

## Oral Lichen Planus (A Clinical Dilemma): Case Report

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### Abstract

Oral lichen planus is a chronic mucosal Condition commonly seen in general outdoor patients, in Dental clinics. lichen planus believed to represent an abnormal immune response in which epithelial cells in the antigenicity of the cell surface. oral lichen planus is a chronic inflammatory disease shows relapses and remissions. Topical steroid are the best choice agent for the treatment of active Oral lichen planus.

**Keywords:** Lichen Planus; Reticular Pattern; Corticosteroids

## Introduction

Lichen Planus is Greek means tree moss and planus means flat. lichen Planus was first described by Erasmus Wilson in 1869. [1] lichen planus affecting oral epithelium with a prevalence of 0.020% - 1.20% among the various with a more female predominance. [2, 3] This disease Cause by abnormal cell mediated immune response of both T4 & T8 lymphocytes in basal epithelial cells.

Oral lichen planus involves the Oral mucous membrane. Six clinic forms of Oral lichen planus are recognized. [4, 5, 6,18] In this case report, the clinical presentation and effective treatment using corticosteroids.

## Case Report

A 44-year-old female came to our Dental department with a chief complaint of burning sensation whilst having food since a duration of six months. The burning sensations on both sides of posterior portion of cheek which mainly aggravated on having food, while relieved on its own. The Patient's medical and family history were non-contributory. Previously the patient had various treatments. On examination, an interlacing white striae with erythematous borders giving a web-like appearance were seen on left posterior buccal mucosa and left buccal mucosa. On palpation the lesion was unscrapable. Based on the clinical presentation a provisional diagnosis of reticular lichen planus.

But as the patient was not willing for biopsy then, she was advised a regimen of anti-oxidant (Cap Antoxid H. C) and topical corticosteroids (Tacroz ointment®) for four weeks. Patient was asked to report for periodic recalls every week. The result was excellent and after a period of just three months the lesion had regressed completely and the patient's oral mucosa was back to normal. Patient was further recalled every week for next six months; no incidence of recurrence was seen.

## Pre-Treatment



## Discussion

Lichen planus is a altered immune response characterized by a inflammatory infiltrate, that may represent apoptotic epithelial cells, and degeneration of the basal epithelial layer. [7] Oral lichen planus can evelop on any mucosal surface including larynx and oesophagus but lesions have predilection for the posterior buccal mucosa. The specific etiology of oral lichen planus is till now mostly unknown. It is believed that result from an abnormal cell mediated immune response with infiltrating cell population composed of both T4 and T8 lymphocyte in the basal epithelial cells. [8,18] The lichen planus can be described as purplish, polygonal, planar, pruritic papules and plaques. [9, 10] Since 30% to 50% of patients with oral lesions also have cutaneous lesions, the presence of these characteristic cutaneous lesions can aid in the diagnosis of Oral lichen planus out of six, five clinical forms of oral lichen planus are important [11].

Reticular, the most common presentation of oral lichen planus, showing oral variants of Wickham's striae. This is usually asymptomatic.

- Papular, with white papules.
- Plaque-like appearing as a white patch which may resemble leukoplakia.
- Atrophic, appearing as areas. Atrophic oral lichen planus may also manifest as desquamative gingivitis.
- Bullous, appearing as fluid-filled vesicles which project from the surface

The cause of Oral lichen planus is unknown. It is said some certain factors mention below may trigger an inflammatory disorder [12, 13,14].

- Hepatitis C infection and other types of liver disease.
- Allergy-causing agents (allergens), such as foods, dental materials or other substances.
- Stress.
- Graft versus host disease Many controversies exist about the pathogenesis of Oral lichen planus. The various mechanisms hypothesized to be involved in the immunopathogenesis are: [15]

- Antigen-specific mechanism.
- Non-specific mechanisms.
- Autoimmune response.
- Humoral immunity.

## Post-Treatment



Treatment of symptomatic Oral lichen planus includes Several drugs have been used with varying efficacy. Specific treatment includes corticosteroids (topical, intralesional or systemic), retinoids, cyclosporine, griseofulvin, hydroxychloroquine include 0.05% clobetasol propionate gel, 0.1% or 0.05% betamethasone valerate gel, 0.05% fluocinonide gel, 0.05% clobetasol utyrate ointment or cream, and 0.1% triamcinolone acetonide ointment. [16,17,18] intra lesional injection of corticosteroid for extensive lesions involves the subcutaneous injection of 0.2 - 0.4 ml of a 10 mg/ml solution of triamcinolone acetonide by means of a 1.0 ml 23 Or 25 guage tuberculin syringe [19].

The prophylactic use of a 0.12% chlorhexidine gluconate rinse may help reduce the incidence of fungal infection during corticosteroid therapy [20].

## **Conclusion**

There are many systemic conditions may be associated with lesions of Oral Lichen Planus and at times oral manifestations play an important role in diagnosing underlying systemic diseases.

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