

Oral Lichen Planus: A Case Report

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ABSTRACT

Oral lichen planus (OLP) is an autoimmune, mucocutaneous disease affecting oral mucosa, skin, scalp, genital mucosa and nails. It is one of the common skin diseases present in the oral cavity. An immune mediated reaction is recognized in lichen planus, but exact etiology is unknown. The disease mostly affects middle-aged females and is infrequently found in children. The atrophic and erosive forms of OLP are less common. Potential of OLP to malignancy is controversial. Hence it is essential for the clinicians to keep an index of suspicion for all intraoral lichenoid lesions. Periodic follow-up of patients with OLP is recommended. We report a case of a purplish white lesion involving the right buccal mucosa of 25 years old male patient without associated cutaneous lesions, with a special emphasis on clinicopathological of the condition and management.

KEYWORDS: Mucocutaneous Lesion, Autoimmune Disease, Malignancy

INTRODUCTION

Oral lichen planus (OLP) is common in the middle-aged and elderly populations with a prevalence of about 0.5% to 2%. Female-to-male ratio is approximately 2:1.¹

OLP is classified into reticular, atrophic, erosive and bullous types.² The reticular and erosive forms are the most common which present as papules and plaques with interlacing white keratotic lines known as Wickham striae with an erythematous border.³

The lesions are found in the buccal mucosa (bilateral often), lateral borders of the tongue, gingiva and lips.^{4,5} OLP is chronic, rarely undergo spontaneous remission.⁴ The etiology of lichen planus remains uncertain, but many factors have been implicated including genetic, infective agents, graft-versus-host disease (GVHD), drug reactions, systemic diseases, hypersensitivity to dental material and vitamin deficiencies. The pathogenesis of lichen planus is not totally understood, but a T-lymphocyte infiltrate suggests a cell-mediated immunological damage to the epithelium. [6] Keratinocytes and modified Langerhans' cells may trigger the immune response.^{7,8} Both CD-4 (helper) and CD-8 (cytotoxic) cells are present, but activation of the CD-8 cells contribute to the characteristic damage to the basal epithelium.

CASE REPORT

A 25 years old male patient reported to us with a chief complaint of a whitish patch on left buccal mucosa since 1 year. Patient gave a detailed history of burning sensation of his buccal mucosa which leads to difficulty in eating and swallowing for 6 months. The patient reported discomfort on consumption of spicy or acidic food and drinks. No cutaneous lesion was visible.

The patient's past history was not significant. The patient was healthy and was not taking any medication. He was a non-smoker and non-alcoholic. Intraoral examination revealed Wickham's striae seen on the left buccal mucosa, extending with relation to 34 to 37 regions. Based on the clinical examination, case was provisionally diagnosed as reticular lichen planus. Hematological examination and biochemistry yielded negative results. An incisional biopsy was done, and a wedge of tissue including both the epithelium and connective tissue was obtained.

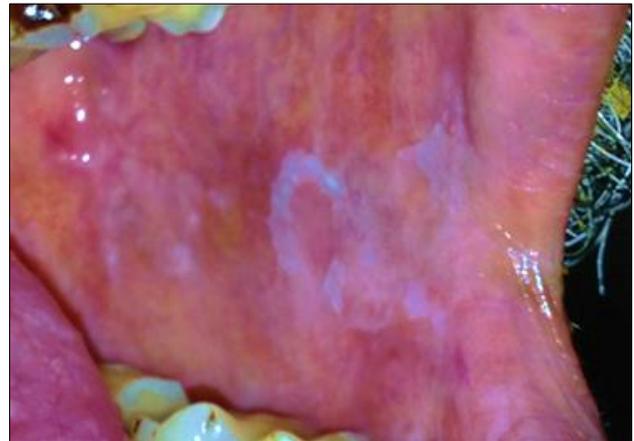


Fig 1: Intraoral examination reveals purplish white patch on left buccal mucosa. Wickham's striae are also visible

Histopathological examination revealed para-keratinized stratified squamous epithelium. The basal cell layer of epithelium was lost at places with juxta-epithelial inflammatory reaction. The underlying connective tissue stroma was dense with severe chronic inflammatory cell infiltrate chiefly lymphocytes. Based on the histopathological features a diagnosis of lichen planus

How to cite this article:

Vijay P, Pardhe N, Singhal I, Punga R, Singh H. Oral Lichen Planus: A Case Report. *Int J Oral Health Med Res* 2016;3(3):54-55.

was made (Figure 2).

