

Rad. & chemoth. & 1 patient (post radiation) also underwent surgical intervention as chemoth. & Rad. showed no response. Follow-up period ranged from 2 months to 3 years, where 2 patients were alive & disease free while the other 2 expired of wide spread disease, including CNS invasion & both patients within that cohort had evidence of regional lymph node metastasis and one of the 2 also exhibited CNS involvement. Histomorphologic subtypes included 3 embryonal and 1 post radiation subtypes. All cases reacted positively with IHC to desmin & myogenin. Ki67 labeling was 75% to 90 % in 3 cases and was not performed in the 4th. One of the cases which encompassed small round cell morphology also reacted positively with CD99, albeit with co-expression of desmin and myogenin.

Conclusions: Our cases highlight the aggressive nature of RMS, with distant metastasis in 3 cases and high Ki-67 labeling. Positive expression of CD99 should not deter from the diagnosis of RMS provided co-expression of myogenin and desmin is confirmed. Considering its aggressiveness and failure to respond to any form of current treatment, post-radiation RMS should be classified as an unspecific variant of RMS.

RED LIGHT IRRADIATION REGULATES ROS SCAVENGING AND ANTI-INFLAMMATION THROUGH SPHK1/NF-KB PATHWAY IN HACAT CELLS. MS. QIAOCHU SUN, PROF. YOUNG KIM, PROF. OKJOON KIM. CHONNAM NATIONAL UNIVERSITY

Objectives: Oxidative stress is a well-accepted pathogenesis of several human diseases, which is an increased amount of the oxidants exceeding the capacity of antioxidant defense system. Light-emitting diode irradiation (LEDI) represents an efficient strategy to counteract this condition. The purpose of the present study was to evaluate the ROS scavenging and anti-inflammatory mechanism of LEDI.

Findings: cDNA microarray, semi quantitative PCR (semi-qPCR), western blotting and small-interfering RNA (siRNA) transfection were processed on PMA induced oxidative stress and inflammation in HaCaT cells. In this study, 625 nm LEDI showed the effect of ROS scavenging and anti-inflammation. One of the most important genes which identified by microarray analysis was sphingosine kinase-1 (SPHK1), which is a key enzyme in sphingolipid metabolism. SPHK1 knockdown drastically reduced the viability of ROS scavenging in the presence of PMA-stimulated HaCaT cells. Furthermore, results with cyclooxygenase-2 (COX-2) and prostaglandin E2 (PGE2) further indicated the importance of the SPHK1 in anti-inflammatory process in HaCaT cells.

Conclusions: The results obtained in this work highlight the possible role of SPHK1 in ROS scavenging and anti-inflammation in PMA-stimulated HaCaT cells, investigating for the first time the possibility its involved molecular mechanisms. And SPHK1 can be used as a therapeutic target in LEDI treatments for treating skin disorders through ROS scavenging and/or anti-inflammation.

SARCOMAS OF THE HEAD AND NECK- A 10-YEAR REVIEW FROM A SPECIALIST CENTRE. DR. SYED ALI KHURRAM^A, DR. ADAM JONES^B, DR. DAVID HUGHES^C, PROF. LYNDIA WYLD^D, DR. NIKHIL KOTNIS^C, DR. MALEE FERNANDO^C. ^A SCHOOL OF CLINICAL DENTISTRY, UNIVERSITY OF SHEFFIELD, ^B CARDIFF AND VALE NHS TRUST,

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Objectives: Head and neck (H&N) sarcomas are rare mesenchymal lesions accounting for 5-15% of all sarcomas with a poor prognosis. Their management can be challenging due to the complex anatomy, difficulty in surgical removal and heterogeneity within and between lesions. The aim of this study was to determine the range and demographics of all histologically confirmed H&N sarcomas over a 10-year period seen at a regional specialist sarcoma centre. Information about grade, margin clearance, treatment modality, metastasis and recurrence was analysed and correlated to survival.

