SALIVARY GLAND SONOELASTOGRAPHY: TO DO OR NOT TO DO? *DR. IRIT ALLON, DR. DANIEL LONDON, DR. OLGA RESNIKOV, DR. MICHAEL ABBA, DR. ANNA PIKOVSKY, PROF. ODED NAHLIELI. BARZILAI UNIVERSITY MEDICAL CENTER*

Background: Sonoelastography (SEG) is a non-invasive, relatively new imaging modality that maps the elastic properties through stiffness of soft tissue. Pathological conditions such as inflammation and neoplasia can change tissue elasticity; as a result, when used in the major salivary glands, this non-invasive modality may provide information that could be useful for diagnosis.

Objective: Two preliminary studies are presented; both assess the diagnostic utility of SEG: the first in primary Sjogren's syndrome (pSS) and the second concerns major salivary gland tumors.

Methods and materials: The first study included fifteen patients with pSS that underwent SEG of the major salivary glands before starting pilocarpine treatment versus diffused sialadenitis and normal glands. The second study included nineteen benign and malignant tumors, just before ultrasound-guided needle aspiration for cytology and excisional biopsy. Quantitative indices of the shear elastic modulus were compared with cytological and histopathological results. Elastography was scored on color-scaled elastograms.

Results: Mean elasticity/stiffness values for pSS were not significantly different from those of diffused sialadenitis and normal salivary gland tissue. As for salivary gland tumors, scores showed clustering according to pathological condition. For example, pleomorphic adenomas were firmer than Warthin's and adenoid cystic carcinoma was firmer than polymorphus adenocarcinoma.

Conclusions: SEG did not show a diagnostic advantage in regard to the assessment of pSS. Nevertheless, it might serve as a tool in the evaluation of benign and malignant major salivary glands tumors. Our studies should be continued to confirm these preliminary observations.

METASTASIS AROUND DENTAL IMPLANTS MASCARAING AS PERI-IMPLANTITIS - A WOLF IN SHEEP'S CLOTHING. *DR. IRIT ALLON[A], DR. LIAT HECHT-NAKAR[A], PROF. ABRAHAM HIRSHBERG[B], DR. ALEJANDRO LIVOFF[A]. [A] BARZILAI UNIVERSITY MEDICAL CENTER, [B] TEL*

Background: Placement of dental implants is a common procedure with a high success rate. A minority of the cases fail, however, a manifestation termed peri-implantitis, which is considered clinically obvious, hence often not biopsied.

Case report: In this report, a case of metastatic lung adenocarcinoma mimicking peri-implantitis adjacent two dental implants is presented. The lesion occurred eight months after the surgical implantation procedure and by that time, the underlying malignancy was unknown to the patient. During the surgical procedure itself', and even in the follow up meetings, there was no apparent clinical or radiographic sign of a metastatic disease, but during an eight months follow up session, the soft tissue around the implants was firmly swelled and mildly erythematous, and the x ray imaging revealed a nonspecific ill-defined radiolucency of the alveolar bone. The tissue was excised, adjacent bone was curated and the tissue was submitted to histopathological analysis. The pathological picture presented a malignant tumor composed of epithelial islands embedded within a fibrous stroma. The epithelial islands presented atypical features and an immunohistochemical phenotype of lung adenocarcinoma that included positive pan keratin, thyroid transcription factor-1 and napsin-A and negative thyroglobulin and prostatic specific antigen. Concurrently, the patient was diagnosed with a lung adenocarcinoma and started systemic treatment.

Conclusion: This case of metastatic disease masquerading as peri-implantitis reflects the importance of submitting any tissue to histopathological assessment.

APPLICABILITY OF ORAL EPITHELIAL DYSPLASIA GRADING IN POTENTIALLY MALIGNANT DISORDERS OF ORAL CAVITY-AN INSTITUTIONAL REVIEW. *DR. KARPAGASELVI SANJAI[A], DR. LALITA JAYARAM THAMBIAH[B]. [A] VYDEHI INSTITUTE OF DENTAL SCIENCES/ RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES, [B] MR AMBEDKAR INSTITITUTE OF DENTAL SCIENCES/RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES*

Oral cancer may be preceded by Potentially malignant lesions such as leukoplakia, erythroplakia, stomatitis nicotina, oral submucous fibrosis (OSMF) and erosive lichen planus(LP). Oral Epithelial dysplasia (OED) is an important predictor of malignant potential. According to WHO 2017, the three tiered grading reliability can be improved by Binary grading system of high & low risk. So the aim of this retrospective study was verify the applicability of the binary grading system for OED in our institution.

Objective: Comparison of the Binary grading system with WHO three tiered grading system in Oral Epithelial Dysplasia.

Findings: 116 cases reported as OED from the period 2008 to 2017, were reevaluated and graded according to WHO 2005 & the Binary system. 81.03% of cases were clinically diagnosed as oral leukoplakia, 10.34% as oral LP and 8.62% as OSMF. The frequency of distribution of cases according to WHO grading system were mild (19), moderate (55) and severe (42), whereas according to binary system 85 cases are high risk and 31 cases low risk. On comparison, all 42 cases of severe dysplasia were graded as high risk. Out of 55 cases of moderate dysplasia, 41 were graded as high risk and 14 as low risk. Among 19 cases of mild dysplasia, 2 cases were designated as high risk and 17 cases as low risk. Out of 116 cases, 11(9.48%) cases were of recurrence as OED. 9 cases (10.58%) out of 85 high risk cases showed recurrence in comparison to two (2.35%) out of 31 low risk cases. Analysis of Binary system in relation to clinical features is also attempted.

Conclusion: In the present analysis, though majority of the high risk cases occurred on buccal mucosa, recurrence was more on tongue. The binary system helped in defining the prognostic group by providing the histologic criteria.

FREQUENT COEXISTENCE OF GLI1 OVEREXPRESSION AND BRAF(V600E) MUTATION IN AMELOBLASTOMAS. *DR. PEI HSUAN LU, DR. JULIA YU FONG CHANG, DR. JANG-JAER LEE. NATIONAL TAIWAN UNIVERSITY HOSPITAL*

Objective: Recent studies show SMO mutations play a role in the pathogenesis in ameloblastomas and may co-existence with FGFR2, RAS and occasionally BRAF mutations. In our previous study, no SMO mutations were identified in ameloblastomas in Taiwan. To understand whether sonic hedgehog (SHH)