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Oral Lichen Planus (Reticular Type) - A Case Report

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Abstract: ***Oral lichen planus (OLP) is a T-cell–mediated and chronic inflammatory disorder affecting the oral mucosa, with an incidence that is higher in women than inmen. The affected age range varies around the world, and the disease is rare in children. Smokers and patients who consume alcohol have a higher prevalence of Oral lichen planus. Oral lichen planus can be caused or triggered by a genetic malfunction or by environmental factors. Although the etiology remains unknown, the immunological system plays a substantial role, and several factors are well known, such as psychological stress, anxiety and drug intake. Oral lichen planus may be associated with some systemic diseases, including hepatitis C virus infection, hypertension, diabetes, thyroid dysfunction and graft-versus host disease. This article discusses the prevalence, etiology, clinical features, oral manifestations, diagnosis, complications and treatment of Oral Lichen Planus.***

Keywords: Oral lichen planus, T-cells, smokers, oral mucosa

1. Introduction

The mouth is a mirror of health or disease, a sentinel or early warning system. The oral cavity might well be thought as a window to the body because oral manifestations accompany many systemic diseases. In many instances, oral involvement precedes the appearance of other symptoms or lesions at other locations. [1]

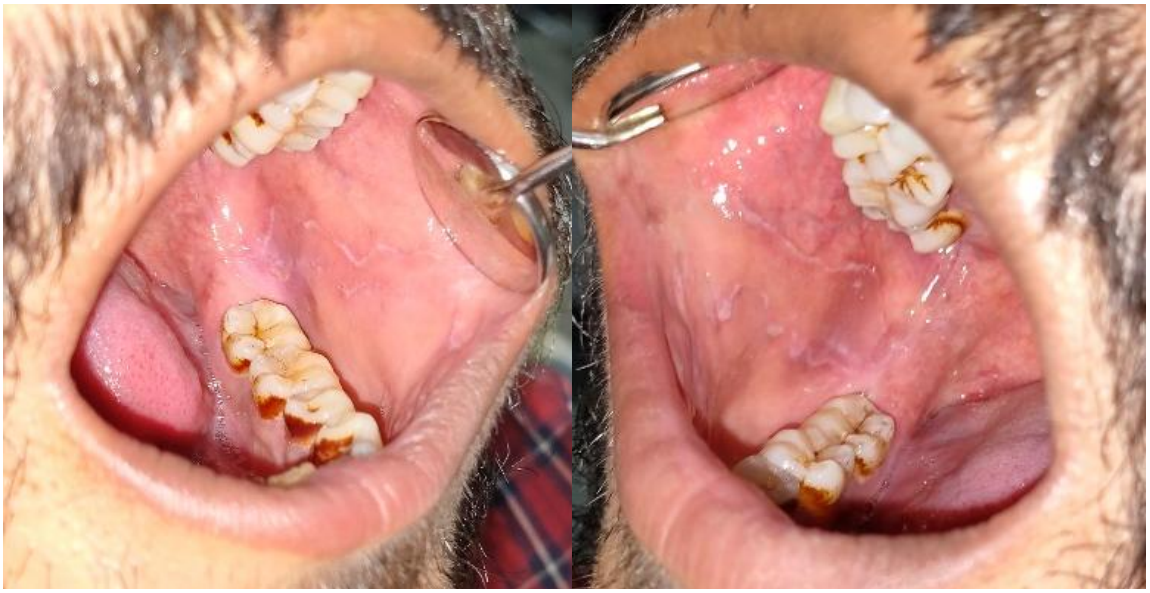
Lichen planus (LP) is a chronic mucocutaneous disorder of the stratified squamous epithelium that affects oral and genital mucous membranes, skin, nails, and scalp. [2]

Oral lichen planus (OLP) is the mucosal counterpart of cutaneous Lichen Planus. [3]

It is derived from the Greek word "*leichen*" means tree moss and Latin word "*planus*" means flat. [4]

