

candidosis (41%), median rhomboid glossitis (5%), chronic mucocutaneous candidosis (5%), papillary hyperplastic candidosis (3%) and cheilocandidosis (3%). Others included pale oral mucosa (31%), burning mouth (28%) and recurrent oral ulcers (6%). The values of hemoglobin in 64 ID patients varied from normal to life-threatening levels but none had developed advanced systemic symptoms except fatigue. All had low serum iron and ferritin; however, 14 (22%) patients were nonanemic and 19 (30%) patients remained normocytic. All oral changes can be successfully meliorated by iron therapy plus antifungals when candidosis existed. A colorectal cancer in two patients was diagnosed and treated.

**Conclusions:** Our findings demonstrate that oral mucosa alterations accompanying oral candidosis are a sensitive indicator of ID. ID is the prime promoting factor in the development of oral mucosa alternations; anemia is merely a late manifestation of ID. It is essential to investigate the origin of ID, because it can be the initial sign of a serious disease, particularly malignancy.

### CHANGING TRENDS IN THE CLINICAL SPECTRUM OF HIV-RELATED ORAL LESIONS (2000-2017).

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**Objectives:** To evaluate the clinical spectrum of oral lesions (HIV-OLs) in HIV-infected patients attending three referral centers in Mexico City over 17 years.

**Findings:** All HIV-infected adult patients had an oral examination either before or immediately after receiving combined antiretroviral therapy (cART), performed by specialists in oral pathology and oral medicine who used current clinical diagnostic criteria for HIV-OLs. Three periods were defined according to the evolving pattern of antiretroviral use in our country (2000-2005, 2006-2011, 2012-2017). For the statistical analysis, Mantel-Haenszel chi-square and Kruskal-Wallis test were applied, with an alpha value set at 0.05.

In this 17-year study, 5,186 HIV-infected patients were included (90.7% male; median age 33 years-old). The use of cART increased systematically during the course of the 3-study periods (36.9 to 60%;  $p < 0.001$ ). Simultaneously, there was a significant increase in the percentage of patients with CD4+ counts  $> 500$  cells/mm<sup>3</sup> (10.9-25.6%;  $p < 0.001$ ) and with an undetectable viral load (28.2-55.3%;  $p < 0.001$ ).

A progressive decrease of HIV-OLs prevalence was observed during the study periods (50.3-39.3%;  $p < 0.001$ ), mainly oral candidosis (OC) (31.8-20.3%;  $p < 0.001$ ); in contrast, HPV-OLs increased by almost 5-fold during the study periods (1.2-4.9%;  $p < 0.001$ ); a slight rise in oral secondary syphilis was noted (0.1-1.0%;  $p < 0.001$ ). During follow-up, 2 cases of potentially malignant disorders and 4 of oral cancer were diagnosed.

In the group who were taking cART, through the 3-study periods, a significant trend to lower OC (24-15.1%,  $p < 0.001$ ), hairy leukoplakia (12-7%,  $p < 0.001$ ), and Kaposi's sarcoma (2.4-1.4%,  $p = 0.017$ ) prevalence was observed, but a significant trend to higher HPV-OLs (1.4-6.3%,  $p < 0.001$ ) and syphilis (0-1.1%,  $p = 0.028$ ) prevalence was registered.

**Conclusions:** The clinical spectrum of HIV-OLs has changed in recent years, associated with an augmented cART use, with a decrease of the most described OLs, and HPV-OL upsurge. The apparent increase of malignant lesions warrants attention for its early diagnosis.

### ORAL CANDIDA COLONIZATION AND INFECTION IN HIV-INFECTED PATIENTS IN A REFERRAL CENTER IN MEXICO CITY. DR.

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**Objective:** To determine the species-specific virulence profile of Candida species isolated from the buccal mucosa of patients with HIV/AIDS and its association with clinical, laboratory and fluconazole resistance characteristics.

**Findings:** Cross-sectional, observational and analytical study. Saliva samples were obtained by swab and mouthwash of 118 HIV/AIDS adult patients and 74 individuals without HIV (comparative group). Ninety one percent (108) HIV/AIDS individuals were male, with a median age of 39.5 (Q1-Q3: 34-37) years, similar to the comparative group (median 35.5, Q1-Q3: 24-47,  $p = 0.08$ ). Sixty-two (53.4%) of HIV patients were in AIDS category, 91 (76%), used HAART, with a median use of 1,117 (Q1-Q3: 515-2,054) days. The median CD4+ lymphocyte count was 406 (Q1-Q3: 198-614) cells/mm<sup>3</sup>, 81(70.4%) subjects had undetectable viral load. The prevalence of oral candidosis (OC) was (9, 7.6%). Approximately one third were colonized (38, 32.2%). The most frequent species was *C. albicans* (86%), followed by *C. glabrata*. Similar findings were found in the comparative group: 5 (6.8%) OC patients, 19 (26.4%) colonized and a frequency of *C. albicans* of 84.2% (16). All HIV/AIDS patients with OC, had a count  $> 400$  colony forming units (CFU), contrasting the comparative group, where only 60% of OC individuals had  $\geq 400$  CFU. There was a frequency of resistance to fluconazole in 39.5% of HIV/AIDS patients, with a greater proportion in the colonized (41.2%) compared to the infected (33.3%).

**Conclusion:** Despite the decrease in the frequency of HIV-related oral lesions in the post-HAART era, OC continues to be a common infection. A high prevalence of colonization was found in both HIV and non-HIV participants, but CFU count was higher in the HIV patients. A high frequency of resistance to fluconazole was observed in the colonized with a high proportion of species non-albicans. Clinicians should consider the elevated resistance to antifungals for the treatment of OC.

