READ BY TITLE ABSTRACTS

ATYPICAL ORTHOKERATINIZED ODONTOGENIC CYST IMPERSONATING AS A PERIODONTAL LESION

Dr. Sonia Sanadhya (University of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences), Dr. John Brooks (UUniversity of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences), Dr. Arash M. Rostami (University of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences), Dr. Jeffery Price (University of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences), Prof. John Papadimitriou (University of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences), Dr. Cynthia Drachenberg (University of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences), Dr. Andrew M. Reff (University of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences), Dr. John Basile (University of Maryland, School of Dentistry, Department of Oncology & Diagnostic Sciences)

A 61-year-old female with an atypical orthokeratinized odontogenic cyst masquerading as rapidly progressing periodontitis associated with maxillary right lateral incisor (tooth #7). The patient underwent extraction and immediate implant placement with bone grafting. Four months later, the implant was removed due to recurrent infection. Granulation-like tissue was curetted but not reviewed microscopically. At 3.5 months, infection persisted. A periapical radiograph revealed a cystic lesion. Computed tomography showed extensive bone loss from area #7 to the mesial aspect of the second premolar. Histopathologic examination demonstrated lamellated orthokeratinized stratified squamous epithelium, subjacent prominent granular cells, lack of basal cell organization, intense inflammatory infiltrate in the fibromyxoid connective tissue, containing scattered nonviable bone aggregates with ragged borders, and epithelial cell rests. The diagnosis was OOC. The canine was extracted and bone grafting was performed. At 4 months, the right first premolar was extracted due to severe bone loss and a whitish globule was enucleated. Microscopically, stratified squamous epithelium with abundant orthokeratin production with minimal focal parakeratin and a basement membrane with squamoid to low cuboidal basal cells with occasional budding, and lack of atypia or nuclear pleomorphism was noted. Immunohistochemistry demonstrated Ki-67 positivity limited to basal cells, representing normal proliferation. P63 positivity was observed in the basal, parabasal and a few spinous cell layers. The lesion was negative for Bcl-2. Several mural dystrophic calcifications were noted. Ultra- structurally, uniform layers of keratin squames without nuclei, underlying keratohyaline granules admixed with tonofilaments, and several nuclei with membrane infolding and chromatin clumping were noted. That immediate placement of a dental implant within the site of an apparent preexisting and unrecognized OOC can result in prosthesis failure, necessitating the need for CT imagery prior to immediate implant placement and submission of harvested tissue from any implant failure site to rule out presence of occult disease or malignancy.

INVASIVE ORAL MUCOSAL MELANOMA ARISING FROM LENTIGINOUS MUCOSAL MELANOMA IN SITU: A CASE REPORT

Dr. Laurel Henderson (USC School of Dentistry), Dr. Parish P. Sedghizadeh (USC School of Dentistry), Dr. Felix Kyle Yip (USC School of Dentistry), Dr. Audrey Boros (USC School of Dentistry)

Primary oral mucosal melanoma (OMM) is a rare subtype of melanoma that is generally more aggressive and associated with greater morbidity and mortality as compared to conventional melanoma subtypes. The majority of reported OMM cases occur on palatal or maxillary mucosa or gingiva, and precursor in situ lesions have not been well-defined in this context as compared to other melanoma subtypes. Herein we present a rare case of primary OMM occurring on the buccal mucosa of an otherwise healthy 57-year-old male with a history of cigarette smoking and no family history of melanoma. While the clinical presentation was largely consistent with diffuse oral smoker's melanosis, the presence of non-healing leukoplakic lesions on the right buccal mucosa were of concern and prompted biopsy. Histologic examination, however, revealed an invasive melanoma arising from the background of lentiginous mucosal melanoma in situ. Immunohistochemistry for SOX-10 and Melan-A were positive in the lesional cells, confirming the diagnosis. Treatment by head and neck oncology is currently planned for wide excision with lymph node dissection, and adjuvant chemoradiation as needed.

MULTIPLE MYELOMA RECURRENCE PRESENTING AS A GINGIVAL MASS: A CASE REPORT OF UNUSUAL HISTOLOGICAL fiNDINGS IN A RARE ENTITY.

Dr. Scott Steward-Tharp (The University of Iowa, College of Dentistry and Dental Clinics), Dr. Felipe Nor (The University of Iowa, College of Dentistry and Dental Clinics), Dr. Wattawan Wongpattaraworakul (The University of Iowa, College of Dentistry and Dental Clinics), Dr. John Hellstein (The University of Iowa, College of Dentistry and Dental Clinics), Dr. Emily Lanzel (The University of Iowa College of Dentistry and Dental Clinics), Dr. Sherry Timmons (The University of Iowa, College of Dentistry and Dental Clinics), Dr. Nidhi Handoo (The University of Iowa, College of Dentistry and Dental Clinics)

Multiple myeloma is the second most common hematologic malignancy. This disease, characterized by a clonal proliferation of terminally differentiated plasma cells, exhibits a strong localization to the bone marrow microenvironment, with infrequent extramedullary spread. Myeloma is most common in those aged 55 and older, with less than 1 % of new diagnoses coming in individuals < 35. We present a case of multiple myeloma recurrence manifesting as a gingival soft tissue enlargement in a 29 year-old male; the patient was reported to be in full remission 2 years post stem cell transplantation. Clinically, a red/purple, dome-shaped mass localized to the mandibular marginal gingiva. The clinical impression was benign reactive process vs neoplasm. Excisional biopsy revealed no gross bony involvement. Microscopic examination revealed a neoplastic proliferation taking on a "thyroid-like" follicular architecture at low power with multiple, variably sized cystic spaces being closely packed and filled with homogenous, dense, brightly eosinophilic, bubbly material. At higher power, the cells lining these cystic cavities were morphologically recognizable as plasma cells, with occasional eosinophilic intracytoplasmic inclusions. Immunohistochemical stains showed membranous CD138 positivity of the neoplastic population with kappa immunoglobulin light chain restriction. The patient was referred to hematology-oncology for subsequent workup. Although thyroid follicle- like architecture has been reported in a number of diverse pathologic entities, to the best of our knowledge, this represents only the second report of this histological appearance in plasma cell neoplasms.

FIRST ARCH SYNDROMES; A CHALLENGE IN ORAL HEALTH CARE

Dr. Mohammed Bindakhil (University of Pennsylvania, School of Dental Medicine), Ms. Gabriela Dobkin (University of Pennsylvania, School of Dental Medicine), Dr. Katherine France (University of Pennsylvania, School of Dental Medicine), Dr. Temitope Omolehinwa (University of Pennsylvania, School of Dental Medicine)

Introduction: First arch syndromes (FAS) are congenital craniofacial disorders that occur during early embryonic development. Examples of FAS include Treacher Collins syndrome (TCS), Pierre Robin sequence (PRS) and agnathia-otocephaly (AO). TCS occurs in about 1 in every 50000 live births, and genetic mutations in TCOF1, PPLR1d, or POLARIC have been recognized in most cases. Clinical manifestations of TCS include hypoplastic facial bones, ear deformities, and cleft palate. PRS is characterized by micrognathia, glossoptosis, respiratory distress, and occasionally cleft palate. AO is another congenital disorder that is characterized by agnathia and often associated with other craniofacial abnormalities. In all FAS, the mortality rate approaches 30%, mainly due to respiratory tract obstruction. Providing dental treatment to FAS patients can be challenging due to several factors including the risk of aspiration via the oropharynx or sites of unrepaired clefts.

Case Report: A 30-year-old female presented to Penn Dental Medicine for comprehensive care. The patient's medical history was significant for PRS, TCS, congenital deafness, gastrointestinal ulcers, and depression. Her surgical history included reconstructive procedures, placement of tracheostomy and gastrostomy tubes, and placement of bone-anchored hearing aids. Extraoral and intraoral examination revealed a complete absence of the mandible, protruded maxilla and incompetent upper lip, ear and orbital deformities, and cleft palate. Cone beam computed tomography scan revealed a clival cleft in the skull base, a palatal cleft, and the presence of a fibular graft in the mandible area. In planning dental treatment, the primary consideration was preventing aspiration. This included the use of hand instruments over piezoelectric devices for periodontal treatment, use of rubber dam, and covering the areas of palatal defects during procedures.

Conclusion: FAS possess a high risk of life-threatening complications associated with oral health care. Management of FAS patients requires special treatment modifications to prevent serious complications and ensure successful outcomes.