Findings: 87 sarcomas were identified using the local database with a male prevalence (67%) and a mean age of 43 years. The most common diagnoses were angiosarcoma, pleomorphic sarcoma NOS (14.9%), chondrosarcoma (10.34%) and rhabdomyosarcoma (9.2%). The most commonly involved sites were scalp (26.44%), neck (12.64%), buccal mucosa and temporal fossa (9.2%). The majority of the lesions were Trojani grade 3 (44%). A large proportion of the sarcomas were smaller than 5 cm (70%). 97% of cases were treated with curative intent with surgery the first intervention in 77% cases and chemoradiotherapy in the remaining 23%. When surgery was employed, excision was undertaken for 90% of cases and debulking for the remaining 10%. 47% cases developed a recurrence which was predominantly locoregional (68%) and related to margin involvement ($p < 0.005$). Overall and disease-specific survival was significantly related to gender, grade, metastasis and treatment modality ($p < 0.05$).

Conclusions: Head and neck sarcomas are rare and complex lesions requiring multidisciplinary management. Our survival rates are similar to those reported in literature with grade and metastasis being the most important predictors of survival. National and international databases are required for multicentre registration and better identification of prognostic factors.

AN ATYPICAL SIMPLE BONE CYST IN THE INFERIOR ALVEOLAR CANAL: A CASE REPORT. DR. MD SHAHIDUL AHSAN, PROF. NIDHI HANDOO, PROF. SAULO SOUSA MELO, PROF. SHERRY TIMMONS, DR. FELIPE NOR, DR. JOSHUA ORGILL, DR. SCOTT STEWARD-THARP, PROF. JOHN HELLSTEIN. UNIVERSITY OF IOWA COLLEGE OF DENTISTRY

Objective: The simple bone cyst is a benign intraosseous pseudocystic lesion without any epithelial lining. As most of simple bone cysts are asymptomatic, they are commonly first noticed as incidental radiographic findings. In the jaws, they are predominant in the mandibular premolar and molar region of young adults. We present a case of simple bone cyst of the mandible with atypical association with the inferior alveolar canal.

Clinical presentation: A 52-year-old female patient presented with a well-defined, finely corticated, unilocular, radiolucent lesion of unknown duration in the right ramus of the mandible, with no relevant past medical history. A benign odontogenic lesion was considered. However, given that the CBCT findings indicated the inferior alveolar canal as a possible epicenter, the differential diagnosis also included neural tumors and vascular anomalies. Incisional biopsy was performed, but no epithelial lining was noted. Microscopically, the specimen consists

of variably dense fibrocollagenous connective tissue with small blood vessels and nerve bundles. S100 and CD31 immunohistochemistry showed expected positivity for nerve and vascular tissues. A microscopic diagnosis of simple bone cyst associated with the inferior alveolar canal was rendered.

Conclusion: This case represents an unusual simple bone cyst. Radiographically, the lesion appears to be associated with inferior alveolar canal. Even though simple bone cysts in the posterior mandible are not common, it is very unlikely to involve/arise from the inferior alveolar canal.

REGIONAL ODONTODYSPLASIA: A CASE

REPORT. MR. JOSE RAMOS^A, DR. ROBERTO ONNER CRUZ TAPIA^B, MS. ANDREA MESIAS-PENAHERRERA^B, DR. JAVIER PORTILLA-ROBERTSON^B. ^ANATIONAL AUTONOMOUS UNIVERSITY OF MEXICO, ^BUNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO

Objective: Report a case of regional odontodysplasia in the maxilla of a pediatric patient and the immunohistochemical expression of different types of collagen. Regional odontodysplasia is a rare developmental anomaly, involving the ectoderm and ectomesenchyme of the temporally and permanent teeth. It tends to be localized in only one arch of the jaws.

Case report: A 8-year-old female patient, with no significant hereditary or pathological history. On examination dental agenesis C, D, E is observed. Radiographically revealed 6, 7 and 8 with radiopaque contour and loss of the delimitation between enamel-dentin complex, giving an appearance of ghost teeth. Surgical treatment was performed. Microscopic examination follicular tissue contains scattered collection of enameled congregates and islands of odontogenic epithelium. Immunohistochemical expression of different types of collagens was heterogeneous in the dentin (col. 1,2,3,4,5,6,10 and 11). These results are consistent with an abnormal dentin development.