2. Case Presentation

A 27-year-old male patient came to school of dental sciences Sharda university. Patient chief complains of dirty teeth since 3 years. Patient also gave history of episodes of intermittent burning sensation on both sides of cheeks which mainly aggravated on having hot and spicy food, which relieved on its own. On extra oral clinical examination there is no relevant things is observed but on Intraoral clinical examination we saw white striated on both side of buccal mucosa which was non scrapable on palpation. Based on clinical presentation Provisional diagnosis of Reticular lichen planus of both left and right buccal mucosa was given. Patient was advised for biopsy but patient was not willing for biopsy, then he was advised fora regimen of anti-oxidant (Cap. Oxitard®) and topical cortico-steroids (Tess ointment®) for one month. Patient was asked to report for periodic recalls every two weeks



3. Discussion

Lichen planus is an autoimmune inflammatory condition. It is the most frequent non-infectious disease of the oral mucosa in adult patients. Of the affected patients, only 17% make a full recovery, although remissions have been

reported in 39% of cases with OLP lesions. The exact etiology of this disease is not yet known, but stress, drugs, dental fillings, genetic factors, immunity, and hyper-sensitivity reactions can contribute to its pathogenesis. OLP is mediated by T-cells, chiefly CD8-positive T-cells that release various cytokines like tumor necrosis factor alpha (TNFα) and interleukin-12 (IL-12), which causes the perturbation of the basement membrane integrity [5]

About 5% of OLP patients will develop cutaneous lesions

The OLP diagnosis is based on the clinical symptomatology and the HP aspects. Clinically, the lesions are usually multiple and bilateral and appear on various sites of the oral cavity. Classically, OLP distribution is symmetrical, with well-defined white striations on a slightly erythematous background that frequently involves the tongue, and buccal mucosa. [6]

Six clinical forms of oral lichen planus are recognized: [[7]

- **Reticular**-the most common presentation of oral lichen planus, is characterized by the net-like or spider web like appearance of lacy white lines, oral variants of Wickham's striate. This is usually asymptomatic.
- **Erosive/ulcerative**, the second most common form of oral lichen planus, is characterized by oral ulcers presenting with persistent, irregular areas of redness, ulcerations and erosions covered with a yellow slough. This can occur in one or more areas of the mouth. In 25% of people with erosive oral lichen planus, the gums are involved, described as desquamative gingivitis (a condition not unique to lichen planus). This may be the initial or only sign of the condition.
- **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 OLP is unknown. It is said some certainfactors mention below may trigger an inflammatory disorder [8]

- Hepatitis C infection and other types of liver disease
- Allergy-causing agents (allergens), such asfoods, dental materials or other substances
- Genetic background.
- Immunodeficiency disorder.
- Some bacterial and viral diseases.
- Certain medications for heart disease.
- High blood pressure or arthritis.
- Certain drugs like ibuprofen and naproxen.
- Stress.
- Graft versus host disease

The diagnosis of OLP is based on a combination of characteristic clinical findings, history and histopathological examination. The hyperkeratotic (white) variant of OLP is often symptomless. The atrophic or the erythematous (red) variant and the erosive or the ulcerative (yellow) variants of OLP generally have persistent symptoms. [9]

Treatment of symptomatic OLP is challenging. Several drugs have been used with varying efficacy. Specific treatment includes corticosteroids (topical, intralesional or systemic), retinoid, cyclosporine, griseofulvin, hydroxychloroquine and dapsone.

Non-pharmacological modalities include PUVA therapy, photodynamic therapy and LASER therapy. [10]

One of the most important issues concerning OLP is its potential for malignant transformation into Oral Squamous Cell Carcinoma. Although the WHO has categorized OLP as a precancerous condition, the risk of malignant transformation of OLP remains a subject of debate in the literature. Some authors accept the possible malignant potential of OLP, while others oppose this suggestion. Based on recent reports, the overall malignant transformation rate of OLP is estimated to be very low. [11]

4. Conclusion

A variety of systemic conditions may be associated with lesions of OLP and at times oral manifestations are the only signs and symptoms present in lieu for the underlying condition as seen in our patient. And since there is tendency for malignant transformation, it is elementary and fundamental as oral clinicians to make an accurate and timely diagnosis and render the appropriate treatment plan, because we all know that – "A stitch in time saves nine". [9]

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