Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Conclusions: This study sample did not indicate a significant change in sex and age of patients with oral cancer over the years. The identification of potentially malignant disorders is important for the early diagnosis of oral cancer.

INCREASED HERPES ZOSTER CASES IN BRAZIL RELATED TO THE COVID-19 ERA

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Objectives: Recently, studies have discussed reports of patients positive for COVID-19 with skin lesions and vesiculobullous oral lesions consistent with the manifestations of herpes zoster (HZ) and the involvement of this manifestation with the COVID-19 infection. The objective of this study was to compare the data from the Unified Health System on the number of diagnoses of HZ in each year during the pandemic period.

Study Design: The data were extracted from the public database of the Ministry of Health of Brazil (DATASUS) and a descriptive analysis of the numbers was performed per million inhabitants and by percentage comparing the prepandemic period and the years 2017, 2018 and 2019 with the same period of 2020 in all Brazilian regions.

Results: The data showed an increase in the number of HZ diagnoses over the years and the negative impact of COVID-19 on the number of diagnoses of HZ per million inhabitants (+35.4%) during the pandemic in Brazil.

Conclusions: Although the association between HZ and COVID-19 is not well established, we observed an increase in HZ cases during the COVID-19 pandemic, which suggests a correlation between these diseases.

ACIDIC EXTRACELLULAR pH ENHANCES EXPERIMENTAL METASTASIS OF HUMAN SQUAMOUS CELL CARCINOMA CELLS IN NUDE MICE

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Objectives: To evaluate the effects of an acidic microenvironment on oral squamous cell carcinoma cells regarding the ability to develop metastases in vivo.

Study Design: After different periods of exposure to the acidic culture medium, the concentration of 2 million oral squamous cell carcinoma cells in 150 µL of phosphate-buffered saline was injected into the tail vein of Balb/c nude animals. The animals were monitored for 10 weeks and then euthanized, and their lungs and livers were collected, measured, weighed, photographed, and fixed in 10% formalin for histologic processing. Histologic slides stained with hematoxylin and eosin were obtained and analyzed by a blind observer who quantified the number of metastases per slide. After analysis of data distribution, the groups were compared by t-test or analysis of variance.

Results: The group with cells previously exposed to the acid microenvironment (pH 6.8) presented a higher number of lung metastases (P = 0.0322) compared to the unexposed group (pH 7.4). The average of metastases in the pH 6.8 group was 6.33 (±2.12), whereas in the pH 7.4 group it was 3.87 (±2.16).

Conclusions: The acid microenvironment confers metastatic capacity to oral squamous cell carcinoma cells and consequently greater tumor progression.

ASSESSMENT OF BIOMARKERS OF BONE METABOLISM AND PROINFLAMMATORY CYTOKINES IN THE SERUM AND SALIVA OF CIRRHOTIC PATIENTS

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Objectives: To assess serum and salivary levels of bone metabolism, proinflammatory biomarkers in patients with cirrhosis, and the evidence of osteoporotic changes on panoramic radiographs (PRs).

Study Design: Specimens of blood and saliva of 38 patients with cirrhosis were collected for evaluation using LuminexTMxMAP technology to quantify RANKL, OPG, IL-1β, IL-6, and tumor necrosis factor alpha (TNF-α). PRs were evaluated based on the mandibular cortical index (MCI) and data were compared to the expression of biomarkers in serum and saliva. Descriptive data analysis was performed, and the Mann-Whitney test and Spearman's correlation were used.

Results: Most of the sample consisted of males (68.4%) who had cirrhosis from alcoholism (28.9%). Median concentration values of RANKL (74.44 pg/mL), IL-1β (45.91 pg/mL), IL-6 (67.69 pg/mL), and TNF-α (5.97 pg/mL) in saliva were higher than those observed in serum. In 72.7% of the PRs, MCI was found to be suggestive of osteoporotic changes. No statistically significant correlation was observed between salivary and serum expressions of biomarkers or between biomarkers and MCI.

Conclusions: Biomarkers are expressed differently in serum and saliva and their concentration is not related to MCI.

EBV ORAL SHEDDING, VIREMIA AND ORAL HAIRY LEUKOPLAKIA IN HIV-POSITIVE INDIVIDUALS

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Objectives: To evaluate the viral load of the Epstein-Barr virus (EBV) in the blood and saliva of patients positive for human immunodeficiency virus (HIV) and its relationship with oral hairy leukoplakia (OHL).

Study Design: A cross-sectional observational study including 94 individuals with HIV undergoing clinical examination and collection of blood samples (for analysis of HIV and EBV viremia and CD4+ T lymphocyte count) and saliva (for analysis of EBV salivary elimination). Histopathologic examination and in situ hybridization were used in the 20 confirmed cases of OHL.

Results: The majority of the sample was male (72.3%), with a mean age of 45.2 years. The average CD4+ T lymphocyte count was 535.9 cells/mm³, the majority with an undetectable HIV viral load (79.7%). The average log10 of the EBV viral load in the blood was 1.6 and in saliva it was 2.4, with a positive correlation (P = .001). Individuals with OHL had a higher viral load of EBV in their saliva (P = .045).

Conclusions: The increase in the EBV viral load in the saliva of individuals with HIV with OHL is justified by the tropism of this virus by the epithelial cells and by the local immunological microenvironment.