cytoplasm. Three cell lines demonstrated lower growth potential under inhibition of the expression of LAD1 by using siRNA. Although early adhesion to the plates was not affected, cleaved-caspase-3 positive and TUNEL positive cell ratio were increased in LAD1-knockdown cells. Furthermore, cell motility of LAD1-knockdown cells was significantly suppressed in wound scratch assay.

Conclusions: LAD1 is potentially involved in modulation of actin dynamics in oral SCC cells, affecting their motility and proliferation at the interface between cancer and non-cancerous tissue.

INTERLEUKIN 1 RECEPTOR ANTAGONIST (IL-1RA) BIOLOGY IN ORAL EPITHELIUM, ORAL DYSPLASIA AND ORAL SQUAMOUS CELL CARCINOMA.

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Objectives: Knowledge of molecular biology of oral dysplasia (OD) and oral squamous cell carcinoma (OSCC) is essential in order to find novel biological markers that could serve as predictor markers for malignant transformation. IL-1 receptor antagonist (IL-1RA), IL-1 natural inhibitor, is encoded by the IL1RN gene and has been reported to be downregulated in head and neck squamous cell carcinoma, but the effects of its downregulation in OSCC and OD are largely unknown. Thus, the aim of this research was to study the role of IL-1RA in oral carcinogenesis and oral keratinocyte senescence.

Findings: IL1RN, specifically intracellular IL-1RA type 1 (icIL-1RA1), is constitutively expressed in normal oral epithelium, but is downregulated, both in vitro and in vivo, in OD and OSCC cell lines. We also found an upregulation of IL-1R1 (IL-1 agonist receptor) in OSCC and OD cell lines. Using confocal microscopy, we have found that both proteins, IL-1RA and IL-1R1, are able to localize inside the nucleus, which suggests a new possible ways of interactions of intra-nuclear IL-1α in oral keratinocytes. Transient transfection in OSCC and OD cell lines with a plasmid encoding for icIL-1RA1, showed no or limited effects on cell migration (by cell exclusion and transwell assay), cell proliferation (by EDU incorporation) and IL-6 and IL-8 secretion (by ELISA). Preliminary data suggests an increase of IL-1 alpha and a decrease of icIL1-RA mRNA expression as primary oral keratinocytes and mortal OD cells senesce.

Conclusions: IL1RN is downregulated in oral dysplasia and oral cancer. How this downregulation favours oral carcinogenesis it is not yet known, but might be related with the oral senescence program.

EXTRAPARENCHYMAL EXTENSION, LYMPH NODE INVOLVEMENT, AND A HIGHER KI67 INDEX WERE HIGH RISK FACTORS FOR WORSE PROGNOSIS IN CONVENTIONAL MAMMARY ANALOGUE SECRETORY CARCINOMA.

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Objective: The prognostic factors of salivary gland (mammary analogue) secretory carcinoma (SC) are unclear because of the rarity of the tumors. Here we presented the largest case series to investigate the prognosis related clinicopathological factors in salivary conventional SC.

Findings: The study was based on a retrospective cohort of patients whose sections were reviewed and newly diagnosed as SC by the detection of ETV6 rearrangement from 1993 to 2015. The clinicopathological features were analysed as the primary predictors and patients' final outcome was collected. Survival analysis was performed in conventional SC by using Kaplan-Meier method and Cox proportional hazards regression model. In our study, totally sixty-two cases of SC were confirmed. Fifty-nine out of 62 cases were conventional SC with a mean age of 43.2 years, showing significant male predilection (49/59, 83.1%) and mostly occurred in parotid glands (49/59, 83.1%). Additional 3 cases were identified as SC with high-grade transformation (HG-SC), with a mean age of 20 years older than that of patients with conventional SC. Lymph node metastasis and Ki67 expression $\geq$10% were related to poor recurrence-free survival (RFS), distant disease-free survival (DDFS) and disease-free survival (DFS) in conventional SC. Significantly decreased RFS and DFS were seen in patients with extraparenchymal extension. T3/T4 stage, age greater than 44 years and markedly hyalinized fibrous septa were associated with worse DDFS. By using multivariate analysis, the Ki67 index was found to be an independent prognostic factor for RFS ($p = 0.008$) and DFS ($p = 0.003$) in conventional SC. Much more worse RFS and DFS were presented in HG-SC due to its aggressive behaviour.

Conclusion: In conventional SC, patients with extraparenchymal extension, lymph node involvement, and higher Ki67 index exhibited poor clinical outcome. Moreover, Ki67 was a potential predictor of RFS and DFS of conventional SC.

THE EXPRESSION OF MAML2 GENE REARRANGMENT IN CASES OF GLANDULAR ODONTOGENIC CYSTS AND MUCOEPIDERMOID CARCINOMAS WITH OVERLAPPING HISTOLOGIC FEATURES.

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Objectives: MAML2 expression has been demonstrated in the majority of mucoepidermoid carcinomas (MEC) arising in the salivary glands. MEC may also arise intraosseously in the jawbone (IMEC). Glandular odontogenic cyst (GOC) is an odontogenic cyst with some histologic overlap with IMEC. MAML2 expression has not been extensively studied in IMEC or in GOC. This study will test the reliability of MAML2 in distinguishing cases of IMEC from GOC that share similar histologic features.

Methods: An IRB-approved retrospective search of IMEC, GOC, and IMEC with prior history of GOC was performed within the archives of the UF Oral Pathology Biopsy Service from 1994-2017. Eight cases from four patients were selected with diagnoses of either IMEC with earlier GOC, GOC with IMEC features, or IMEC with GOC features. Tissue was available for six out of the eight cases, on which break apart fluorescent in situ hybridization (FISH) analysis was performed for the presence of MAML2 rearrangement.