SARCOMATOID VARIANT OF A SQUAMOUS CELL CARCINOMA OF THE ORAL CAVITY: A CASE REPORT.

Dr. Francisco Hernandez (UNAM), Dr. Claudia Haydee Sarai Caro-Sánchez (InCan), Dr. Ana Maria Cano valdez (InCan), Dr. Luis Fernando Jacinto Alemán (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.)

Introduction: Sarcomatoid squamous cell carcinoma (SSCC) is a histological variant with a poorer prognosis than its conventional form. SSCC of the oral cavity comprises less than 1% of all tumors of the oral cavity. Regarding its histopathology, it is a solid tumor composed of spindle cells which follow a short fasciculated pattern. It may feature hypocellular and hypercellular zones, as well as ulcers and necrosis areas.

Case presentation: A 33 year old male patient, with a complaint of a right maxillary mass with a 2-year evolution. Upon the radiographic assessment, a solid lesion that affected the associated gingiva, the right palatal bone, the maxillary sinus and adjacent structures, was observed. The Pathology department received a sample of a right maxillectomy, with a 6.5 x 5.4 x 4.8 cm solid, firm, brown-white lesion. The histologic findings revealed a malignant neoplasm of spindle and pleomorphic cells, with invasion of bone structures and blood vessels. Immunohisto- chemistry was performed and the following results were obtained: CKAE/AE3 showed a diffuse positivity; positive vimentin; EMA, CD56, CD99 y pS100 markers were negative. A SSCC was determined, with ulcers and lymphovascular invasion.

Discussion: Literature reports that this is a rare variant of squamous cell carcinoma, with a predominant male predilection. These data are consistent with the current case report. Regarding the location, it has a site predilection for the upper lip and tongue, whereas the present case occurred in the maxilla. Among the differential diagnoses, tumors like sarcoma are usually confused with this variant and must be ruled out.

Conclusions: The SSCC is a rare variant of the most common malignant neoplasm of the oral cavity, which possesses a poorer prognosis than the conventional squamous cell carcinoma. Given its histopathologic features, a classification according to the level of differentiation and immunochemistry are mandatory to confirm the diagnosis.

PSEUDOGOUT OF THE TEMPOROMANDIBULAR JOINT: CASE REPORT AND REVIEW OF THE LITERATURE

Dr. Ibrahim Akeel (Harvard School of Dental Medicine), Dr. Chia-Cheng Li (University of Michigan), Dr. Hao-Sheng Chang (Kaohsiung Veterans General Hospital), Dr. Chun-Feng Chen (Kaohsiung Veterans General Hospital)

Introduction: Calcium pyrophosphate dihydrate (CPPD) deposition disease, also known as pseudogout, is a metabolic disorder causing noninfectious inflammation of the joints. CPPD deposition disease typically affects fibrocartilage, such as the knee and wrist joints. Temporomandibular joint (TMJ) is an uncommon location affected by CPPD deposition, with only 64 cases reported in the English literature to date. To increase the awareness of this condition, we report one case of CPPD deposition disease in the TMJ.

Case Report: A 57-year-old male presented with dull pain and a progressive swelling of the left TMJ for a week. Upon extraoral examination, the patient exhibited a mild facial asymmetry with no limitation of mouth opening. Radiographically, there was flattening, erosion and sclerosis of the left condyle with multiple radioopacities in the joint space. Left condylectomy was performed and reconstructed with the coronoid process and temporalis muscle pedicle graft. The microscopic examination demonstrated fragments of mature lamellar bone and woven bone with marked synovial hyperplasia and an inflammatory infiltrate, consistent with an inflamed condylar head. Numerous scattered polarizable, rhomboid crystalline depositions, consistent with calcium pyrophosphate dehydrate, were identified. It was uneventful at the 5-month follow-up.

Discussion: CPPD deposition disease is an inflammatory arthropathy caused by an imbalance metabolism of phosphate, leading to an increased deposition of calcium pyrophosphate crystals within the joint space. A wide spectrum of clinical symptoms can be present in CPPD deposition disease of the TMJ, including orofacial pain, preauricular swelling, trismus, hearing loss, otalgia, and limitation of mouth opening. Histopathologically, calcium pyrophosphate dihydrate crystals exhibiting birefringence under polarized light are present. According to the clinical presentations, treatment options for CPPD deposition disease range from the nonsurgical intervention, primarily with nonsteroidal anti-inflammatory drugs, to TMJ arthrotomy or condylectomy.

UNCOMMON MALIGNANT TRANSFORMATION OF THE EPITHELIAL COMPONENT OF A WARTHIN TUMOR. REPORT A CASE.

Dr. OSCAR GERARDO VÁZQUEZ (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.), Dr. Carla Monserrat Ramírez Martínez (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.), Dr. Elba Rosa Leyva Huerta (Department of Oral pathology,
Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico.
UNAM. School of Dentistry.)

In 1929, pathologist Aldred Warthin described for the first time a tumor called "papillary cystadenoma lymphomatosum". Warthin's tumor is a benign salivary neoplasm occurring mainly in the parotid gland, and has an epithelial component and a lymphoid stroma. However, rarely, either the epithelial or the lymphoid component of Warthin's tumor can undergo malignant transformation. Malignant transformation of the lymphoid component is relatively common but the epithelial malignancy is very rare. We report a case, male 79-year-old with an asymptomatic right parotid mass that had been enlarging slowly over 5 years. Histopathological examination shows one part of characteristic bilayered oncocytic epithelium, transitional zones to frankly malignant transformation and dense lymphocytes background. The patient underwent a complete work-up, and no other primary malignant lesions were found.

CASE REPORT OF DISSEMINATED HISTOPLASMOSIS REVEALED BY NASAL SEPTUM INVOLVEMENT.

Ms. Mariana Raeder (University of Campinas (UNICAMP)), Mr. Kairo Silveira (University of Campinas (UNICAMP)), Ms. Bruna Zaidan (University of Campinas (UNICAMP)), Dr. Fabiano Reis (University of Campinas (UNICAMP)), Mr. Klaus Schumacher (University of Campinas (UNICAMP)), Dr. Victor Montalli (Faculdade São Leopoldo Mandic)

Histoplasmosis is an opportunistic infection caused by inhalation of spores of the dimorphic fungus *Histoplasma capsulatum*, which is endemic in Latin America and other tropical countries. It is a saprophyte fungus found in soil contaminated by bird droppings. The development of the disease depends on the immunity of the patient, the number of organisms inhaled and the microorganism strain. The clinical presentation consists of a spectrum of manifestations, from fatal acute respiratory failure secondary to pulmonary infiltrates, shock, coagulopathy and multiorgan failure, to a subacute disease with poor general condition, fever, weight loss coupled with lymphadenopathy, hepatosplenomegaly, digestive symptoms such as diarrhea, pancytopenia and skin lesions. In healthy individuals the primary infection is self-limited and characterized by mild symptoms. The disseminated disease is more prevalent in immunosuppressed individuals, when a reactivation of an infection earlier acquired might occur. This case report aims to present an unusual case of disseminated histoplasmosis diagnosed by a biopsy of the nasal septum ulcer of an immunosuppressed patient after a-bone marrow transplant due to leukemia. A 57-year-old man, originated from Brazil, who was on chemotherapy for leukemia, was admitted for nasal septum lesion for 3 months. A biopsy of the nasal septum ulcer was performed and revealed an angioinvasive fungal infection, which was later diagnosed as histoplasmosis. He had no upper respiratory tract symptoms but he underwent a chest and an abdominal computed tomography scan in a multi-detector device of 64 channels. The imaging exams revealed pulmonary involvement with ground glass opacity surrounding a pulmonary mass (halo sign), which represents hemorrhage, typically seen in angioinvasive infections, in addition to mediastinal and abdominal lymphadenopathy and splenomegaly with splenic infarct. The patient was treated with amphotericin B for 2 weeks and itraconazole for 12 months with clinical and imaging improvement.

