

Case Report

Oral Mucosa Lichen Planus: Case Presentation

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Abstract

Objective: Lichen planus is a chronic inflammatory and immune disease that affects the skin, nails, hair, and mucous membranes. It is characterized by polygonal, flat-topped, violaceous papules and plaques with overlying, reticulated, fine white scale (Wickham's striae), commonly affecting dorsal hands, flexural wrists and forearms, trunk, anterior lower legs and mucosa membranes.

Aim: The aim of this prospective observational study was to describe the features of this patient in our tertiary hospital.

Methods: This case was seen by stomatology department of our hospital with mouth and oral mucosa lesions over the period of six months. Co-morbidity diagnoses, clinical features, investigations and complications were noted.

Results: Female patient with histologic and clinical diagnosis of lichen planus. No skin lesions were seen during the examination and during the follow up clinics. She is progressing very well and at the moment improved a 90%, almost healed.

Conclusion: Lesions consisted of oral mucosa lichen planus, confirmed by histology report. Patient is doing well with the treatment of steroids mouth washes.

Keywords: Lichen planus; Lichenoid lesions; Oral mucosa; Skin

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Introduction

Lichen planus was first reported in 1869 by Erasmus Wilson. The origin of the word is believed to be from the Greek word "Leichen", which means tree moss; and also from Latin word "planus" which means flat and even surface. Dr Wilson explained the condition as an inflammatory disorder with unknown etiology. Initially, the characteristic surface markings or striae was described by Weyl in 1885. In 1895, Wickham further explained the characteristic of the lesion, now known as Wickham striae. Further on, Darier explained the presence of such characteristic markings by correlating with an increase thickness of the granular cell layer. The coexistence of oral, cervical and stomach lichen planus lesions were described by Guogerot and Burnier in 1937 [1].

A similar variant of mucosal lichen planus as the vulvovaginal-gingival syndrome with erosive lesions involving oral and vulvovaginal mucosa were introduced by Pelisse and colleagues in year 1982.

Lichen planus is a skin rash triggered by the immune system. It's not known why the immune response occurs. So there is no cure. There may be several contributing factors, and each case is different. Potential causes include: viral infections, allergens, stress, and genetics [2].

Sometimes lichen planus occurs along with autoimmune disorders. While it may be uncomfortable, in most cases lichen planus is not a serious condition. It's not contagious. However, there are some rare variations of the condition that may be serious and painful [3].

We are presenting a case of a female patient, 29 years old, no other illnesses, and no family history of skin diseases, nor chronic illnesses. Personal history she started a new position at the bank. Who was seeing by her dentist for a follow up consultation, she had a root canal treatment 7 months ago, and now saw the lesion and treated with antiseptic mouth washes and honey. Lesions persisted and extended to lips. That's why she was referred to our clinic. Complaining of pain and sometimes itching. After tooth brushing blood can be seen sometimes.

On examination

- No skin lesions were found
- Vaginal mucosa was intact, no lesions no discharge
- Oral mucosa: a wild spread white striations, linear type, with ulcerations and extended areas of redness and white patches. Localized on inner cheeks, tongue and lips

Investigations:

- We took sample for culture and biopsy
- Culture was negative, normal flora, no fungal infection or bacteria.
- Biopsy result came in a week with this description
- Parakeratosis and slight acanthosis of the epithelium. A lichenoid (band-like) mixed lymphohistiocytic infiltrate in the submucosa
- Consisted of Lichen planus

It generally occurs more commonly in females, in a ratio of 3:2, and most cases are diagnosed between the ages of 30 and 60, but it can occur at any age. Lichen planus can occur in patients as diverse cutaneous manifestations alone or in combination with mucosal lichen planus and, or lichen planus of the nails. Study shows that frequency of mucosal involvement of lichen planus patients is 30- 70%. Oral lichen planus is relatively common; it is one of the most common mucosal diseases [4-6].

A diagnosis of oral Lichen Planus (LP) is confirmed through review of the patient history, physical examination, and histologic findings. The clinical evaluation should include a patient history that assesses the following: History of LP involving other body sites or other skin disorders that may present with similar findings (eg, autoimmune blistering diseases)

Presence of associated symptoms (eg, pain, burning)

Medication the patients are taking within the few weeks to months after drug initiation eg. Antihypertensives, antidepressants, diuretics, antidiabetics, NSAIDs and etc. to evaluate for the possibility of an oral lichenoid drug eruption

History of dental restorations, use of dental appliances, or oral exposure to substances that may cause oral lichenoid contact eruptions (eg. dental composites, cobalt chromium based dentures etc) [7].

Other diagnosis must be ruled out

Lichenoid drug eruption: The cutaneous manifestations resemble idiopathic lichen planus. Chronic graft-versus-host disease: The history of preceding hematopoietic cell transplant is helpful for diagnosis. Psoriasis. Atopic dermatitis. Cutaneous lupus erythematosus. Discoid lupus erythematosus (Figures 1 and 2).



Figure 1: Taken at the clinic: Erythematous violaceous plaques can be seen on lips, and mucosa.

There is no cure for lichen planus, and so treatment of cutaneous and oral lichen planus is for symptomatic relief or due to cosmetic concerns. When medical treatment is pursued, first-line treatment typically involves corticosteroids, and removal of any triggers. Without treatment, most lesions will spontaneously resolve within 6-9 months for cutaneous lesions, and longer for mucosal lesions [8-15] (Figure 3).



Figure 2: Taken at the clinic: Erosion can be seen on the right.



Figure 3: Taken at the clinic after 3 weeks with treatment, Lesions on lips and mucosa healing.

The condition is benign, elimination of precipitating factors and improving oral hygiene are considered initial management for symptomatic OLP, and these measures are reported to be useful. Treatment usually involves topical corticosteroids (such as betamethasone, clobetasol, dexamethasone, and triamcinolone) and analgesics, or if these are ineffective and the condition is severe, then systemic corticosteroids may be used. Calcineurin inhibitors (such as pimecrolimus, tacrolimus or cyclosporin) are sometimes used [15-28].

Conclusion

In this case clinical features were consisted of OLP. Diagnosis was confirmed by biopsy [29-41]. Possible cause was the root canal treatment she had 7 month ago, before the lesions appeared, also she is been under stress due to her new employment as a General Manager in a bank. She is responding very well to the medication. She improved 90% in the last clinic.

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Conflict of Interest

None declared.

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