

lesions demonstrate the variations in the growth of the epithelial lining, metaplastic changes in the form of mucous cell, rushton bodies and ciliated columnar cells in the epithelium. Cholesterol clefts, juxta-epithelial hyalinization, russel bodies, foamy macrophages, multinucleated giant cells and odontogenic epithelial rests are the histopathological presentations found in connective tissue stroma.

Case description: Total 59 cases of radicular cysts were histopathologically confirmed in our institution from December, 2017 to December, 2022. In this series, five cases of radicular cysts with varying histopathological features has been described. This diverse form of histopathology may signify aggressiveness, chronic nature of the lesion and adaptive mechanism of the host immune system determining the fate of the lesion.

Conclusion: After excising such periapical lesions surgically, a routine histopathological evaluation is important to know the aggressive behavior and potential for malignant transformation. Distinct histopathological findings in the same lesion may provide an important insight into the knowledge of the morphological variations of radicular cysts.

Keywords: cholesterol clefts; dental pulp necrosis; radicular cysts

Salvage therapy for immunotherapy-refractory oral cancer with combination chemotherapy.

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Abstract

Cancer immunotherapy based on the blockade of immune checkpoint molecules such as PD-1, CTLA-4, and PD-L1 has opened new opportunities for recurrent or metastatic cancers that are refractory to other therapies. Currently, immune checkpoint inhibitors nivolumab and pembrolizumab, human monoclonal IgG4 antibodies targeting PD-1 on T-cells, have been clinically successful in prolonging the overall survival of patients with recurrent and/or metastatic oral cancer. However, the overall response rate in patients treated with immunotherapy is still low and the optimal therapy is largely unknown, especially in cases in which immunotherapy is no longer effective. Recently, salvage therapy with combination chemotherapy offers a novel insight into the treatment for immunotherapy-refractory cases. We present our experience of successful treatment of salvage therapy in immunotherapy-refractory oral cancer.

Vascularized scapula bone graft using angular branch in maxillofacial reconstruction

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Abstract

The scapula flap is one of the most widely used osteocutaneous flaps in maxillofacial reconstruction. The nutritional vessel, the subscapular artery(SSA), is divided into the circumflex scapular artery(CSA) and the thoracodorsal artery(TDA), both of which supply the scapula bone and the skin. Therefore, the scapula flap can be harvested with the CSA or TDA and the SSA can be used as a vascular pedicle for composite flap. However, when using the SSA, this artery is in close proximity to the brachial plexus, and has many anatomical variations, and some of which are less than 3 cm, which can cause significant stress and risk for surgeon. Therefore, we prioritize the vascularized scapula bone using the angular branch and latissimus dorsi miocutaneous flap, where TDA can be harvested as the vascular pedicle; compared to scapula flap with CSA, scapula flap with TDA allows more freedom in skin and bone flap placement, more soft tissue volume, and a longer vascular pedicle. We report cases of scapula flap reconstruction using angular branch performed in our department and discuss its indications and limitations.

Segmental Lefort I Osteotomy: An upgraded approach in orthognatic surgery for midface deformities

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Abstract

The treatment of dentofacial deformity often calls for a combined orthodontic and surgical approach to obtain satisfactory functional and aesthetic results with long term stability. The most frequent surgical procedure performed for correction of defects of maxilla is Lefort I osteotomy, both in its original form and with modern variations. Lefort I, specifically, is used to adjust the position of maxilla and maxillary teeth in three dimensions, either alone or in concert with other interventions to achieve these goals. Segmental Lefort I osteotomy, a modification of classical Lefort I osteotomy provides coordination of the premaxilla with the posterior segments while simultaneously enabling an improvement in transverse dimension. It is recommended for arduous anomalies like anterior open bite, vertical maxillary excess, transverse maxillary deficiencies.

We present 2 cases: a case of vertical maxillary excess with skeletal class II deformity in a 20 year female and a case of anterior open bite with skeletal class I relation in a 36 year female. In both cases, segmental (two-piece) Lefort I with BSSRO were performed with additional genioplasty in former case. Through the combined orthodontic-surgical intervention pronounced skeletal, dental and occlusal improvement were achieved.

The main purpose of this presentation is to highlight major advantages of segmental Lefort I osteotomy: single surgical intervention, reduced period of coalescence, psychological impact and treatment duration.

Keywords: anterior open bite, segmental Lefort I osteotomy, vertical maxillary excess

Conservative management of sialoliths

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Abstract

Background: Sialoliths are calcified structures found within the ducts of salivary glands, frequently located in the submandibular gland (84%), than in the parotid gland (13%). Diagnosis is based on history of pain and swelling associated with eating and conventional mandibular occlusal radiograph. Conservative management of salivary stones consists of salivary gland massage and use of sialagogues.

Case description: 24 year female presented to the department with chief complain of swelling below left side of tongue since 10 month which was insidious onset, gradually progressive associated with swelling on eating. On clinical examination single, localized, well-defined swelling roughly oval approx. size about 5.5cm*3.5cm in maximum dimension on left side of floor of mouth extending antero-posteriorly from 31 to 37, medio-laterally from sublingual fold to mucogingival junction. Two hard granular structure of size approximately 3mm*4mm and 2mm*2mm dimension could be palpated lingual to 31 and 33. Mandibular occlusal radiograph revealed two non-homogenous

radiopacities. First one was oval shaped, regular border size approximately 5mmx5mm on lingual aspect of 31, 5mm anterior to soft tissue shadow of tip of tongue and second one with irregular shape and border, size approximately 5mm*9 mm on lingual aspect 5mm posteriorly and laterally to the first one. Vitamin C was prescribed and patient was advised to take adequate fluid. Retrieval of both sialoliths was done by stimulating the salivary gland with the help of lemon and milking posteroanteriorly.

Conclusion: Conservative management can be done in case of small and accessible calculi to prevent post-operative complications.

Key words: salivary stones, sialolithiasis

Single-stage Patient-specific Total Temporomandibular Joint Replacement with Simultaneous Correction of Dentofacial Deformity

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Abstract

End stage TMJ diseases severely affect the architecture as well as physiology of TMJ resulting in impairment in mastication, speech, airway support and esthetics requiring joint reconstruction to improve mandibular form and function. In cases of multiple prior operations and severe anatomical discrepancies from pathology, autogenous bone grafts often fail. Alloplastic total joint replacement has been evolving as a salvage procedure in such end stage TMJ diseases. Although stock prosthesis are available, patient specific prosthesis are preferred due to variability in mandibular anatomy and angulation of fit of condylar head to fossa. Advances like virtual surgical planning and 3D printing allowing patient-specific implants have increased the precision of preoperative planning with evolution of single step surgery.

We present 2 cases; a case of left TMJ ankylosis in a 28 years old female with resultant dentofacial deformity and a case of left condylar prosthesis failure in a 45 years old female where patient specific temporomandibular joint prosthesis were used for joint reconstruction with concomitant Orthognathic surgery to correct facial deformity. Easy adaptation of prosthesis without need of alteration of bony surfaces, reduction in operating time with avoidance of second surgical site with added advantage of starting physical therapy on the following day of operation, uneventful postoperative recovery and replication of virtually planned treatment objectives were experienced in both cases.

The aim of this report is to highlight “ patient specific TJR with simultaneous orthognathic surgery “ as an effective surgical option for the management of end stage TMJ diseases.