

Lichen Planus Mimicking Actinic Cheilitis: A Case Report.

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Abstract: Oral lichen planus (LP) is a common manifestation in patients with LP; however, isolated lip LP is rare and may mimic other conditions such as lichenoid drug eruptions, actinic cheilitis, and early carcinoma in situ in the absence of typical skin lesions. The clinical appearance poses diagnostic dilemmas and is often misinterpreted. Etiology of lichen planus is not known clearly, but at present it has been linked to autoimmune disorder. We report the case of a male with isolated LP of the lower lip, mimicking actinic cheilitis at presentation. Histopathological examination confirmed LP of the lip.

Keywords: Oral, lichen planus, ulceration, plaque.

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I. Introduction

Lichen planus (LP) is a chronic mucocutaneous disorder of the stratified squamous epithelium that affects oral and genital mucous membranes, skin, nails, and scalp. Oral lichen planus (OLP) is the mucosal counterpart of cutaneous LP. LP is estimated to affect 0.5% to 2.0% of the general population.^[1] This disease has most often been reported in middle-aged patients with 30-60 years of age and is more common in females than in males. The disease seems to be mediated by an antigen-specific mechanism, activating cytotoxic T cells, and non-specific mechanisms like mast cell degranulation and matrix metalloproteinase activation.^[2]

OLP occurs more frequently than the cutaneous form and tends to be more persistent and more resistant to treatment.^[3] Isolated lip LP is rare and may mimic other conditions such as lichenoid drug eruptions, actinic cheilitis, and early carcinoma in situ in the absence of typical skin lesions.

II. Case Report

A 38 years old male presented with the complaints of ulceration over the lower lip for the last 6 months duration. There was history of bleeding on manipulation along with the associated pain and intolerance to spicy food. No other skin or mucosal lesion was present. There was no history of prolonged sun exposure or exacerbation of lesion on exposure to sunlight. Patient was a chronic smoker (15 pack-year cigarettes). There was history of similar episode 18 months back which resolved spontaneously over a period of one month.

On examination over the lower lip there was a single ill defined plaque of size of 4x1 cm approximately, with violaceous borders, erosions and whitish scales at places (Figure 1). On palpation the plaque was non tender and non-indurated. Skin and nail examination were unremarkable.

On Histopathological examination biopsy showed moderately dense superficial perivascular lichenoid infiltrate of lymphocytes and plasma cells with irregular acanthosis and vacuolation of the basal layer. The dermoepidermal junction was focally infiltrated by lymphocytes and showed scattered necrotic keratinocytes (Figure 2). The biopsy was consistent with lichen planus. The differential diagnosis of actinic cheilitis was kept however histopathology ruled out the same. The patient was treated with topical steroids, emollients and antihistaminic.

III. Discussion

Lichen planus (LP), first described by Erasmus Wilson in 1869 and is related to a T-cell mediated immune response whose etiology is not correctly understood.^[4] The mucosal lesions are more chronic in nature and persist for many years. The classification of OLP has been simplified into 3 subtypes: reticular, atrophic, and erosive (including ulcerations and bullae).^[5] Subtypes may coexist as is evident in this patient who manifested both the reticular and erosive form of the condition. The role of sunlight in lip LP has been suggested by the increased frequency of lower lip involvement and male predominance in OLP.^[6] LP has a site predilection for buccal mucosa, followed by tongue (mainly the dorsum), gingiva, labial mucosa, and vermilion of the lower lip.^[5] LP isolated to a single oral site other than the gingiva is also unusual, although occasional cases of isolated lesions on the lips or tongue have been reported.^[7]

Clinical differentials include oral lichenoid lesions, actinic cheilitis, herpes simplex lesions, discoid lupus erythematosus (DLE), autoimmune blistering diseases, and early carcinoma in situ.

