believed to be associated with minor trauma, chronic irritation or hormonal factors. Poor oral hygiene may also be one of the precipitating factors. Clinically pyogenic granuloma is generally seen as a smooth or lobulated exophytic lesion with a pedunculated or a sessile base. Due to its great angiogenic capacity, pyogenic granuloma is usually presented as reddish and painless localized growth. Primary treatment of pyogenic granuloma usually involves a complete surgical excision. The recurrence rate for pyogenic granuloma is said to be 16% and re-excision is advisable. This report describes a case of a 28-year-old female who presented with a large sessile growth at her upper right molar tooth region in which excisional biopsy was performed twice due to recurrent. Histologically suggested a diagnosis of pyogenic granuloma. The severity of the lesion and the affected site often challenges its surgical treatment. As an alternative, a non-surgical approach was performed and there was no recurrence thereafter.

CR77 Surgical Ciliated Cyst of Maxilla Mimicking Radicular Cyst: A Case Report

Bhrendtha Subramaniam, Anand Ramanathan, Tan Chuey Chuan

Introduction: Surgical ciliated cyst is a rare, benign cystic lesion seen in the maxilla and found to be lined by respiratory epithelium. It is not uncommon in Asian population with a prevalence of up to 20% where it is also known as a postoperative maxillary cyst, as they are seen in patients with a previous history of surgery or trauma to the midface region. The development of this cyst can range between 1 to 55 years. Case Report: A 53-year-old, Chinese lady presented to our department with a complaint of loose palatal obturator and mobile crowns of 25, 26 and 27. She has a history of repaired cleft lip and palate that developed into a large palatal fistula following orthognathic surgery at 19 years of age. CBCT revealed a well demarcated, ovoid, radiolucent lesion surrounding the palatal root apex of tooth 26 and periodontally compromised 25, 26 and 27. The presence of midface titanium plates and screws correlated with the patient's history of undergoing orthognathic surgery. A clinical diagnosis of a radicular cyst was made, and the lesion was surgically enucleated. Histological evaluation demonstrated pseudostratified ciliated columnar epithelial lining. The patient had an uneventful recovery following removal of the cyst. Conclusion: Surgical ciliated cysts mimic clinically and radiographically as inflammatory cysts of dental origin. Clinicians should include it as a differential diagnosis especially in patients with a previous history of trauma or surgery to the maxilla. The possibility of the occurrence of this cyst as a surgical complication should be informed to patients who would be undergoing maxillary osteotomy or Caldwell Luc surgery. As recurrence is rare, enucleation of the cyst is the recommended treatment of choice in small cysts.

CR78 Printing in the Aid of Accurate Pre-Shaping of Plates in the Infra Orbital and Blow Out Fractures – A Case Report

Nurul Aiman Abu Jamal*, Firdaus Hanafiah, Kathiravan Purmal, Zafirah Z. Merican

Background: The fracture of the orbital and zygomatic bones have been noted as the most common mid facial fractures. The size, shape and extension of the plates for reconstruction are somewhat difficult to estimate or envision since the plain X-rays and computed tomography (CT) scans are presented in two dimensional forms in either films or digital screens. The advent of 3D printing has made it possible for us to manufacture a rapid prototype of a full 3D dimensional model of the fractured maxillofacial complex. With the 3D printed model, it is now possible to pre-bend and shape the infraorbital plate and associated mesh to the desired dimensions and curvature. Case report: A 30-year-old Malay female was referred to our hospital due to an alleged fall from a motorcycle. She allegedly skidded and fell onto the sidewalk. Post trauma, she had full GCS, no loss of consciousness. On examination, she had diplopia on right upper gaze; slight enophthalmos of

the right eye was observed. She also had numbness in her right cheek. A CT scan revealed fractures of the right orbital rim and as well as a right maxillary fracture. She was then scheduled for an open reduction and internal fixation surgery to reduce the maxillofacial fracture. A 3D computed tomography model of the right orbit was created as a model to help in preoperative planning and was made as a mould to shape the titanium orbital plate. Conclusion: Despite the complex anatomy of the orbit, the process of shaping and trimming to the precise contour for this patient was made easier with the aid of a 3D printed model with less risk of soft tissue damage and less trial of fitting.

CR79

Traumatic Parotid Gland Fistula

Afaf Syahira Ahmad Satmi*, Azmeel Mazlee Bin Anuar, Shamsul Anuar bin Ahmad

Sialocele and fistula are the rare complications of salivary gland injury that can be due to trauma or surgery. Study by Lewis and Knottenbelt reported that about 0.21% of trauma cases become the cause of parotid gland injuries. Thus, a thorough history, clinical examination and investigations are required in order to diagnose this condition as well as to come out with a proper management. There are many treatment modalities as proposed in literature that involve conservative and surgical approach. In this case report, a healthy 33 years old Indian male with post motor vehicle accident presented with right parotid duct fistula. Both conservative and surgical approaches were done in managing this patient. Hyoscine was prescribed as initial management and as swelling was remarkable after a week, surgical exploration, drainage and ligation of parotid duct was done under general anaesthesia. The desired outcomes were achieved. Patient was able to recover well post operatively asymptotically. In conclusion, conservative and surgical approach can be done in managing salivary gland fistula.

CR80

Nostril Post Extraction

Alicia Ding*, Ng Kar Tsyeng, Ferdinand JK

Oroantral communication (OAC) is an abnormal communication between the oral cavity and the maxillary sinus that can occur post extraction of maxillary posterior teeth. Over time, a layer of epithelium lines this communication resulting in the formation of an oroantral fistula (OAF). Different flap designs have been used for this purpose, based on the defect size and location. This report highlights a case whereby a patient complained of pain over the right cheek region, as well as nasal regurgitation upon rinsing and drinking. She presented to a general medical practitioner and was diagnosed with sinusitis. It was later discovered that she had an extraction of an upper molar recently. This case report highlights the importance of good history taking and all clinicians should be able to identify the signs and symptoms of OAC in order to establish an accurate diagnosis with subsequent effective management.