ORAL MANIFESTATION OF NEUROfiBROMATOSIS TYPE 2: A CASE REPORT

Dr. Karan Dharia (Texas A&M College of Dentistry), Dr. John Shillingburg (DFW Oral Surgeons), Dr. Yi-Shing Lisa Cheng (Department of Diagnostic Sciences, Texas A&M University College of Dentistry, Dallas, Texas)

Neurofibromatosis 2 (NF2) is a rare syndrome characterized by unilateral or bilateral vestibular Schwannomas, and meningiomas or other tumors involving central or peripheral nervous systems. While the oral findings for neurofibromatosis 1 are well documented, the oral features in NF2 patients are mostly unknown. To the best of our knowledge, there have been only two reports describing oral findings in NF2. We report a case of NF2 who showed two benign plexiform nerve sheath neoplasms in the oral cavity.
A 22-year old African American female with a history of NF2 presented with two asymptomatic lump lesions in the oral cavity. Oral examination revealed one soft tissue mass in the left buccal mucosa; and the other in the right lower lip. Her recent spine and brain MRI studies reported bilateral vestibular schwannomas, intracranial meningiomas, cervical cord ependymomas and multiple schwannomas along the cervical nerve roots. The patient also reported mild decrease in hearing, and neck pain in the morning. In addition, the patient had scalp and facial skin biopsies which were diagnosed as schwannomas.
Both lumps were biopsied and showed similar histologic features consisting of a benign non-encapsulated spindle cell neoplasm in which the spindled cells were arranged in bundles and showed a plexiform growth pattern. No obvious Antoni A tissue or Verocay body was noted. S100 immunohistological staining demonstrated diffuse positivity of the spindle cells. Immunohistochemical stain for neurofilament highlighted the presence of neurons in the spindle cell proliferation. The clinical, histological and immunohistochemical findings of the oral neoplasms in this NF2 patient will be discussed.

SYNONASAL ANGIOMATOUS POLYPS CAN SIMULATE MALIGNANT NEOPLASMS IN IMAGING EXAMS: REPORT OF TWO CASES.

Ms. Mariana Raeder (University of Campinas (UNICAMP)), Dr. Victor Montalli (Faculdade São Leopoldo Mandic), Dr. João Altemani (University of Campinas (UNICAMP)), Dr. Albina Altemani (University of Campinas (UNICAMP))

Introduction and Objectives: The most frequent benign synonasal expansive formations are inflammatory polyps and papillomas. In imaging exams, the destruction of anatomical structures suggests greater aggressiveness and, among the benign lesions, such behavior is more common in papillomas. However, among the inflammatory polyps, the angiomatous variant has been considered more destructive than the conventional lesion. Considering that this hypothesis has been based on rare studies of this variant, the objective of the present study is to describe the imaging and morphological findings of two synonasal angiomatous polyps (SNAP). Material and methods: Computed tomography scans were performed in a multi-detector device of 64 channels and slides stained by hematoxylin and eosin of 2 cases of SNAP were reviewed. Findings: Tomographic exams of both cases showed an expansive and heterogeneous synonasal mass, with bone destruction compromising the walls of the maxillary sinus, ethmoid, lamina papyracea, nasal septum and also with invasion of the pterygopalatine fossa in one of the cases. Histologically, in addition to the areas with conventional aspect, the polyps often presented dilated blood vessels containing thrombosis at different stages of organization and extensive deposit of fibrinous/hemorrhagic material. Conclusion: The SNAP are distinguished from the inflammatory polyps by the dilated vessels, which determine thrombosis and hemorrhages, causing great expansion of the lesion and, consequently, bone destruction. The knowledge about the destructive aspect of this benign lesion is important and stresses the importance of biopsy for proper treatment planning.

A DENTIGEROUS CYST WITH SQUAMOUS ODONTOGENIC TUMOR-LIKE AND MYOfiBROBLASTIC PROLIFERATION: A CASE REPORT

Dr. Julia Yu Fong Chang (National Taiwan University Hospital), Dr. Yi-Ping Wang (National Taiwan University Hospital)

Various changes in dentigerous cyst have been reported, such as ameloblastomatous changes and squamous odontogenic tumor-like proliferation. In contrast to ameloblastomatous changes, squamous odontogenic tumor-like proliferation seems to be indolent and does not affect the prognosis based on few case reports. Moreover, some dystrophic calcifications and slightly stromal cell proliferation in the dentigerous cyst wall are not uncommon. But prominent myofibroblastic proliferation is rare. Here, we reported a case of dentigerous cyst with both foci of squamous odontogenic tumor-like proliferation and foci of myofibroblastic proliferation. This was a 63-year-old female patient complained of intermittent dull pain at lower right retromolar area for 2 months. A well-defined radiolucency at distal side of a vertically impacted tooth 32 was noted in panoramic x-ray. Tooth 32 odontectomy and cyst enucleation were performed. The pathologic examination showed a focally inflamed dentigerous cyst with squamous odontogenic tumor-like and myofibroblastic proliferation. After 3 months of follow-up, the wound healing was fair and no recurrence was noted. Due to the rarity of these cases, it is important to be familiar with these alterations and to avoid misdiagnosis as an odontogenic tumor.

CONVENTIONAL VS. EXTRAOSSEOUS AMELOBLASTOMA: UNUSUAL CLINICAL AND HISTOLOGIC PRESENTATION OF A MAXILLOFACIAL AMELOBLASTOMA

Dr. Pallavi Parashar (University of Alberta Faculty of Medicine and Dentistry), Dr. Clayton Davis (University of Alberta Faculty of Medicine and Dentistry), Dr. Brad Potter (Univesity of Colorado), Dr. Vincent Biron (University of Alberta Faculty of Medicine and Dentistry), Dr. Daniel O'Connell (University of Alberta Faculty of Medicine and Dentistry)

Objective: To describe the unusual clinical and histopathological presentation of an Ameloblastoma affecting the right maxillary sinus, nasal cavity and maxilla, and discuss the dilemma in the clinical classification based on the WHO 2017 classification.

Findings: A 74 year old male patient presented to the Oral Surgery Clinic for surgical management of a non-healing palatal tumor, with a clinical impression of an Oral Squamous Cell Carcinoma. Histopathological assessment of the biopsied specimen revealed multiple patterns demonstrating cords and strands of bilayered and interlacing columnar cells with mild evidence of reverse polarization, nests of epithelial islands with dyskeratotic cells, and moderate mitotic activity. Given the wide diversity in the histologic presentation, multiple considerations of the specimen representing a tumor of odontogenic origin, or benign or malignant non-odontogenic origin, were considered. Immunohistochemical staining with CK 19 and CK 5/6 demonstrated uniform positivity of the lesional cells, further supporting an Ameloblastoma. A CBCT was subsequently requested, which demonstrated a defined, rounded homogeneous hyperdensity in the right maxilla, and extension into the maxillary right sinus and nasal fossa up to the nasal septum. The mass extended superiorly to the floor of right orbit. Assessment of the surgical resection specimen confirmed our initial histopathological suspicion of an Ameloblastoma.

Conclusion: Maxillary Ameloblastomas have been occasionally reported to extensively expand into the paranasal sinuses and nasal cavity. However, primary sino-nasal ameloblastomas with extension into the maxilla have also been reported. This report demonstrates the dilemma in appropriate classification of the Ameloblastoma, as the primary origin is unclear. In cases of extensive involvement of the sino-nasal region and maxilla, a clinical diagnosis of a "Maxillofacial" Ameloblastoma is suggested. The surgical management, however, remains unchanged.

CEMENTOBLASTOMA: AN UNUSUAL PRESENTATION

Dr. Hussain Dashti (University of Kuwait), Dr. Aref Ghayyath (University of Kuwait), Dr. Tareq Al-Ali (University of Kuwait)

Cementoblastoma is a rare neoplasm of odontogenic origin that comprises 1-6.2% of all odontogenic tumors. Cementoblastoma consists of a large mass of cementum or cementum-like tissue which continues with the cemental layer of the apical third of the tooth root. Clinically, Cementoblastomas are usually associated with mandibular first molar (50%),where pain and expansion being the most common clinical symptoms. Radiographically, Cementoblastoma present as a well-defined radiopaque or mixed density mass attached to the tooth root with surrounding readiolucent rim. Extraction of the involved tooth, with or with out curettage of the surrounding bone,is the preferred and most conservative treatment option. On gross examination, Cementoblastomas are present as nodular hard tissue mass attached to one or more tooth roots.Histologically, Cementoblastomas are composed of a-celluar sheets or irregular trabeculae of cementum attached to the root; proliferation of cementoblasts might be present. At the periphery of the solid mass, radiating columns of cementum or cementum-like material is observed. Reversal lines and root resorption might be present. **Case report:**27-year-old female presented to the diagnostic science department at Kuwait University dental clinic complaining of pain associated with maxillary right first molar. Root canal treatment was performed on the tooth three months prior to her current appointment without any improvement in symptoms. The patient reported sharp pain upon palpation the buccal aspect of the tooth. A periapical radiograph was ordered where no pathologic findings were noted. CBCT examination revealed a round radiopaque mass with partial radiolucent surrounding rim located in the furcation of the maxillary right first molar. The maxillary right first molar was extracted one week later where a nodular hard tissue mass was noted in the furcation. Histopathologic examination revealed symmetric hard tissue proliferation attached to the root. The hard tissue proliferation is composed of acellular cementum-like material with radiating columns at the periphery. In Conclusion, Cementoblastoma could be the cause of painful vital posterior teeth where CBCT should be utilized for further examination.