DLE was considered as one of the differential diagnosis where lip involvement is frequent. Clinical manifestations in DLE include well demarcated discoid lesions or a diffuse cheilitis wherein lesions typically tend to spread from the vermilion to the surrounding lip skin, obscuring the limits of the vermilion. This feature is useful in differentiating lupus erythematoses from lichen planus of the lip and from other types of cheilitis, as lichen planus lesions are characteristically limited to the vermilion area. Lesions in DLE are more often asymmetrically distributed in the oral cavity in palate, buccal mucosa, tongue which helps to differentiate it from lichen planus where lesions are bilaterally present.^[8]

Actinic cheilitis presents as rough, scaly lips with fissures and ulceration. Commonly seen as a single lesion, but multiple lesions also occur. The initial sun-induced lesion is whitish-gray or brown, annular and the lip vermilion border becomes indistinguishable and shows generalized atrophy. Marked folds appear along the vermilion perpendicular to the long axis of the lip and often associated with dryness. The lower lip especially the labial aspect is more commonly affected. Palpation is important in diagnosis because actinic cheilitis has a fine, "sandpapery" feel.^[9]

In the reported case, the histopathological features were characteristic for LP and aided in histological differential diagnosis with leukoplakia, invasive carcinoma, and other forms of cheilitis. Band-like lymphocytic infiltrates in the connective tissue area, hyperkeratosis with ortho- and/or parakeratosis, liquefaction degeneration of the epithelial basal layer, and absence of epithelial dysplasia constitute the characteristic histopathological features.^[10]

There is no definitive treatment protocol for OLP. The therapy mainly aims at improvement of symptoms and regular follow up to rule out any dysplastic changes. Topical glucocorticoids usually form the mainstay of treatment for erosive OLP, although systemic and intralesional steroids are also in use. Use of orabase should be exclusively on moist intraoral sites, and topical steroids in orabase vehicle should be avoided for lip lesions.^[11] Our patient was prescribed topical application of low-potency steroid ((kenacort 0.1% paste three to four times daily), along with Vaseline lip therapy for a month. Lip lesions considerably subsided with topical steroid treatment.

IV. Conclusion

Lip involvement is an uncommon and unusual site of presentation of OLP. Early and correct diagnosis and effective management together with periodic follow-up is mandatory to alleviate the symptoms. Predisposition of lip lesions to multiple injuries (lip biting, makeup application, or sunlight exposure) alters the clinical presentation thus making diagnosis difficult. Lip lesions in oral LP (OLP) usually exhibit malignant potential, thus necessitating prompt diagnosis and management of such lesions.

References

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FIGURES



Figure 1: A 38 years old male with ill defined plaque of size of 4x1 cm approximately, with violaceous borders, erosions and whitish scales at places.

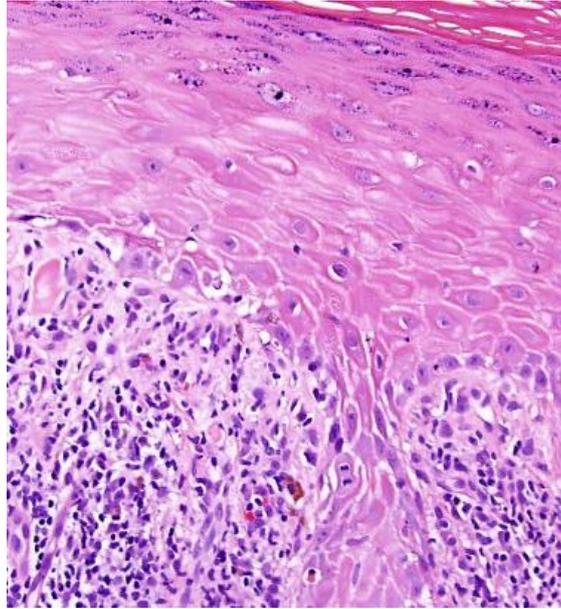


Figure 2: Histopathological examination showed superficial perivascular lichenoid infiltrate of lymphocytes and plasma cells with irregular acanthosis and vacuolation of the basal layer. The dermoepidermal junction was focally infiltrated by lymphocytes and showed scattered necrotic keratinocytes.

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