Isolated Lichen Planus of the Lower Lip

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An idiopathic inflammatory dermatosis, lichen planus (LP) involves the skin, mucosa, or both, in a variety of clinical forms. The involvement of the mucosal membranes is seen frequently and usually is asymptomatic, but occasionally, LP can be complicated by extensive painful erosions. We report the case of a 44-year-old man who presented with a 3-year history of isolated lower lip erosions, for which the diagnosis of LP was made. This report represents only the fourth case of LP exclusively localized on the lower lip.

Lichen planus (LP) is an idiopathic inflammatory dermatosis that involves the skin, mucosa, or both, in a variety of clinical forms. Its estimated prevalence is from 0.9% to 1.2% of the population. LP has been associated with a variety of disorders, especially hepatitis C infection. The involvement of the mucous membranes frequently is seen and usually is asymptomatic, but occasionally, LP can be complicated by extensive painful erosions. The oral mucosa may be affected, as well as genital, conjunctival, esophageal, laryngeal, and anal mucosae.

Oral LP may be subdivided into 6 clinical patterns: reticular, plaques, papules, atrophic, erosive, and bullous. Differential diagnosis of oral LP includes squamous cell carcinoma, herpes infection, cicatricial pemphigoid, pemphigus vulgaris, plasma cell process, and discoid lupus. Altman and Perry reported oral mucosa involvement in 65% of patients with cutaneous LP. In their series of 307 patients with LP, only 25% of cases had mucosal involvement alone, and only one patient had LP isolated to the lip. To our knowledge, this report represents only the fourth case of LP exclusively localized on the lower lip.

Case Report

A 44-year-old man presented with a 3-year history of isolated lower lip erosions. The patient noted lower lip edema and burning pain. He was otherwise healthy, except for a diagnosis of diet-controlled hypertension. He denied taking prescription or herbal medications, smoking tobacco, using alcohol, or having a history of herpes. Findings from the physical examination revealed crusting over a swollen lower lip (Figure 1), and normal findings on the remainder of the mucosal surfaces, as well as on the skin, nails, and hair.

A punch biopsy of the lower lip was performed and revealed a dense, bandlike lymphohistiocytic infiltrate in the papillary dermis extending into the midreticular dermis (Figure 2A). Compact orthokeratosis, wedge-shaped hypergranulosis, as well as irregular, jagged epidermal hyperplasia, were noted. On higher magnification, vacuolar alteration at the dermoeipidermal junction was shown, with occasional necrotic keratinocytes (Civatte bodies) at and above the dermoeipidermal interface (Figure 2B). A diagnosis of LP was made.

A complete resolution of the lower lip lesions, with some postinflammatory pigment alteration, was observed after 6 weeks of treatment with high-
potency topical steroid (clobetasol propionate 0.05% gel) applied twice daily (Figure 3). Serology testing was negative for the hepatitis C virus. There was no evidence of recurrence at the 16-week follow-up visit.

Comment
In contrast to cutaneous LP, oral LP is much more persistent and highly resistant to topical treatments. Our patient responded well to 6 weeks of treatment with high-potency topical steroid applied twice daily. At the 16-week follow-up visit, there was no evidence of recurrence. A short course of topical steroid can be effective, but it can lead to relapse. Systemic treatment with oral steroids and retinoids may be used for recalcitrant cases, but side effects often limit their prolonged use. Topical tacrolimus ointment has shown promise in treating recalcitrant, erosive mucosal LP.9 Tacrolimus is a macrolide with strong inhibition of T-lymphocyte activation, and its topical form currently is approved for the treatment of atopic dermatitis. The efficacy of tacrolimus in oral LP supports the idea that T lymphocytes play an essential part in the pathogenesis of this disease.
Since Hallopeau\textsuperscript{10} first reported a case of oral LP with malignant degeneration in 1910, retrospective studies have reported frequency of malignant transformation in oral LP ranging from 0\% to 10\%.\textsuperscript{11} Although controversies still exist as to whether oral LP has an inherent predisposition to malignancy, currently, it is classified as a precancerous condition requiring subsequent follow-up visits of at least 3 times a year, with extremely meticulous clinical examinations.

**REFERENCES**