RISK OF MULTIPLE PRIMARY MALIGNANCIES AFTER RADIATION THERAPY IN ADENOID CYSTIC CARCINOMA

Mr. Da Wool Han (Department of Oral Pathology, Oral Cancer Research Institute, Yonsei University College of Dentistry), Prof. Hyun Sil Kim (Department of Oral Pathology, Oral Cancer Research Institute, Yonsei University College of Dentistry), Prof. Jong In Yook (Department of Oral Pathology, Oral Cancer Research Institute, Yonsei University College of Dentistry), Prof. Eunae Sandra Cho (Department of Oral Pathology, Oral Cancer Research Institute, Yonsei University College of Dentistry)

Radiation therapy is aimed to eliminate cancer, yet, it is known to be able to result in second or third primary malignancies as well at the locally affected region. The majority of multiple primary malignancies (MPMs) occur in the region of the first primary tumor with oral malignancies arising in the oral cavity and salivary gland malignancies occurring in the salivary gland. Here, we present a case of a secondary primary squamous cell carcinoma (SCC) at the post-operative palatal defect and a potential third primary high grade-precancerous lesion at the nasal mucosa arising after radiation therapy for adenoid cystic carcinoma (ACC) at the palate. This case emphasizes the need for local examination of adjacent structures, such as the nasal cavity or sinus, additional to periodic oral examination after radiation therapy in the maxilla.

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ORAL NEUROTIZED NEVUS. REPORT OF A RARE CASE AND REVIEW OF THE LITERATURE

Dr. Argyrios Daskalopoulos (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Anastasia Andreou (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Vasileios Ionas Theofilou (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Ioannis Melakopoulos (Department of Oral and Maxillofacial Surgery, Dental School, National and Kapodistrian University of Athens), Dr. Evanthia Chrysomali (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Prof. Nikolaos G. Nikitakis (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens)

Objective: Neurotized nevus (NN) is a subtype of melanocytic nevus characterized by organized proliferations of nevus cells that mimic Meissner corpuscles. Histopathologically, the resemblance to nerve structures could cause diagnostic dilemmas from benign neural tumors, especially neurofibroma. To this date, a very limited number of oral NN cases has been reported. The aim of this study is to report a case of oral NN and review the pertinent English language literature.

Findings: A 41 year-old female patient presented for evaluation of a 0.3 cm nodule of 4 months duration involving the right buccal mucosa. With a provisional diagnosis of salivary gland lesion, excisional biopsy was performed and histopathologic examination revealed a well-circumscribed, subepithelial proliferation of cells with morphologic features of nevus cells; scattered deposition of melanin and areas resembling neural structures were also discerned. With a microscopic differential diagnosis of NN vs. neurofibroma, immunohistochemical evaluation was performed: S100 and Melan-A were positive, while CD34 was focally positive and HMB-45 was negative, leading to a final diagnosis of oral NN.

An English language literature review was conducted revealing a total of 9 oral NN cases, including the present case. Females seemed to be exclusively involved with a mean age of 42.6 years. Clinically, a small nodule with or without signs of pigmentation was observed, without specific site predilection. Histopathologically, either partial or complete neurotization was seen. Melan-A, the main marker distinguishing NN from neurofibroma, was performed in only one additional case presented in the literature.

Conclusions: Oral NN is a peculiar and underreported entity that could cause diagnostic difficulties due to its histopathologic resemblance to neurofibroma. Immunohistochemical examination, especially for Melan-A, can solve diagnostic problems.

VASCULAR CHANGES IN A CASE OF PERIPHERAL GIANT CELL LESION: AN IMMUNOHISTCHEMICAL STUDY

Prof. Eneida Vencio (Federal University of Goias), Ms. Stephany Carvalho (Federal University of Goias), Mr. Ricardo Silva (Federal University of Goias), Mr. Wilson Mariano Jr (Federal University of Goias), Prof. Nadia Costa (Federal University of Goias)

A 47-year-old woman was referred for the management of a painful swelling in the canine region with a recent history of tooth removal. A slight asymmetry was seen in the upper lip. Intraoral examination showed a purplish-red nodule, pediculated lesion on the anterior right alveolar crest, associated with an unstable dental prosthesis. Periapical radiography revealed superficial bone resorption. The lesion was surgically excised, followed by curettage. Microscopically, several MGCs were seen in a background of spindle-cells and areas of hemorrhage. Interestingly, some vessels in the periphery exhibited transendothelial migration of MGC positive for macrophage fusion marker CD44 and MMP-9. Serum calcium, alkaline phosphatase, and parathormone levels were normal. No recurrence was detected in 1 year. Clinical significance of vascular changes and MGC transendothelial migration, as well as its origin must be further clarified.

GRANULOCYTIC SARCOMA IN THE MAXILLA AFTER MEDULLAR RELAPSE OF ACUTE LEUKEMIA IN HCT PEDIATRIC PATIENT: A CASE REPORT

Prof. Fabio Coracin (University Nove de Julho, School of Medicine), Dr. Adriana Seber (Hospital Samaritano Sao Paulo Americas), Dr. Valeria Cortez Ginani (Hospital Samaritano Sao Paulo Americas), Dr. Jussara Bianchi Castelli (Grupo Fleury Medicina e Saude, São Paulo, Brasil), Ms. Juliana Francielle Marques (Hospital Samaritano Sao Paulo Americas), Dr. Walmyr Ribeiro de Mello (Hospital Samaritano Sao Paulo Americas)

Objective:to relate a case of a granulocytic sarcoma in maxilla arising from maxillary sinus in a pediatric patient underwent to non-related hematopoietic stem cell transplantation after medullary relapse of leukemia. **Findings:** a 7yo female patient suffered of acute myeloid leukemia (M5) with byphenotypic features underwent to non-related allogeneic HSCT. Conditioning regimen comprised total body irradiation plus etoposide and engraftment with hematopoietic recovery was at D+22. GVHD prophylaxis comprised cyclosporine plus methotrexate. Severe mucositis occurred between D+5 and D+12. Complete chimera was accessed in D+40. On D+50, 13.8% of blasts immature cells were accessed in bone marrow and immunofluorescence showed 2% of anomalous cells leading to bone marrow relapse of acute myeloid leukemia. On D+65, an expansive mass in maxilla was seen described as hipodensities and erosions involving the alveolar ridge of the maxilla on the left that presents diffuse bone loss with cortical ruptures in the floor of the maxillary sinus and corresponding nasal fossa associated to an increase in soft tissue volume with thickening of the gingival mucosa of the maxilla and small retromaxilar extension mimicking a tumoral infiltrative lesion related to the underlying disease. A incisional biopsy was performed under general anesthesia due clinical conditions and the microscopic features showed mucosa lined by squamous epithelium, with preserved maturation and connective tissues showed an intense infiltration mononuclear cell with marked stretching artifact (maybe the needle biopsy artifact), observing possible atypical cells with nuclei of size intermediate and indistinct cytoplasm leading to granulocytic sarcoma diagnosis. A new chemotherapeutic approach was done and, after a treatment failure, she died due to leukemia relapse. **Conclusion:** after a maxillary possible relapse of a systemic disease, a complete approach between physicians, oral medicine and oral pathology was necessary to a better diagnostic approach trying a more intensive treatment to relapse of leukemia.