Conclusion: Regional odontodysplasia is an alteration that develops at a very early age, so the interdisciplinary management and the choice of treatment are fundamental since the treatment must be specific for each patient.

PALATE EPITHEIOD HEMANGIENDOTHELIOMA, CASE REPORT..

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Introduction: Epithelioid hemangi endothelioma (EHE) is considered as a borderline vascular neoplasm between hemangioma and angiosarcoma. It represents less than 1% of all vascular tumors and was described in 1975 by Dail and Liebow, but the term EHE was introduced in 1982 by Weiss and Enzinger. EHE is characterized by a proliferation of epithelioid endothelial neoplastic cells. This lesion is rare reported in oral cavity. Clinically, it presents as gingival swelling.

Case Report: 59 years old male presents with asymptomatic left palatal swelling of 3 years of evolution, the lesion was previously diagnosis as granular cell tumor by a hospital Pathologist. Excisional biopsy was done. Microscopically are epithelioid hyperchromatic cells with vacuolated cytoplasm and lumen formation, arranged in nests and closely associated with

blood vessel. Neoplastic cells were positive for the CD31, CD34, D2-40, FVIII and INI1; Ki67<2% and negative for CKAE/CKAE3, S-100, langerina, vimentin, EMA, SMA and FLI1 markers. Tissue electron microscopy was performed and the diagnosis of epithelioid hemangi endothelioma was done.

Discussion: The EHE is an uncommon vascular neoplasm with less of 50 cases reported in oral cavity in the English literature. The most common location is gingiva, in middle age patients. Histologically, the presence of vacuolated cells may cause confusion in the diagnosis and therefore the use of other tools such as immunohistochemistry is important for the appropriate diagnosis of this lesion and correct treatment.

Conclusion: EHE can turn into malignancy and metastasize to regional lymph nodes, therefore wide margins surgical excision and long term follow up of the patient is highly recommended because the 10-15% rate of recurrence, the survival rate is 76% true 5 years of follow-up.

ADENOMATOID ODONTOGENIC TUMOR,

THE REPORT OF THREE CASES. PROF. BEATRIZ ALDAPE^A, PROF. CARLOS LICEAGA^B, DR. LUIS MONTOYA^C, DR. CESAR OJEDA^B, DR. CARLOS GARCIA^D. ^AUNAM, ^BHOSPITAL JUÁREZ DE MÉXICO, ^CHOSPITAL JUAREZ DE MEXICO, ^DPRIVATE SURGERON

Adenomatoid odontogenic tumor (AOT) is a rare benign odontogenic tumor. AOT represents 3-7% of all odontogenic tumors. First described by Steensland in 1905 and later by Philipsen and Bin in 1969, AOT is an encapsulated tumor composed by odontogenic epithelium with duct-like structures. Radiographically, it commonly appears as a pericoronal unilocular radiolucency associated with an impacted tooth, more often the maxillary canine. Frequently, the lesion shows focal calcifications. Most cases are discovered in the second decade of life. Some authors have considered AOT as a hamartoma rather than a neoplastic process. A peripheral variant has been described. Here, we report three cases of AOT to illustrate the benign course of this tumor.

Cases: The three cases were found in females at the age of 15, 18 and 33 years. One case was discovered the mandible as periapical lesion and two cases associated with impacted maxillary canines. All cases show well-defined mixed radiolucent and radiopaque appearance. Root resorption was not observed in the mandibular case. Slow growing was reported in all cases. An excisional biopsy was done in the three cases. Microscopically, all cases revealed an encapsulated tumor compose of sheets of solid basaloid epithelium with duct-like spaces. Cystic and solid patterns with dystrophic calcification were also observed. No recurrence has been reported.

Conclusion: Although, the mandibular case was located in an uncommon location and showed an atypical appearance, all cases demonstrated an indolent behavior. These cases confirm the benign nature of this tumor.

CLEAR CELLS TUMORS IN THE ORAL CAVITY: TWO CASES TO SHOW THE CHALLENGING DIAGNOSIS.

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Introduction: Clear cell carcinomas in the jaws are very infrequent neoplasms. Differential diagnosis includes metastatic