

Objective: This study aimed to evaluate incidence of oral lesions histopathologically diagnosed at Faculty of Dentistry, Srinakharinwirot University, Thailand.

Materials and Methods: The data was collected retrospectively from histopathology reports. Demographic data including age, sex of patients and types and locations of lesions were recorded. The data were analyzed by descriptive statistics. The results were then compared with other studies in Thailand and other countries.

Findings: A total of 701 cases were analyzed. The specimens were from female (61.4%) more than male (38.4%). Mean age of the patients was 40 years old. The lesions were predominantly found in mandible (24.4%) and buccal mucosa (17.3%) for hard and soft tissue, respectively. The six most common lesions were lichen planus (12.1%), radicular cyst (8.8%), dentigerous cyst (7.6%), fibroma (7.6%), mucocele (5.4%) and pyogenic granuloma (4.9%). The most common location, sex predilection and incidence of the six lesions mentioned above were similar to other studies, except for the higher incidence of lichen planus in our study.

Conclusions: Nationality, genetic background, environment and life style may influence the occurrence of oral and maxillofacial lesions.

GINGIVAL AND ALVEOLAR MUCOSAL OVERGROWTHS IN A UNIVERSITY BIOPSY SERVICE IN SAUDI ARABIA. DR. IBRAHIM O BELLO, DR. AHMED QANNAM. COLLEGE OF DENTISTRY, KING SAUD UNIVERSITY, RIYADH

Objectives: Majority of the lesions of the gingiva and alveolar mucosa are inflammatory in origin and usually their management is under the domain of the periodontist. Focal tissue overgrowths in these sites are associated with a variety of lesions (wide clinical differential diagnoses) and often require biopsy and microscopy for definitive diagnosis. This study aimed to review the gingival and alveolar mucosal biopsies seen at the Oral Histopathology Laboratory, College of Dentistry, King Saud University, Riyadh, Saudi Arabia over a 33-year period. Histopathology records and slides of patients with focal gingival enlargement other than those due to gingivitis and periodontitis between 1984 and 2016 were retrieved and analyzed according to age, gender and location.

Findings: In all, 624 patients were found with a mean age of 35 years (range: 1 week – 91 years), peak incidence in the second to sixth decade (highest peak was third decade), male to female ratio of 1.4: 1, and a slightly higher prevalence in the mandible. Majority of the lesions comprised reactive/hyperplastic lesions (88% of all lesions) followed by malignant lesions (10%) and benign tumors constituting only 2% of total lesions. A total of 24 distinct histological entities encompassing all the three groups were diagnosed. The most frequent histologically diagnosed lesions were pyogenic granuloma (236 cases; 38% of all cases), fibroma (208 cases; 33%), peripheral ossifying fibroma (56 cases; 9%), squamous cell carcinoma (44 cases; 7%), peripheral giant cell granuloma (38 cases; 6%), and neurofibroma and non-Hodgkin lymphoma (both 6 cases, 1%) respectively.

Conclusion: Like in most previous reports, reactive hyperplastic lesions are the most prevalent lesions seen as focal overgrowths in gingival and alveolar mucosa. Carcinoma at these sites may be an understated but clinically and epidemiologically significant problem in Saudi Arabia.

EPULIS FISSURATUM: COMPARISON OF CLINICAL IMPRESSION TO HISTOPATHOLOGIC DIAGNOSIS. DR. TANYA WRIGHT^A, DR. NAGAMANI NARAYANA^B. ^A TUFTS UNIVERSITY SCHOOL OF DENTAL MEDICINE, ^B UNIVERSITY OF NEBRASKA MEDICAL CENTER, COLLEGE OF DENTISTRY

Objective: This study evaluated the percentage of cases correctly identified as epulis fissuratum based on the clinical impression and histopathologic diagnosis and evaluated the percentage of cases identified as a malignancy by the histopathologic diagnosis with a clinical impression of epulis fissuratum.

Findings: A search in the database systems at the biopsy services of University of Nebraska Medical Center College of Dentistry and Tufts University School of Dental Medicine for the clinical impression term epulis/epulis fissuratum from January 1, 2012 until July 1, 2017 was performed which identified 187 cases. The Fisher's exact test measured the similarity between dental practitioners' clinical impression of epulis fissuratum and histopathologic findings. Sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV) of the dental practitioners' clinical impression about the malignancy of epulis fissuratum were calculated. P value < 0.05 was considered statistically significant. From the 187 cases, there was a female predilection (67%), more than half of the cases (55%) were in the maxillary region (palate, vestibule), and patients wearing ill-fitting dentures were identified at sixty percent. Seven cases (3%) were identified as malignant by the histopathologic diagnosis which included squamous cell carcinoma and melanoma, but malignancy was not suspected in two of the seven cases. Epulis fissuratum was listed as the only clinical impression. More than half of the cases (54%) were correctly identified as epulis fissuratum based on the clinical impression and histopathologic diagnosis.

Conclusion: Based on the collected data, dental practitioners should remove and submit excised tissue for microscopic analysis to rule out malignancy in suspected cases of epulis fissuratum.

IRON DEFICIENCY PREDISPOSES TO ORAL MUCOSA ALTERATIONS AND CANDIDA INFECTION. PROF. SHIN-YU LU. ORAL PATHOLOGY AND FAMILY DENTISTRY SECTION, DEPARTMENT OF DENTISTRY, KAOHSIUNG CHANG GUNG MEMORIAL HOSPITAL AND CHANG GUNG UNIVERSITY COLLEGE OF MEDICINE, KAOHSIUNG, TAIWAN

Objectives: Iron deficiency (ID) is the most common nutritional deficiency, but its diagnosis is not always easy. We investigate patients with oral mucosa alternations as the initial manifestation of iron deficiency (ID) or iron deficiency anemia (IDA).

Materials and methods: Sixty-four patients (50 IDA and 14 ID) with a wide range of sore mouth were diagnosed and treated. The iron studies and anemia classification based on the mean and heterogeneity of red cell size were assessed.

Results: ID predisposed 64 patients to a high incidence of Candidainfection (81%) and showed a variety of oral manifestations including angular cheilitis (63%), atrophic glossitis (59%), pseudomembranous candidosis (44%), erythematous

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/mm³ (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/mm³, 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 ≥ 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. CHIH-HUANG TSENG^A, DR. YUK-KWAN CHEN^B, DR. WEN-CHEN WANG^B, DR. CHING-YI CHEN^B, DR. EDWARD CHENGCHUAN KO^B. ^A KAOHSIUNG MEDICAL UNIVERSITY HOSPITAL, ^B KAOHSIUNG MEDICAL UNIVERSITY

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