CLINICOPATHOLOGICAL ANALYSIS OF ORAL LESIONS FROM A TERTIARY HEALTH CARE CENTER IN NEPAL

Dr. Pratibha Poudel (Kathmandu University School of Medical Sciences), Dr. Nadim Islam (University of Florida College of Dentistry), Dr. Ritesh Srii (Kathmandu University School of Medical Sciences)

Objective: To analyze the clinicopathological details of oral lesions diagnosed in a tertiary health care center in central, east of Nepal within a period of two years and to assess the concordance between clinical and histopathological diagnosis of these lesions. **Findings:** A total of 237 cases were analysed in the present study. Among them, 52.7% were males and 47.3% were females. Most of the patients were from 21-30 years age group with the mean age of 36.84±18.75 years. Buccal mucosa and mandible were the most common sites for soft tissue and hard tissue lesions respectively. Odontogenic cysts (20.7%) were the most common category followed by benign lesions (17.3%) and malignant lesions (16.9%). However considering the frequency of individual lesion, mucocele (13.1%) was the commonest lesion followed by squamous cell carcinoma (12.7%). Total concordance between clinical and histopathologic diagnosis was found in 56.5% cases. The most clinicopathological agreement was seen for benign lesions followed by malignant lesions. **Conclusion:** The findings suggests that a wide variety of oral lesions are seen in this part of Nepal and also, that the cases of OSCC's are on a rise with each subsequent year. At present, though it is the second most common entity, it can be hypothesized that OSCC may be higher up on the list. Therefore, oral healthcare awareness is paramount and this may be the only way to reduce the oral cancer incidence rates and lowering the healthcare management burden. This is a single institution based data and further larger studies encompassing multiple institutions is warranted to procure better epidemiological data and improve oral healthcare and outcomes vis-à-vis quality of life.

MOLARINCISORMALFORMATION:ANUNUSUALDENTAL DEVELOPMENTAL ANOMALY

Dr. Kathleen Schultz (Long Island Jewish Medical Center at Hofstra/Northwell Zucker School of Medicine), Dr. Paul Crespi (Long Island Jewish Medical Center at Hofstra/Northwell Zucker School of Medicine), Dr. John Fantasia (Long Island Jewish Medical Center at Hofstra/Northwell Zucker School of Medicine)

Introduction: Dental developmental defects are often hereditary, and can occur at or around birth, and have been linked to epigenetic changes, trauma, illnesses and unfavorable environmental stimuli. Commonly recognized dental defects include molar-incisor hypomineralization and chronologic hypoplastic enamel defects. An unusual pattern of dysmorphic crown and root development have been identified in permanent molars and incisors and primary second molars, characterized by thin or shortened roots, cervical constriction of the molar crown and a cervical notch in the incisors. Clinical exam is often negative. Molar-Incisor Malformation (MIM) represents a newly identified dental developmental defect.

Case description: A healthy 11 year old female presented to Cohen Children's Medical Center for comprehensive pediatric dental care. Radiographs demonstrate alterations of permanent maxillary incisors, maxillary canines and permanent first molars, characterized by pulpal, dentin, root and cervical crown abnormalities, thin, spindly molar roots and a cervical notch of the maxillary central incisors. Prior dental history included extraction of dysmorphic, periapically involved mandibular right first permanent molar, leading to mesial migration of the second molar and unfavorable malocclusion, and root canal therapy of right maxillary permanent canine. The treatment plan includes space maintenance and long term follow up of dysmorphic dentition.

Conclusion: Negative sequelae of aberrant dental development includes caries, pulpal necrosis, periodontal instability, premature exfoliation and secondary effects due to management of these conditions, including mesial migration, supraeruption and dental malocclusion. The majority of patients exhibiting MIM have been reported to have neurologic diseases such as meningitis, stroke, meningomyelocele, as well as other significant medical conditions, necessitating hospitalizations and invasive medical treatment within the first year of life. Identifying this condition in a patient highlights a need for a comprehensive review of the medical history. Similarly, patients with complex medical conditions in early childhood should be followed for possible development of dental morphologic defects.

ORAL PYOGENIC GRANULOMA: A 18-YEAR RETROSPECTIVE CLINICOPATHOLOGICAL AND IMMUNOHISTOCHEMICAL STUDY

Dr. Jaqueline Ribeiro (São Paulo State University (UNESP)), Dr. Noala Milhan (São Paulo State University (UNESP)), Dr. Anderson Nascimento (São Paulo State University (UNESP)), Dr. Bruna Carvalho (São Paulo State University (UNESP)), Dr. RENATA MORAES (São Paulo State University (UNESP)), Prof. Ana Lia Anbinder (São Paulo State University (UNESP))

INTRODUCTION: Pyogenic granuloma (PG) is a non-neoplastic lesion that occurs frequently in the skin and oral cavity. There are two histological types of PG in the mouth: the lobular capillary hemangioma (LCH), characterized by vessels organized in lobular aggregates, and the non-LCH (NLHC) type, characterized by vascular proliferation similar to granulation tissue. The purpose of the present study is to compare the frequency, demographic, clinical, histopathological and immunohistochemical features of the two types of PG. MATERIAL AND METHODS: Retrospective study was performed on our archives from January 2000 to October 2018 (total 8,755 cases), comprising 197 cases diagnosed as PG. Gender, age, site of lesion and previous history of trauma data were collected; histologic sections of all cases were reviewed and immunohistochemical reactions (GLUT-1, CD34, SMA and mast cell tryptase) were performed in 11 LHC and 11 NLHC cases. Number of CD34-positive microvessels and SMA-positive area were evaluated. Data were submitted to appropriate statistical analyses (α=0.05). RESULTS: After review, 62 cases of LHC and 107 of NLHC PG were included in our study. Mean age of patients was 38.59±16.96 years, 55.62% were females (18% pregnant), 39.64% of cases occurred in gingiva, 76% of nodules were pedunculated, and 13.02% of the patients reported history of previous trauma. LCH occurs in younger individuals than the NLHC PG, and in the lips, while NLCH PG is more prevalent in gingiva ($p<0.05$). Atrophic epithelium, number of microvessels and SMA-positive area are more prevalent in LCH PG ($p<0.05$). Number of mast cells does not differ significantly between PG histological types. GLUT-1 was negative in all cases. CONCLUSIONS: PG corresponds to 2.25% of the lesions submitted to our service, and the majority of them is of NHLC type. HLC and NHLC PG present clinicopathological differences regarding age, site, epithelium atrophy and vascularization.

CIRCUMORIfiCIAL PLASMATOCYTOSIS OF THE ORAL CAVITY. REPORT OF TWO RARE CASES

Dr. Vasileios Ionas Theofilou (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Grigorios Thermos (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Argyrios Daskalopoulos (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Eleni Marina Kalogirou (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Savvas Titsinides (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Dr. Periklis G. Foukas (2nd Department of Pathology, School of Medicine, National and Kapodistrian University of Athens), Dr. Evanthia Chrysomali (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens), Prof. Nikolaos G. Nikitakis (Department of Oral Medicine and Pathology, Dental School, National and Kapodistrian University of Athens)

Objectives: Plasma cell infiltrates of the oral mucosa might be the sequelae of neoplastic processes (e.g. extramedullary plasmacytoma or multiple myeloma), hypersensitivity reactions (e.g. plasma cell gingivitis) or infectious diseases (like syphilis). Another uncommon cause of oral plasmacytic infiltration is Circumorificial Plasmacytosis (CP). CP represents a rare plasma cell disorder of the orificial mucous membranes with unknown etiopathogenesis. In the oral cavity, it presents with atypical lesions, histologically demonstrating a dense plasma cell infiltrate. Herein, we report two cases of CP involving the oral mucosa of elderly male patients.

Findings: Two male patients, 79 and 80 years old respectively, presented for the evaluation of ulcerated cobblestone or florid papillomatous areas in their buccal vestibules, in addition to diffuse erythema and swelling of their vestibular gingiva. None of the patients had a history of autoimmune or immune-mediated disorders. A broad differential diagnosis was formulated, including orofacial granulomatosis, plasma cell gingivitis and hematologic malignancies. Incisional biopsies were performed from the buccal vestibules and gingiva of both patients. Histopathologic examination revealed an extensive and diffuse infiltration of the connective tissue by cells with morphologic characteristics of plasma cells, in addition to epithelial hyperplastic changes. Immunohistochemical examination for kappa and lambda chains, as well as CD20, CD3 and CD43, revealed a predominant cell constituency of polyclonal plasma cells, while Ki-67 proliferation marker was <10%, rendering a final diagnosis of CP in both cases.

Conclusion: Even though a benign process, CP exhibits clinical and histopathologic features that may overlap with other entities and mimic malignancy, causing significant diagnostic dilemmas. Immunohistochemical confirmation of plasma cell polyclonality is essential for the final diagnosis, while treatment is challenging with various proposed therapeutic agents showing controversial results.

