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Case Report

ORAL LICHEN PLANUS LESION EXACERBATION DURING AN EPISODE OF STRESS

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Abstract:
Restorative and prosthodontic needs for general population invariably arise sometime in their lifetime, which prompts them to visit the general practitioner or the concerned specialist. It is also true that psychological stress has become a part of life for a common man. Many oral mucosal lesions are prone to exacerbate during episodes of stress and require urgent attention. One of such lesions is oral lichen planus which is also thought to have a malignant or premalignant potential. This article presents a case of oral lichen planus which exacerbated due to the patients stressful life. The article also discusses the course of action in such cases.

Keywords:

Introduction

Oral Lichen Planus (OLP) is a chronic inflammatory lesion of the oral mucosa with unknown etiology that may present itself in one of many different forms. With less than 0.2 percent of patients with such lesions developing intra oral carcinoma every year, the disease demands immediate treatment. [1]The oral form may present itself as striations, papules, erythema, erosions or blisters predominantly affecting the buccal mucosa, tongue and/or gingivae. It affects women more than men (1.4:1) and is usually found in the fourth decade, although younger individuals may be affected at times.[2] Patients with oral lesions may have coincident skin lesions that present frequently as pruritic flat topped violaceous papules and plaques, predominantly on the flexor aspects of the wrists or ankles, extensor aspects of the lower legs, the skin of the lower central back and the natal cleft.[2] Oral discomfort in these patients is common and severity has been observed to coincide with psychological stress in one or more forms. During such episodes the oral lesion may be associated with atrophy or erosive lesions. Oral lichen planus typically presents bilaterally. [3, 4] This article presents a case who reported for replacement of maxillary

posterior teeth and had undergone exacerbation of the lesion on one side due to psychological stress in the personal life (job oriented).

Clinical report

A male patient in his late forties, reported to the department of Prosthodontics for restoration of maxillary left first molar with a fixed prosthesis in the form of a crown. Medical history was non-contributory although the patient was a smoker and consumed alcohol regularly. In spite of not using a dental brush, the patient's oral hygiene was fairly good except tobacco stains and calculus in relation to mandibular anteriors. The patient reported discomfort in the oral mucosa two weeks back that coincided with psychological stress due to personal problem during that time. The problem was related to deny promotion in his job. The patient did not report any other associated lesions in the body. Intraorally the lesion presented as erythematous lesion on the buccal mucosa that extended as striations that crossed the buccal vestibule in the region of first and second right mandibular molars passing towards the gingiva **(Fig 1A and B).** On palpation of the buccal mucosa the striations became more prominent with the presence of white plaque over the striations. There was no exudate formation or any erosion of the lesion anywhere in the buccal mucosa or the gingiva. The lesion was also associated with patchy dark brown melanin deposits on the buccal mucosa in the form of inflammatory melanosis.

The patient was referred to the department of oral medicine and diagnosis for treatment before planning the restoration of endodontically treated natural tooth with a crown. Radiographic and histologic investigations were done in the department of oral medicine and further referral to the department of medicine was done. Although the clinical picture was confirmed, the histological picture of the lesion was also typical of oral lichen planus and was characterized by a dense sub-epithelial lympho-histiocytic infiltrate, increased number of intra epithelial lymphocytes and degeneration of basal keratinocytes **(Fig 1C).** Colloid bodies appeared as homogenous eosinophilic globules. Other histological features were consistent with a diagnosis of OLP and included changing basement membrane, disruption of anchoring filaments and degeneration of basal keratinocytes. The patient was treated with systemic and topical corticosteroids therapy.

Discussion

Although the lesion may be diagnosed clinically by any dentist (striation form), it is important that appropriate referral to the specialist is done. [5] In this case the patient was referred to oral medicine where he was also referred to the department of skin and general medicine. Moreover histological diagnosis is compulsory in such cases besides identifying any causative/exaggerating factor, associated disease or more importantly the risk of developing cancer. Other significant aspects of referral in such cases are needed for patient education, motivation, management; medical treatment and long term follow up including re-biopsy as and when required. Among different patterns that the condition exhibits this case shows classical striations on the buccal mucosa and gingiva in the region of first and second molar. While examining such cases it is also important to look for associated lesions, especially ventral and lateral surfaces of the tongue where it is also common.

Discomfort of the patient is directly related to the atrophy of the buccal mucosa which is true for the erosive type of lesions also. [6-8]As the patient reported that his personal life had been very stressful in the past few weeks, after which he had started

feeling discomfort. This is clinically true for exacerbation of OLP, which has been linked to the periods of psychological stress and anxiety. This signifies the predictable correlation of the condition that is related to an immune system imbalance. The role of autoimmunity in disease pathogenesis is supported by many autoimmune features of OLP including disease chronicity, adult onset, female predilection, association with other autoimmune diseases, occasional tissue type associations, depressed immune suppressor activity in OLP patients and the presence of auto-cytotoxic T cell clones in lichen planus lesions. [9-11]

Conclusion

Oral mucosal lesions that are observed routinely during dental treatment procedures should be always referred to concerned specialists for proper management. The patient should be educated about the significance of such referrals. Careful history should be recorded for determining the need of such referrals.

Figure 1: (A) Buccal mucosa showing atrophy of the presence epithelium with presence of inflammatory melanosis (B) Striations seen on the buccal mucosa and adjacent gingiva (C) Histological photograph showing dense sub-epithelial lympho-histiocytic infiltrate with increased number of intra epithelial lymphocytes.

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