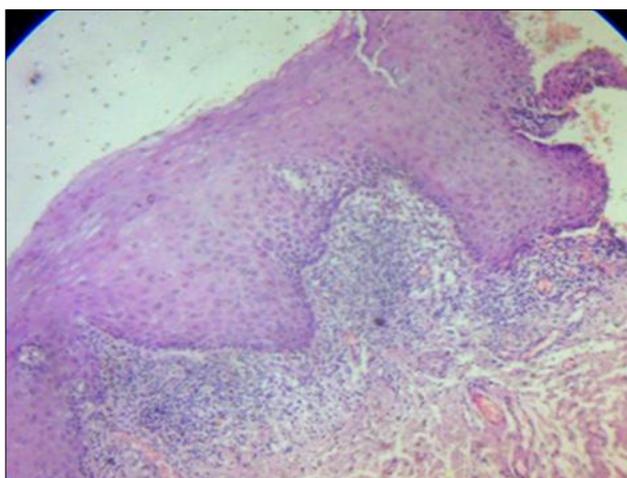


Fig 2: photomicrograph shows hyperparakeratinized stratified squamous epithelium, with dense inflammatory cell infiltrate in the subepithelial region chiefly composed of lymphocytes

Patient was advised triamcinolone acetonide 0.1% for topical application for 7 days and capsule Lycostar twice daily. The patient was instructed to avoid spicy food and take a healthy diet rich in fresh fruit and vegetables. At 1-week recall visit, the patient reported improvement in the burning sensation. Oral hygiene instructions were given to patient and he was recalled after 15 days for follow up. The patient was advised to taper the dose of topical steroid ointment and was asked to continue Lycostar capsules for 3 months. 1-year follow-up was done and did not detect any exacerbation of the lesion.

DISCUSSION

Lichen planus was first described by Erasmus Wilson in 1869 as predominately a disease of the middle-aged.⁴ It is a chronic T-cell mediated autoimmune disease, affecting the skin, oral mucosa, genital mucosa, scalp, and nails.⁹ OLP affects 0.5-2.0% of the general population and is seen in the fifth to sixth decade of life. The lesion is frequently present in women.^{5,10} Since it is considered as a potentially malignant disorder, timely diagnosis with appropriate treatment and follow-up is very vital to avoid further complications. However, the incidence of malignant transformation in OLP is quite low.¹¹ Biopsy is mandatory to rule out dysplasia or malignancy. However, this risk can be reduced by patient counseling, proper oral hygiene and abolition of exogenous carcinogens, effective treatment and utilization of healthy diet.¹² The lesion is usually bilateral and symmetrical and may manifest in six different clinical forms mainly reticular, papular, plaque-like, erosive, atrophic and bullous form. The most commonly involved site is buccal mucosa, tongue, gingiva.²

Here, we emphasize incidence of a classic OLP in a male patient which is quite unusual. Erosive lichen planus was excluded as there was no central areas of shallow ulceration, whereas atrophic OLP appears as diffuse reddish patch surrounded by fine white striae, which was present in this case.^{1,9} The conventional treatment for OLP is topical corticosteroids being the first line of treatment. Adjunctive treatment includes the injection triamcinolone, retinoids, azathioprine, photodynamic therapy and carbon dioxide (CO₂) laser.

CONCLUSION

Lichen planus is a chronic immune-mediated mucocutaneous lesion present on the buccal mucosa and gingiva. This paper presents the classic case of atrophic lichen planus with its timely management. Prognosis was better after medications.

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Source of Support: Nil
Conflict of Interest: Nil