MUCOUS MEMBRANE PLASMACYTOSIS – REPORT OF TWO CASES AND REVIEW OF THE LITERATURE

Dr. Andres Flores-Hidalgo (East Carolina University School of Dental Medicine), Dr. Si On Lim (The University of North Carolina at Chapel Hill School of Dentistry), Dr. Donna Culton (The University of North Carolina at Chapel Hill School of Medicine), Dr. Ricardo Padila (The University of North Carolina at Chapel Hill Adams School of Dentistry)

Introduction: Mucous membrane plasmacytosis (MMPL) is a rare condition of the mucosa characterized by a dense plasma cell infiltrate. Although the etiology remains elusive, it is believed to be a nonspecific inflammatory response to an unknown exogenous stimulus. After the initial description in 1952, multiple authors have described similar lesions typically in genital skin or mucosa, gingiva, lips, tongue, palate, buccal mucosa, epiglottis, nasal cavity, and larynx. Clinical presentations vary, and the lesions may be erosive, nodular, generalized swelling, or painful plaques. Microscopically, MMPL is characterized by sheets of polyclonal plasma cells in a cobblestone arrangement, resembling a neoplasm, without evidence of microorganisms, granulomata, or foreign bodies. Several entities are included in the differential diagnoses, as primary or secondary syphilis, prominent plasma cell component of the host response directed against squamous cell carcinoma, or basal cell carcinoma (cutaneous cases), and plasmacytoma.

Case Presentation: We present two cases of MMPL in two older males. Both presented with nodular ulcerated enlargement of the anterior gingiva. Microscopic examination revealed a polyclonal plasma cell population arranged in a cobblestone fashion. Kappa and Lambda studies showed physiologic ratios, and negative relationship to Epstein-Barr Virus was seen. Also, no evidence of microorganisms or granulomatous inflammation was present. Neither of our patients had a history of exposure to agents known to produce mucosal plasmacytosis.

Conclusions: Anecdotally, a conservative approach has been considered appropriate treatment for MMPL, and although the prognosis is favorable, this entity has been reported in association with chronic lymphocytic leukemia and squamous cell carcinoma. Although the possible association could be explained by inflammation as a cofactor of carcinogenesis, the possibility of unrelated synchronous coexistence cannot be ruled out. Therefore, close clinical follow-up is recommended.

PLEXIFORM SCHWANNOMA: AN UNUSUAL CLINICAL ENTITY

Dr. Nagamani Narayana (UNMC College of Dentistry), Dr. John Casey (UNMC College of Dentistry)

Objectives: An 18-year-old male presenting with asymptomatic, pale yellow nodules on the dorsal tongue of 2 years duration with biopsy resulting in with an unusual diagnosis. The principal goal of this presentation is to discuss the difficulty encountered in distinguishing plexiform schwannoma from plexiform palisaded encapsulated neuroma. Findings: An 18-year-old Hispanic male presented with non-painful "tongue blisters" of 2 years duration without significant change in clinical appearance. His past medical and family histories were not significant. He reported no other lesions on his skin. He was not on any medications nor did he have any drug allergies. He did not smoke or chew tobacco.

An oral examination revealed three, asymptomatic submucosal nodules, 0.6 x 0.6, 0.7 x 0.5, and 0.6 x 0.5 cm on the left mid-dorsal tongue. The nodules were soft and non-tender. The differential diagnosis included multiple lipomas or granular cell tumors. Biopsy of one nodule was performed. Microscopy revealed a multinodular, submucosal, benign tumor composed of haphazardly arranged spindle cells exhibiting serpentine nuclei in a fibrillar stroma. Focally, disorganized areas representing Antoni A and B areas were seen. Immunoperoxidase staining for S-100 protein and glial fibrillary acidic protein (GFAP), a marker for Schwann cells, were positive. Epithelial membrane antigen (EMA) immunoreactivity was noted in the tumor capsule. A final diagnosis of plexiform schwannoma was established. The patient had no outward manifestations of neurofibromatosis type 2.

Conclusions: The histological differentiation between plexiform schwannoma and plexiform encapsulated neuroma is difficult. Review of literature confirmed the complexity of the diagnosis. A diagnosis of plexiform schwannoma was made based on the staining of Schwann cells by GFAP. An infrequent association with neurofibromatosis, type 2 is documented in literature reviews.

ORAL PSEUDOMYOGENIC HEMANGIOENDOTHELIOMA: A CASE REPORT AND REVIEW OF THE LITERATURE

Dr. Carleigh Canterbury (Columbia University College of Dental Medicine), Dr. Scott Peters (Columbia University College of Dental Medicine), Dr. Austin Shackelford (Columbia University College of Dental Medicine), Dr. Elizabeth Philipone (Columbia University College of Dental Medicine), Dr. Angela Yoon (Columbia University College of Dental Medicine), Dr. Michael Perrino (Columbia University College of Dental Medicine)

Objective: The pseudomyogenic hemangioendothelioma (PMH) is an uncommon malignant vascular neoplasm that was first introduced into the World Health Organization (WHO) classification of bone and soft tissue tumors in 2013. It is most often seen in young males with a predilection for the extremities, where it presents as either a solitary or multiple nodule(s). Although considered a malignancy, the clinical course of PMH is indolent; this marks an important distinction from the epithelioid sarcoma, a malignant neoplasm that shares many histologic features of PMH, but is clinically aggressive. Treatment of PMH is typically limited to local surgical excision, although larger lesions or instances of disseminated disease may require adjuvant therapy. Oral PMH is exceedingly rare, with only one documented case in the literature to date. Herein, we present a case of oral PMH occurring in the mandibular gingiva of a 31-year-old female. To the best of our knowledge, this represents only the second reported case of oral PMH.

Findings: A 31-year-old female patient initially presented to a local periodontist for evaluation of an inflamed area of the right mandibular gingiva. The clinician debrided the area and removed what was thought to be a "fishbone" from the site. No tissue was submitted for pathologic examination at this time. After the area failed to heal, the patient was placed on a corticosteroid ointment. At this point, the patient was referred to Columbia University Department of Oral and Maxillofacial Surgery for evaluation and biopsy. Based on the morphologic and immuno- histochemical findings, a diagnosis of PMH was rendered and the patient underwent a wide local excision of the site.

Conclusion: PMH is a rare, albeit important malignant vascular neoplasm with only one previously reported oral manifestation. Enhanced awareness of this entity may help avoid diagnostic pitfalls and lead to improved clinical outcomes.

ORAL LICHEN PLANUS AND WORSENING OF PERIODONTAL PARAMETERS

Dr. Raisa Catunda (University of Alberta Faculty of Medicine and Dentistry), Dr. Carlos Figueredo (University of Alberta Faculty of Medicine and Dentistry), Dr. Seema Ganatra (University of Alberta Faculty of Medicine and Dentistry), Dr. Monica Gibson (University of Alberta Faculty of Medicine and Dentistry)

Introduction: Few sources of data on periodontal parameters in patients with OLP are documented in the literature. Both OLP and periodontitis are chronic diseases that require given periods of follow-up to be investigated, and no studies have analyzed the association of these conditions with a longitudinal approach thus far. The objective is to review the literature systematically to determine if there is an association between oral lichen planus and worsening of periodontal parameters.

Methods: A vast systematic search of the following databases was performed up to October 2018: PubMed, Medline, Embase and Google Scholar. Cross-sectional, case controls and cohort studies in humans that assessed correlation of oral lichen planus (OLP) with periodontal status. Periodontal parameters were: gingival index (GI), bleeding on probing (BOP), clinical attachment loss (CAL) and pocket depth (PD).

Results: 686 records were identified from 4 databases and 50 articles from partial grey literature. After screening steps, 9 eligible articles were included. Not all used the four specified parameters. GI values for OLP patients were 1.13 (±1.62) vs 1.04 (±1.99) in healthy controls (p= 0.12); BOP 6.25% (±7.68) vs 1.59% (±1.73) (p= 0.0369)*; CAL 2.28mm
(±1.57) vs 2.11mm (±1.93) (p= 0.6589) and PD 2.31mm (±0.94) vs 2.09mm (±0.49) (p= 0.8197). The only periodontal parameter that was increased in a statistically significant manner was BOP.

