

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