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ORAL PRESENTATIONS

OVER EXPRESSION OF HUR AND PODOPLANIN MAY PREDICT THE DEVELOPMENT OF ORAL CANCER IN PATIENTS WITH ORAL PRENEOPLASTIC LESION

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Objective: The risk of malignant transformation of oral preneoplastic lesion (OPL) is difficult to assess. The purpose of this study was to evaluate HuR and podoplanin expression in OPL and their role as a marker of oral cancer risk.

Study Design: Fifty-one OPL cases including low and high grade dysplasia were analyzed using immunohistochemistry.

Results: Association between the protein expression patterns and clinicopathologic parameters including oral cancer development were analyzed statistically. Out of 51 cases, 24 (47%) turned into malignancy during the follow-up period. Among the malignant cases 18 (75%) and 10 (42%) showed positive podoplanin and high HuR expression, respectively. OPL with high HuR (0.000) and podoplanin expression (0.029) are predicted to be more potent to transform into malignancy regardless of histopathology.

Conclusions: Taken together, HuR and podoplanin expression could be used as biomarkers to identify OPL patient with substantially high oral cancer risk.

Keywords: HuR, Podoplanin, Dysplasia, Oral cancer

DIAGNOSTIC AND PROGNOSTIC IMPLICATIONS OF CANCER STEM CELLS IN SALIVARY GLAND NEOPLASMS

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Objective: This study aims to determine the implications of the cancer stem cell markers ALDH1, CD166, CD44 and CD24 among different benign, malignant salivary gland tumors and normal salivary glands.

Study Design: The study was conducted on 24 malignant, 24 benign salivary gland tumors and 7 normal salivary gland tissues.

Results: The highest expression of ALDH was by normal tissues followed by benign and malignant tumors. On the contrary, the highest expression of CD166 was by malignant tumors followed by benign tumors then normal tissues. There was no correlation between metastasis, recurrence, histological grade and CSC markers expression. There was significant difference in ALDH1 expression between ACC and PLGA.

Conclusions: CD166 and ALDH1 expression might be used as a marker to differentiate benign and malignant salivary gland tumors. Regarding the prognostic implication there was no difference in the expression of cancer stem cell markers.

ALDH1 might be a diagnostic marker to differentiate PLGA and ACC.

Keywords: Cancer stem cell, salivary gland tumors, prognosis

A NEW PROGNOSTIC MODEL FOR EARLY STAGE ORAL TONGUE CANCER

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Objective: Histopathological grading of surgically resected oral tongue squamous cell carcinoma (OTSCC) still an important guide of postoperative management. Several histopathological models have been introduced as prognosticators in OTSCC, but none of them were get acceptance in clinical practice. This study introduces a simple novel model for prognostication of early OTSCC.

Study Design: A total of 311 cases treated for early OTSCC were scored for tumor budding (B) and depth of invasion (D) and then the scored parameters were combined in a predictive model (BD model).

Results: Cases with high BD scores (score 2) were showed to have more loco-regional recurrence and deaths from OTSCC ($p = 0.003$ and $p = 0.0001$ respectively). No significant correlation between BD scores and other causes of death was observed.

Conclusions: The current prognostic model is a promising indicator for patients' survival in early OTSCC. Further validation is recommended.

Keywords: Oral tongue squamous cell carcinoma, BD model, Prognosis

THE EFFECT OF CHROME-COBALT AND ACRYLIC PALATAL PLATES ON EXPERIMENTAL DENTURE STOMATITIS IN WISTAR RAT *Muhannad Ali Kashmoola¹, Basma Ezzat Mustafa², Nazih Shaaban Mustafa³, ¹Department of Oral Pathology and Medicine, Kulliyah of Dentistry, International Islamic University Malaysia; ²Department of Basic Medical Sciences, Kulliyah of Dentistry, International Islamic University Malaysia; ³Department of Oral and Maxillofacial Surgery, Kulliyah of Dentistry, International Islamic University Malaysia*

Objective: To compare effect of acrylic and chrome-cobalt on experimental oral candidiasis.

Study Design: 72 male Wistar rats were divided into group1 and group2 experimental groups and a control group, group 1 includes animals fitted with acrylic palatal plates, 12 of them inoculated with candida albicans, group 2 includes animals fitted with chrome-cobalt palatal plates, 12 of them inoculated with candida albicans. The control group includes animals inoculated with candida albicans on palate, and animals left without any treatment.

Results: Palatal candidiasis resulted in group 1, with alternating epithelial hyperplasia and atrophy, intra-epithelial polymorphonuclear leukocyte infiltration and chronic inflammatory cell infiltration in connective tissue, transmission of candida from yeast into mycelium was observed. Group 2 did not exhibit palatal candidiasis; but only slight hyperorthokeratinization.