Conclusion: Within the limitations of our study, we concluded that there is a positive correlation between increased BOP and the presence of OLP, as would be expected due to gingival inflammation. Therefore, an effect of OLP on periodontitis progression may be plausible because both share an immune-inflammatory mechanism of pathogenesis, giving value to further investigation of this association.

INTRAOSSEOUS SOLITARY INFANTILE MYOfiBROMA: CASE REPORT.

Dr. María del Rosario Castañeda-Gómez (Universidad de Guadalajara, Centro Universitario de Ciencias de la Salud, Department of Microbiology and Pathology, Laboratory of Pathology.), Dr. Daniel González-Hernández (Hospital Civil de Guadalajara "Juan I. Menchaca" OPD, Maxillofacial Surgery Service.), Dr. Raúl Dueñas-González (Universidad de Guadalajara, Centro Universitario de Ciencias de la Salud, Department of Integral Dental Clinics, Specialty of Maxillofacial Prosthesis), Dr. Ana Graciela Puebla-Mora (Universidad de Guadalajara, Centro Universitario de Ciencias de la Salud, Department of Microbiology and Pathology, Laboratory of Pathology), Dr. Mario Nava-Villalba (Universidad de Guadalajara, Centro Universitario de Ciencias de la Salud, Department of Microbiology and Pathology, Laboratory of Pathology)

Myofibroma is a solitary benign neoplasm that frequently affects the head and neck region of young patients, and which in some cases may present an aggressive behavior. A 13-year-old girl was brought to the maxillofacial surgery service owing to a mass affecting the left mandibular body and ramus, with cortical thinning. In tomographic slices and three-dimensional reconstruction, intralesional septa were observed, as well as the displacement of the second molar. A biopsy revealed a biphasic mesenchymal neoplasm composed of a population of round/oval cells grouped into hypercellular areas, and spindle cells associated with fibrous areas. Additionally, it was accompanied by a rich network with a hemangiopericytoid pattern and intralesional hemorrhage (intralesional venous lakes were revealed in an angiotomography). The cells were negative to CD34 and S-100, and positive for SMA with a Ki67 <1%; a diagnosis of Myofibroma was established. The patient was subjected to hemimandibulectomy with wide margins and microvascular fibular graft. Myofibroma can be misdiagnosed as a result of its wide diversity of histopathological patterns; thus, clinical, imagenological, histopathological and immunohistochemical integration is fundamental for a precise diagnosis.

KAPOSI SARCOMA AS THE fiRST MANIFESTATION OF HIV. A CASE REPORT.

Dr. Eric Zeta Castañeda (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.), Dr. Luis Fernando Jacinto Alemán (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.), Dr. Carla Monserrat Ramírez Martínez (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.), Dr. Tamara Paramo Sánchez (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.), Dr. Alberto Rodriguez Rodriguez (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.)

Introduction: Kaposi sarcoma is a malignant, angioproliferative and multi-center neoplasm, with an endothelial origin. It is associated to VHH-8 and it generally appears in immunocompromised patients, such received a transplant or have been infected by the Human Inmunodeficiency Virus. It may clinically have a slow, progressive and indolent behavior, usually limited to the skin or mucosae, but it may also appear as an aggressive and rapidly progressive disease.

Presentation to the case: 31-years-old male patient, who lives and comes from the State of México. He comes to consultation because he has numerous red-violet lesions, some of them in patches and some of them a nodular morphology, located in maxillary vestibular gingiva and hard palate. With the clinical findings a presumptive clinical diagnosis is issued, which refers to Kaposi Sarcoma. An incisional biopsy is then performed and an ELISA test required, which turned out to be positive. In the histological cuts that were examined, neoplastic proliferation was observed, in blood vessels of different caliber and of cells tapered with chromatin, which present cellular and nuclear pleomorphism and a great number of aberrant mitosis. Recent profuse hemorrhage is identified. The sample is covered by flat hyperparakeratinized stratified epithelium. The diagnosis made was of a Kaposi Sarcoma.

Discussion: In 22% of the case, the first clinical manifestation of Kaposi sarcoma occurs in the oral cavity of HIV positive patients, and up to 71% of the patients carriers of HIV might develop Kaposi sarcoma.

Conclusions: Within the context of an HIV infection, the incidence of Kaposi sarcoma has diminished drastically following the introduction of the antiretroviral therapy. However, the lesions can be observed in mucosae or skin are most commonly associated to the patients with AIDS. And might be the guideline for the systemic diagnosis as it was in the presented here.

OSTEOSARCOMA IN THE MAXILLA, fiBROBLASTIC VARIANT. REPORT OF CASE

Dr. Karla Leonor Robles Calzada (UNAM), Dr. Javier Portilla Robertson (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.), Dr. Ana Maria Cano valdez (InCan), Dr. Claudia Haydee Sarai Caro-Sánchez (InCan), Dr. Carla Monserrat Ramírez Martínez (Department of Oral pathology, Maxillofacial and Oral Medicine. Division of Postgraduate Studies and Research. National Autonomous University of Mexico. UNAM. School of Dentistry.)

Introduction: Osteosarcoma is a malignant neoplasia derived from mesenchymal cells that produce osteoid or immature bone. In head and in neck it accounts for 6% of all tumors. It's main localization is maxillary bones, more frequently in the jaw, with a better prognosis than the maxilla. Being more common in males, in the third and fifth decades of life. In the oral cavity it's usually symptomatic, may manifest with symptoms like: pain, displacement of teeth, paresthesia and nasal obstruction, according to its localization, development time and size.

Case presentation: A 83 years old female presented to our Oral Medicine Clinic with a progressive lesion increasing in size in the right maxillary region of approximately 10 cm in diameter, within the last two years. CT showed mixed lesion in left jaw region with destruction of maxillary antrum and obstruction of the airway. The tumor measured 8x8x6cm, solid and hyperdense with an osteoid matrix deposit. An incisional biopsy was made showing as a malignant lesion producing osteoid matrix with fibroblastic areas.

Discussion: In Mexico, we do not have a head and neck National Registry of Tumors of. In 2010 Kuauhyama et. al. published a series of 21 cases, where incidence in men was higher, with a mean of 37.5 years. Because of its low frequency diagnosis is difficult, other entities must be discarded in this location, which includes: fibrous dysplasia, osteomyelitis and Paget's disease of bones. Its differentiation from other entities is of great importance to establish an appropriate treatment.

Conclusion: Early diagnosis of osteosarcoma is fundamental. In these cases the recommended approach consists of well planified surgeries, adjuvant radio or chemotherapy considering that the clinical behavior of maxillary osteosarcomas is different in long bones. Early diagnosis is fundamental for patients survival.

PRIMARY SYPHILIS PRESENTING ON THE TONGUE

Dr. Mohammed Bindakhil (University of Pennsylvania, School of Dental Medicine), Dr. Faizan Alawi (University of Pennsylvania, School of Dental Medicine), Dr. takako tanaka (University of Pennsylvania, School of Dental Medicine)

Introduction: Syphilis is an uncommon sexually transmitted disease caused by Treponema pallidum. It is characterized by the development of chancres at the site of inoculation. Only 14% of primary syphilis lesions occur extra-genitally, and the oral cavity is usually affected due to oro-genital contact. Oral chancres typically involve the lips; however, the tongue and palate can be affected. We present a rare case of a syphilitic chancre of the tongue.

Case report: A 52-year-old male presented with a one-month history of a non-healing ulceration on the tongue. The patient reported it felt like a pizza burn, but mostly painless with only occasional discomfort. He self-described as homosexual, and generally in good health without taking any medications. Extraoral examination was unremarkable. Intraoral examination revealed a deep ulceration measuring about 1cm on the right lateral tongue and surrounded by lichenoid-appearing inflammation. Differential diagnosis included traumatic ulceration, deep fungal infection, and malignancy. Excisional biopsy demonstrated ulcerated mucosa overlying lamina propria containing a dense, deep and perivascular lymphoplasmacytic inflammatory infiltrate. Periodic acid–Schiff stain was negative for fungi. Immunohistochemical studies for T. pallidumrevealed numerous spirochetal organisms. Serologic studies confirmed rapid plasma reagin titers (RPR) and T. pallidumantibodies. The cumulative findings were consistent with the diagnosis of primary syphilitic chancre. After learning of the diagnosis, the patient reported multiple painless penile lesions. A single intramuscular injection of Benzathine penicillin G 2.4 million units was administered. At a follow- up visit three weeks later, the tongue appeared to be healed. Although RPR was planned to be retested six months later, the patient was subsequently lost to follow-up.

