

## Case Report

**A case report of erosive lichen planus of the oral mucosa**Mohsin Ghanchi<sup>1</sup>, Dhaval Jani<sup>2</sup>, Kartikay Saxena<sup>3</sup>, Vikas Bhakar<sup>4</sup><sup>1</sup>Professor & HOD, <sup>2</sup>Reader, <sup>3</sup>Reader, <sup>4</sup>Senior lecturer, Dept of Oral Pathology & Microbiology, College of Dental Science & Hospital, Amargadh, Gujarat, India**\*Corresponding author**

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**Abstract:** Oral lichen planus mostly affects middle-aged females. It is a chronic muco-cutaneous autoimmune disease and factors like psychological stress, systemic conditions or drugs are the possible etiological conditions. Variants of lichen planus are reticular, atrophic, erosive and ulcerative. Atrophic and erosive lichen planus are most commonly associated with increased risk of squamous cell carcinoma development. Therefore these types require prompt diagnosis and treatment. The present article shows a case report of erosive lichen planus in a 44 year old male patient having considerable stress and depression at the time of presentation.

**Keywords:** Erosive lichen planus, Oral lichen planus, Lichen planus.

**INTRODUCTION**

Lichen planus is a chronic mucocutaneous autoimmune disease of varied etiology. Oral mucosa and skin are the most commonly affected areas. Other areas like mucous membranes of oesophagus, genitalia or conjunctiva and skin appendages like scalp, hair or nails can also be affected. One or several areas can be involved, either concomitantly or sequentially [1-3].

The overall prevalence of Lichen Planus was reported in different studies from 1 to 2% and it is more commonly seen in females as compared to males. Oral Lichen Planus usually presents bilaterally in the posterior buccal mucosa, gingiva and the lateral border of the tongue [4].

Oral lichen planus presents in two forms [4,5].

1. Keratotic (reticular, popular, plaque-like)
2. Non-keratotic (erosive, atrophic and bullous)

The erosive or atrophic forms of oral lichen planus are commonly presents with severe discomfort or pain and also intolerance to consume hot or spicy food. Also, the risk of malignant transformation in atrophic or erosive lesions is found to be higher than other types of oral lichen planus, as the deeper layers of epithelium are exposed to oral environment. Thus, these type of lesions should be monitored and treated in the long term [4-6].

The present article shows a case report of erosive lichen planus in a 44 year old male patient having considerable stress and depression at the time of presentation.

**CASE REPORT**

The 44-year-old male patient came to the Oral pathology and Microbiology department with a chief complaint of burning sensation to hot and spicy foods in the posterior region of the oral cavity. Burning sensation was started almost 3 to 4 months back which was insidious in nature and aggravated on taking hot and spicy food. Dental history and medical history of the patient was not present.

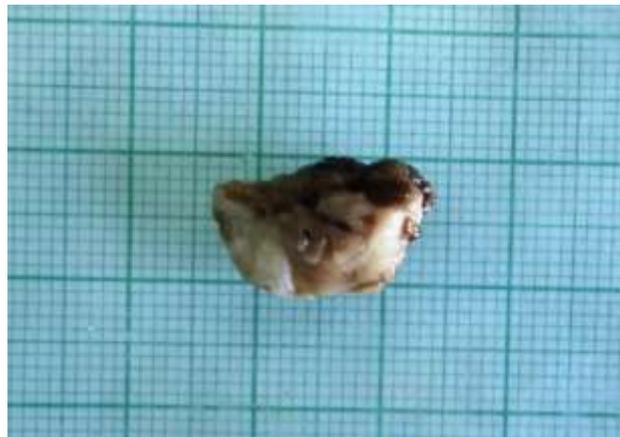
On intraoral examination erythematous areas with scattered, irregular white keratotic flecks on the right and left buccal mucosa (Fig. 1). Adjacent mucosa appeared normal. On palpation all inspection findings were confirmed and the lesion was non-tender. The patient was subjected to routine blood investigations and was advised for biopsy. (Fig. 2)

Histopathological examination had showed hyperkeratotic stratified squamous epithelium showing prominent wedge shaped granular cell layer. Rete ridges were saw tooth shaped and there was presence of basal cell layer degeneration. Subepithelial region showed dense band of chronic inflammatory cell infiltration. (Fig. 3) Therefore the diagnosis of the lichen planus