Conclusions: Presence of acrylic in association with Candida albicans is required for oral candidiasis, while Chrome-Cobalt Inoculated with Candida albicans caused hyperkeratosis and slight epithelial hyperplasia.

Keywords: experimental, oral candidiasis, candida albicans, chrome-cobalt, acrylic, rat,

IMMUNOLOGICAL CHANGES IN SECONDARY SJOG-RAN SYNDROME (COMPARATIVE STUDY) *Basma Ezzat Mustafa Alahmad¹, Nazih Sh. Mustafa², Muhannad A. Kashmoola³, Raida Khalil⁴, ¹Assistant Professor, Head of Dept. of Basic Medical Sciences, Kulliyah of Dentistry, International Islamic University Malaysia; ²Assistant Professor, Head of Dept. of Oral and Maxillofacial Surgery, Kulliyah of Dentistry, International Islamic University Malaysia; ³Associate Professor, Dean, Head of Dept. of Oral Pathology and Oral Medicine, Kulliyah of Dentistry, International Islamic University Malaysia; ⁴Associate Professor, Department of Biotechnology and Genetic Engineering, Philadelphia University, Jordan*

Objective: This study was designed to evaluate the immunological changes and its existence for early diagnosis and proper management of disease.

Study Design: 56 patients with RA accompanied by sSS where included in this study and compared to 60 RA patients without sSS. Schirmers test, blood tests and search for auto antibodies was done for all patients in both groups. Schirmers, blood tests and search for antinuclear antibody was done for all patients in both groups, with the measurement of salivary flow rate.

Results: Schirmers test was positive in all sSS and negative in all RA patients, whilst salivary flow rate was reduced in all sSS. Latex fixation test, ANA, Anti Ro and Anti La were reported significantly higher in sSS ($p < 0.01$)

Conclusions: Secondary Sjogrens syndrome had a significantly positive rheumatoid factor, antinuclear antibody, anti Ro (SS-A) and anti La (SS-B) compared to rheumatoid patients without Sjogrens syndrome.

Keywords: Immunological Changes, Secondary Sjogran Syndrome

THE EFFECT OF NOVEL FLAX OIL-BASED IMPLANT COATING ON BONE HEALING PROCESS (IN VIVO ANIMAL STUDY) *Nazih Shaaban Mustafa¹, Basma E. Mustafa Al Ahmad², Ammar A. Mustafa³, Muhannad A. Kashmoola⁴, ¹Assistant Professor, Head of Dept. of Oral and Maxillofacial Surgery, Kulliyah of Dentistry, International Islamic University Malaysia; ²Assistant Professor, Head of Dept. of Basic Medical Sciences, Kulliyah of Dentistry, International Islamic University Malaysia; ³Assistant Professor, Kulliyah of Dentistry, International Islamic University Malaysia; ⁴Associate Professor, Dean, Head of Dept. of Oral Pathology and Oral Medicine, Kulliyah of Dentistry, International Islamic University Malaysia*

Objective: This pilot study was designed to investigate the effect of new implant coating material on postoperative bone healing process.

Study Design: experimental formula of flax oil-based implant coating was prepared. Twelve (12) white New Zealand male rabbits were randomly distributed into four groups ($n=3$). Surgery was performed to prepare 2mm hole in the zygomatic bone. The right side was filled with the test material (test group), whereas the hole in the left side of the same animal was left material free. Bone healing process was investigated after 3,7,14, and 21 days.

Results: New growth of normal bone explained by active bone apposition was observed in the test operation area in the marrow space after three days, less postoperative inflammation was observed explained by less inflammatory cells in the operation area.

Conclusions: The new formula could represent a promising implant coating material for better bone healing process and hence faster osseointegration.

Keywords: Flax seed, coating, implant, Bone, Rabbit

CASTLEMAN DISEASE: A DIAGNOSTIC DILEMMA

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Castleman Disease (CD) is a benign lymphoproliferative disease. The etiology is still unknown. It was first described by Castleman et al. in 1956. Clinically it is rare and is always a diagnostic dilemma. It mostly seems in adults and it is rare in children. Mediastinum is the most common location and followed by neck, abdomen and axilla. It might be also found in lymph nodes in any region of the body. There are two pathological subtypes such as hyalen vascular type (%90) and plasma cell type (%10). In the parotid region it is also rare and very difficult to reach the correct diagnosis particularly with fine needle aspiration (FNA) and also by histologically.

Here we present a rare case of CD in parotid gland region findings of FNA and histological features.