Conclusion: Oral primary syphilis can mimic many conditions that affect the oral cavity. Early detection and treatment can significantly decrease the disease complications. Although rare, primary syphilis should be considered in the differential diagnosis of non-healing oral ulcerations**.**

DECOMPRESSION MAY SERVE AS A RELIABLE INITIAL TREATMENT METHOD FOR GLANDULAR ODONTOGENIC CYSTS: A REPORT AND RETROSPECTIVE STUDY

Dr. Austin Shackelford (Columbia University College of Dental Medicine), Dr. Carleigh Canterbury (Columbia University College of Dental Medicine), Dr. Joy Chen (Columbia University College of Dental Medicine), Dr. Garrick Alex (Columbia University College of Dental Medicine), Dr. Sidney Eisig (Columbia University College of Dental Medicine), Dr. Alia Koch (Columbia University College of Dental Medicine)

Objectives: The Glandular Odontogenic Cyst (GOC) is a developmental odontogenic cyst which commonly presents as a painless mandibular swelling. It often has an aggressive clinical course, with a tendency to recur in approximately one third of documented cases. While the diagnostic criteria of GOCs has been well established, treatment protocols for this entity remain contested. Treatment typically has been correlated with lesion size and ranges from curettage to bloc resections. One novel approach is decompression followed by enucleation. In this way, the GOC can be reduced in size, allowing for a more conservative surgical approach. Herein we present a case of a GOC that occurred in the left posterior mandible of a 63-year-old male, which was treated by decompression followed by enucleation. In addition, we have conducted a review of the cases treated with this method over the past five years at the Columbia University Irving Medical Center (CUIMC).

Findings: A 63-year-old male presented to CUIMC for evaluation of a large radiolucent lesion in the left mandible extending from the subcondylar region to the body of the mandible. At the time of initial biopsy, a surgical drain was placed. The drain was maintained for over twelve months during which regular clinical and radiographic follow-up was performed. The patient then received definitive treatment of enucleation and has shown successful results with no evidence of recurrence. Our review of previous cases showed similar results as this case.

Conclusions: Despite their clinically aggressive behavior, GOCs may respond well to decompression followed by enucleation. In this way, the patient can be spared larger surgical procedures. Retrospective analysis of cases at CUIMC demonstrate that this initial approach can have potentially beneficial effects on treatment outcomes.

TWO RARE EXTRACTION CASES OF UNSUSPECTED AND SUSPECTED CONCRESCENT MOLAR EXTRACTIONS. CASE REPORTS WITH POST-SURGICAL SPECIMEN RADIOLOGY

Ms. Daniela Boldikova (NYU College of Dentistry)

Concrescence is a rare developmental anomaly of dental hard tissues, characterized by theunion of adjacent teeth by cementum. The etiology is widely disputed – studies have linked it to instances of trauma, infection, and crowding in the developing dentition. The incidence varies between deciduous and permanent teeth, with deciduous teeth exhibiting concrescence in 0.2-3.7% upon extraction, while permanent teeth exhibit concrescence at about 0.8%. The highest observance is typically found between maxillary second and third molars, and early diagnosis may be complicated by crowding or superimposition of teeth in the posterior maxilla. Identification of concrescence prior to surgical procedures can facilitate more effective extraction of affected teeth – however, surgical planning may be limited by the diagnostic quality of radiographic images. This presentation is a literature review of concrescence and the implications of the etiology on oral surgical patient management. This presentation also highlights two case reports with post-surgical specimen radiography of patients who exhibited concrescence when presenting to NYU College of Dentistry. Early detection and identification of concrescence amongst dental hard tissues is imperative for effective surgical planning, as is understanding the potential etiology of such rare developmental anomalies.

JAWS, THE MOST UNIQUE BONES IN THE HUMAN SKELETON – MORE THAN 20 DIFFERENCES REVIEWED.

Dr. Jerry Bouquot (University of Texas, Houston), Dr. Steven Whitaker (West Virginia University School of Dentistry), Dr. Ashley Clark (University of Texas, Houston), Dr. Firoozeh Samim (McGill University)

Introduction: The jawbones, especially the mandible, are without a doubt the most unique bones of the human skeleton. They have more total numbers and types of pathologies, by far, than any other bones. Additionally, the mandible is more liable to chronic ischemia and inflammation than any other bone. Unique pathophysiologic aspects explain some features, while others remain poorly understood; overall they allow dental/osseous treatments that could not possibly be successful in extragnathic bones. **Objective:** To characterize the unique physiological, anatomical and pathological uniqueness of the maxilla and mandible. **Methods & Materials**: A four-decade-long literature review of the dental and orthopedic literature was undertaken, commencing with a Bone Pathology Fellowship by one of the authors (JEB) and including more than 5,000 papers and textbook chapters. **Results**: A total of 22 different and unique features of the jawbones were identified, suggesting that, compared to long bones, the jaws: are routinely ischemic or inflamed; experience more infection, more trauma, more implants, more exposed bone, more and more varied cortical masses, more focal osteoporosis, more internal fibrous scar tissue, more varied neoplasms, more varied cysts and more osteocavitations (voids); have a much faster turn-over rate; are closer to the surface and have more "stuff" (spicy candies, tobacco, cocaine, etc.) placed next to them; are the only bones with large sensory nerves and lymphatic vessels internally; are the only bones with teeth embedded, resulting in incomplete epithelial covering; have much more frequent acute diminution of blood flow (vasoconstriction) than any other bones; and strongly influence recognition (facial recognition) of other humans. **Conclusion**: The jawbones, especially the mandible, are, by far, the most unique and different bones in the human skeleton.

ARCHEGONOUS CYSTIC ODONTOMA, A CASE PRESENTATION

Dr. Beatriz Aldape (UNAM), Dr. Jesús Everardo Ochoa Zavala (ORAL AND MAXILLOFACIAL SURGERY)

Introduction: Archegonous cystic odontoma (cystic odontoma) is an unusual cystic lesion characterized by ameloblastic epithelial lining and areas of dental hard tissue formation. Herein, we describe a maxillary example occurring in a 5-year-old female. **Methods and Materials:** The 5 years old female patient presented with a slow-growing, asymptomatic lesion in the left side of the anterior maxilla. The lesion was excised and histologic preparations and immunohistochemical stains were performed for diagnostic purposes.

Results: Radiographic evaluation revealed radiolucency with calcifications in the cystic cavity. The lesion was displacing adjacent teeth. The patient also presented with missing both permanent maxillary lateral incisors and malformation of the left first premolar. Macroscopically, the specimen consisted of a semi-translucent cystic lesion 2.2x1.5x1 cm with accompanying hard tissue. Microscopically, the cystic cavity was lined thin epithelium characterized by cuboidal and polygonal cells featuring palisading of the basal cell layer and subjacent fibroblastic zone with hyalinized dentinoid induction which lacked dentinal tubules. Immunohistochemically, the epithelium was negative for calretinin. Component cells of the connective tissue wall were negative for S100, CD34 and EMA.

Conclusions: a) A rare example of archegonous cystic odontoma is reported. b) This variant should be appropriately included among odontogenic tumors.

HEAD AND NECK RELATED QUALITY OF LIFE AMONG HEAD AND NECK CANCER PATIENTS IN SOUTH WESTERN NIGERIA

Dr. Bamidele Kolude (UNIVERSITY OF IBADAN/ UNIVERSITY COLLEGE HOSPITAL)

AIM: To evaluate the impact of HNCs and therapy on the quality of life of patients in a tertiary health facility in South Western Nigeria.

METHODS: Cross sectional descriptive study that utilized a structured questionnaire comprised of items from two HN-QOL instruments; University of Washington – Quality of Life (UW-QOL) & European Organization for Research and Treatment of Cancer (EORTC) questionnaires.

RESULTS: Study comprised 55 respondents (55 males (84.6%) & 10 females (15.4%) and mean age was 52.4+10.7 years. TNM stages at presentation were stage I (15.4%); stage II (18.4%); stage III 32.3% & stage IV (33.8%). Overall mean score was 61.95+15.5.

Difference in the mean QL scores according to age group, educational status, treatment type and risk habits was insignificant but difference in mean scores according to socioeconomic status and TNM stage was significant.

CONCLUSION: Early presentation & Adequate/ Qualitative health care (depicted by early stage tumors and high socioeconomic status respectively) were the main determinants of respondents QL in this study.