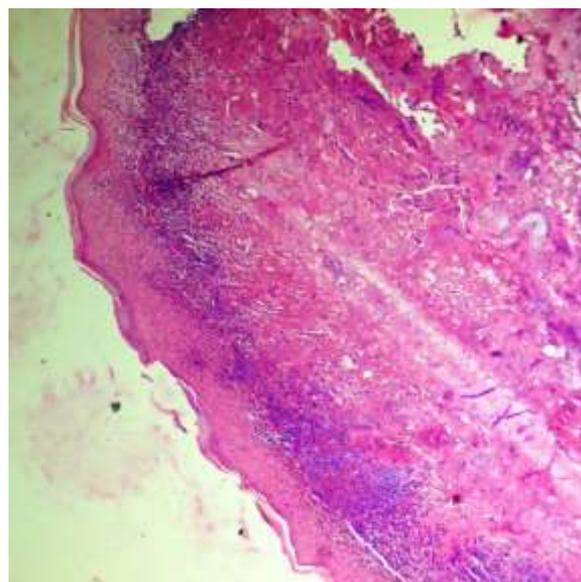
was confirmed. The patient was advised topical steroids and kept on follow-up.



**Fig. 1:** Intraoral photograph of the patient showing posterior part of the right buccal mucosa affected with erosive type of lichen planus.



**Fig. 2:** Incisional biopsy specimen.



**Fig. 3:** Histopathological examination of the patient.

## DISCUSSION

OLP is a common chronic inflammatory and immunological mucocutaneous disorder that varies in appearance from keratotic (reticular or plaque like) to erythematous and ulcerative clinical forms. In the year 1869, it was Erasmus Wilson who first named the skin lesion. In 1895, Thieberg identified the oral lesion [7,8].

Oral lichen planus (OLP) derived from the Greek word “Leichen” meaning tree moss and Latin word “planus” meaning flat/even. This is a common immune-mediated disorder that affects stratified squamous epithelium and is of unknown etiology. It is seen worldwide, mostly in the fifth to sixth decades of life, frequently in the middle aged and occasionally in children. This lesion is twice more common in women than in men with a bilateral presentation. It is often a painful and debilitating disease, and the treatment is aimed at palliation rather than cure. In such lesions, corticosteroids are considered to be the mainstay of treatment which can be used either topically, intralesionally or systematically [7,9,10,11]. Atrophic lesions and erosions are the forms most likely to cause pain [12].

Lichen planus is usually diagnosed clinically. If a patient has lichen planus at any site, the clinician should check all possibly involved sites, like the mucosa, skin, and skin appendages. Specialized endoscopic and otorhinolaryngologic examinations should be carried out when related symptoms such as odynophagia or dysphagia are present [2].

The etiology of OLP is unknown; however, OLP appears to be a T cell-mediated autoimmune disease. Current evidence suggests that OLP reflects perturbation of cell-mediated immunity, precipitated by exogenous or endogenous factors, and can result in deviated response to self-antigen. Precipitating factors can include stress, trauma or infectious agents. The majority of T cells within the inflammatory infiltrate of OLP are activated CD8+ lymphocytes. Activated T cells in the inflammatory infiltrate in correlation with increased production of Th1 cytokine (IL-1, IL-8, IL-10, IL-12, TNF- $\alpha$ ) increase the expression of intercellular adhesion molecule-1 on macrophages and Langerhans cells and also the major histocompatibility complex antigens by keratinocytes [13].

The patients having erosive-atrophic lichen planus can show widespread and painful lesions which are often unresponsive to conventional treatments [4].

Topical or systemic corticosteroids are the main-stay of the treatment for lesions of oral lichen planus and it acts by modifying the immune response of the patient. This is done essentially by suppressing activity of the T-cell. Topical corticosteroids can be

given for treatment of mild to moderately symptomatic lesions [14].

In spite of various attempts for the development of management modalities for the oral lichen planus, no definitive management is still available. The current treatment protocol focuses on signs and symptoms of disease. But it can produce adverse effects on oral mucosa [4].

## CONCLUSION

The patients of oral lichen planus like those of the erosive or atrophic variants should be informed about the condition and the risk of malignant transformation. Regular follow-up and medications are must in such cases.

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