### LYMPHOMAS WITH ORAL MANIFESTATIONS – 18 CASES IN OUR INSTITUTION AND REVIEW OF LITERATURE. DR.

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Lymphomas are the heterogeneous group of malignant diseases characterized by proliferation of malignant lymphoid cells or their precursors. Lymphomas are the ninth most common

cancer worldwide and constitute 3.2% of malignant tumor. Lymphomas are generally classified to two main categories: Hodgkin's lymphomas (HL) and the non-Hodgkin lymphomas (NHL), and about 90% are NHL. Non-Hodgkin lymphoma represents 4.3% of all new cancer cases in the U.S. and the ninth most common cancer in male patient of Taiwan. Lymphomas may arise in lymph nodes or any organ with only 3% of them occurs in oral cavity. However, lymphomas represent the third most common group of malignant lesions in the oral cavity, following squamous cell carcinoma and salivary gland neoplasms. Here, we reviewed clinical features, radiologic appearance and diagnosis of 1035 cases of lymphomas with oral manifestations (18 cases in our institution and 1017 cases retrieved from literatures). We found that oral lymphomas affect patients aged 4-96 years (average, 55.1 years), occurring about 1.3 times as often in males than in females. The most common sites of involvement included tonsil, maxilla, mandible, palate, tongue, gingiva and buccal mucosa. The most frequent symptoms are swelling, pain, ulceration and paresthesia. Tooth displacement and hypermobility were also frequently seen when the alveolar bone were involved. The radiologic finding was non-specific as an osteolytic lesion. Thickening of periodontal ligament, loss of lamina dura and tooth displacement were also mentioned in some cases with invasion of jaw bones. The most common diagnosis was diffuse large B-cell lymphoma, which accounting for 30% of all cases. The oral lesions of lymphoma are often a component of more widely disseminated disease. An early detection can result in a higher cure rates and better long-term survival for the patients.

#### **P120 CATENIN EXPRESSION AND ITS CORRELATION WITH E-CADHERIN IN SALIVARY GLAND NEOPLASMS.**

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P120 catenin loss or altered localization has been associated with E-cadherin inactivation and poor patient prognosis in several cancers.

**Objectives:** The purposes of this study were to investigate the expression of P120 catenin in salivary gland neoplasms in correlation with E-cadherin, and examine the relationships between levels of expression and pathologic characteristics.

**Materials and Methods:** Fifty-two cases of salivary gland neoplasms, including 25 mucoepidermoid carcinomas (MEC), 13 adenoid cystic carcinomas (ACC), 12 pleomorphic adenomas (PA) and 2 polymorphous adenocarcinoma (PAC) were investigated for P120 catenin and E-cadherin expression immunohistochemically. The immunoreactivity was categorized as low expression or high expression group, based on whether the positive staining was below or higher than 10% of the neoplastic cells, respectively.

**Findings:** Overall, the expression of both proteins was common in salivary gland neoplasms. P120 catenin primarily localized to the membrane of neoplastic cells in most cases. A significant correlation between levels of expression of both proteins was noted in MECs with no relationship with pathologic characteristics. In ACCs and PA, ductal cells showed positive immunoreactivity, whereas myoepithelial cells variably expressed both proteins. Overexpression of P120 catenin was detected in solid subtype of ACCs.

**Conclusion:** The cadherin-catenin complex is maintained in neoplasms of salivary gland. The differential expression of both P120 catenin and E-cadherin in this group of neoplasms appears to represent the heterogeneous population of neoplastic cells present in each tumor type.

#### **SINONASAL SPINDLE CELL CARCINOMA ARISING FROM INVERTED PAPILLOMA IN A PATIENT WITH HISTORY OF RADIOTHERAPY FOR SINONASAL SQUAMOUS CELL CARCINOMA.**

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Carcinosarcoma or carcinoma with spindle cell/sarcomatoid features of the nasal cavity and paranasal sinuses is an exceedingly rare malignancy. We report a case of carcinosarcoma with synchronous inverted papilloma developing in the left nasal cavity and maxillary sinus, in a 72-year-old male with a history of radiation therapy for sinonasal squamous cell carcinoma, 30 years ago. The patient's chief complaint was left nasal obstruction. He also reported purulent nasal drainage, impaired sense of smell and occasional epistaxis. CT imaging showed lobular growth of soft tissue narrowing nasopharyngeal airway with extensive palatal erosion. Endoscopic sinonasal surgery was performed to remove the sinonasal mass. Grossly, the tumor had a white fleshy appearance with tumor necrosis. Microscopically, the tumor was composed of pleomorphic epithelial and spindle cells with frequent mitoses and tumor necrosis. Residual inverted papilloma (IP) with high-grade dysplasia, and foci of keratinizing squamous cell carcinoma (SCC) component (2%) was present at the edge of the main tumor. A transition of SCC to spindle cell carcinoma was present confirmed by focal p63 positivity in both components. The pleomorphic sarcomatoid tumor was positive for vimentin and negative for P40, CK5/6, AE1/AE3, p16, S-100, CD34, CD31, ERG1, SMA, desmin, Sox10, and myogenin with Ki67 highlighting 70% of tumor cells. A final diagnosis of sinonasal sarcomatoid carcinoma associated with residual transformation from IP to SCC was rendered. Due to rarity of such a case, the prognosis and response of treatment is uncertain. So far, no effective targeted therapy has been reported. The patient is currently being treated with aggressive chemotherapy. To the best of our knowledge, this is only the second case of sinonasal carcinosarcoma arising from inverted papilloma with high-grade dysplasia and transition to sarcomatoid SCC. Perhaps the previous radiation therapy played a role in the development of the sarcomatoid variant of SCC.

#### **SALIVARY DUCT CARCINOMA, A CASE REPORT.**

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**Objective:** We report a case of salivary duct carcinoma outside age of presentation and with a rare location.