

previous studies have shown high frequency of BRAF(V600E) mutation in ameloblastomas. Interestingly, recent studies have reported that BRAF mutation is associated with the expression of SOX2 in colorectal cancers. Here, we investigated if SOX2-positive cell component is expanded in BRAF(V600E) mutated than wild type ameloblastomas.

Methods: Fifty-five formalin fixed paraffin embedded ameloblastoma tissue sections were used for macro-dissection of tumor component, DNA extraction and SOX2 immunohistochemistry. Sanger sequencing was further performed to detect the BRAF (V600E) mutation. The correlation between SOX2 positive cell numbers and BRAF status in ameloblastomas was evaluated by T-test.

Results: Among 55 ameloblastoma cases, forty-eight cases harbored BRAF(V600E) mutation. SOX2 positive cells were found in all cases regardless of BRAF status with average 22.3% SOX2 positive cells in ameloblastomas. BRAF(V600E) mutated ameloblastoma cases showed significantly more Sox2-positive cells (24.5%) than in wild type (6.6%) ($p < 0.05$).

Conclusion: SOX2 positive cells were found in all ameloblastomas and BRAF(V600E) mutated ameloblastomas showed significantly more SOX2-positive cells. The results suggested BRAF(V600E) mutation may contribute to the expansion of SOX2 positive cell compartment.

CHONDROMYXOID FIBROMA OF THE MAXILLA: CASE REPORT. DR. GILBERTO URIBE AYALA^A, DR. JHONATAN LOPEZ^B, DR. HERMINIA DEL SOCORRO ARVELO SAAVEDRA^B, DR. PABLO EDGAR EDGAR^C. ^A UNIVERSIDAD LATINA DE AMÉRICA, ^B PRIVATE PRACTICE, ^C ÁNGELES HOSPITAL MORELIA

Objectives: Chondromyxoid fibroma (CMF) is a rare benign cartilaginous bone tumor with a characteristic lobular architecture and chondromyxoid background, this tumor account for 5% of all maxillofacial bone tumors.

Clinical presentation: we present a CMF of the left maxilla in a 15 years old female, presented with a bone swelling in the molar area. No systemic disease, other than hypothyroidism, were known. Tomographic evaluation exhibit a bone formatting lesion on the left maxilla, incisional biopsy was performed and processed histologically.

Histopathological diagnosis: Fibro-osseous lesion not otherwise specified.

Intervention: the patient was subjected to a left maxillectomy. A final diagnosis of CMF was emitted.

Outcome: the patient is treated by a Maxillofacial Prosthodontics and close clinical follow up by the Oral and Maxillofacial Surgeon, the patient is 6 months free of disease.

Conclusions: Lesion was identified as Fibro-osseous lesion not otherwise specified by the incisional biopsy; it exhibited lobular architecture and chondromyxoid background, after the tumor resection the histopathological features were confirmed in the entire tumor, this case in particular exhibit extensive chondroid areas give the possibility of another diagnosis like: chondrosarcoma, chondroid osteosarcoma, chondroblastoma or chondroma.

BENIGN ALVEOLAR RIDGE KERATOSIS: CLINICOPATHOLOGICAL STUDY OF 174 CASES AND P53 EXPRESSION PATTERN.

DR. ASMA ALMAZYAD^A, DR. CHIA-CHENG LI^A, DR. VIKKI NOONAN^B, DR. SOOK BIN WOO^A.

^A HARVARD SCHOOL OF DENTAL MEDICINE, ^B BOSTON UNIVERSITY HENRY GOLDMAN SCHOOL OF DENTAL MEDICINE

Objectives: Benign alveolar ridge keratosis (BARK) is a benign hyperkeratosis that occurs as a poorly demarcated white papule or plaque on the retromolar area or edentulous alveolar ridge mucosa caused by trauma. Histopathologic features are identical to cutaneous lichen simplex chronicus, a condition that results from chronic habitual skin scratching/picking. P53 protein is a tumor suppressor protein that plays a critical role in DNA repair. P53 protein has been shown to be present within 5-25% of the basal cell nuclei in normal oral mucosa and reactive lesions. The objective of this study is to report on the histopathologic features of BARK and to explore P53 expression pattern.

Study Design: Cases of BARK were identified from the biopsy service of the Harvard School of Dental Medicine from January, 2016 to December, 2017. Randomly selected cases were studied for the presence of P53.

Results: There were 174 cases comprising 119 males and 55 females (2.2:1; M:F) with a median age of 57 years (range 15-86). The majority were in the sixth (31.0%) and seventh (29.3%) decades. There were 112 (64.4%) cases on the retromolar pad and 62 (35.6%) on the edentulous alveolar mucosa; 27 (15.5%) cases were bilateral. Histopathologically, the oral mucosa showed hyperkeratosis often with wedge-shaped hypergranulosis and occasional focal parakeratosis. The epithelium exhibited mild to moderate acanthosis and slight surface undulations or papillomatosis, with tapered rete ridges, often confluent at the tips. The study for P53 performed in 11 cases showed less than 25 % nuclear positivity.

Conclusion: BARK is a distinct benign clinicopathologic entity caused by friction that is the intraoral counterpart of cutaneous lichen simplex chronicus with which it shares similar histopathologic features. It is not a mere hyperkeratosis which would relegate it to the clinical entity of leukoplakia, and which is a potentially malignant condition.

UNUSUAL DENTAL FOLLICULAR HAMARTOMA ASSOCIATED WITH A DENTIGEROUS CYST WITH FOCAL PARAKERATOSIS: A CASE REPORT AND REVIEW OF THE LITERATURE.

DR. DIANA WANG^A, DR. JOHN KASHMANIAN^B, DR. SOOK BIN WOO^A. ^A HARVARD SCHOOL OF DENTAL MEDICINE, ^B PRIVATE PRACTICE

Introduction: Dental follicular hamartoma with central odontogenic fibroma-like features is a rare condition that has been reported primarily in black African teenagers and young adults and is characterized by involvement of multiple teeth that either show amelogenesis imperfecta or enamel dysplasia, hypodontia, open-bite malocclusion, and gingival overgrowth.

Case Report: We report a case of an unusual dental follicular hamartoma associated with a dentigerous cyst in the left mandible of a 23-year-old male who was otherwise healthy. The patient presented to his oral surgeon with pain in the left mandible. Clinical examination revealed soft tissue swelling and suppuration associated with the distal aspect of tooth #18. A panoramic radiograph revealed a 3.3 cm x 2.3 cm unilocular radiolucency associated with impacted tooth #17 that extended from the superior aspect of the crown to the mandibular notch. This lesion had been present at least four years prior when it measured 2.6 cm x 2.0 cm. Tooth #17 was extracted and the bulk of the lesion was curetted. The biopsy revealed a cellular proliferation of spindled fibroblast-like cells in a