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Diagnosis and treatment of oral lichen sclerosus in a pediatric patient

Abstract

Lichen sclerosus is an uncommon chronic inflammatory disease, which rarely affects the oral mucosa. Here, we describe the occurrence of oral lichen sclerosus with gingival destruction in a 12-year-old female patient. After diagnostic confirmation by histopathology, intralesional injection of corticosteroid was performed, producing satisfactory remission of the lesion.

1 | CASE REPORT

Lichen sclerosus (LS) is an unusual mucocutaneous chronic inflammatory disease predominantly affecting the anogenital region that can result in atrophy, destructive scaring, functional impairment, and malignant transformation.[1,2] Lichen sclerosis in the oral mucosa is extremely rare. It is typically characterized by well-demarcated

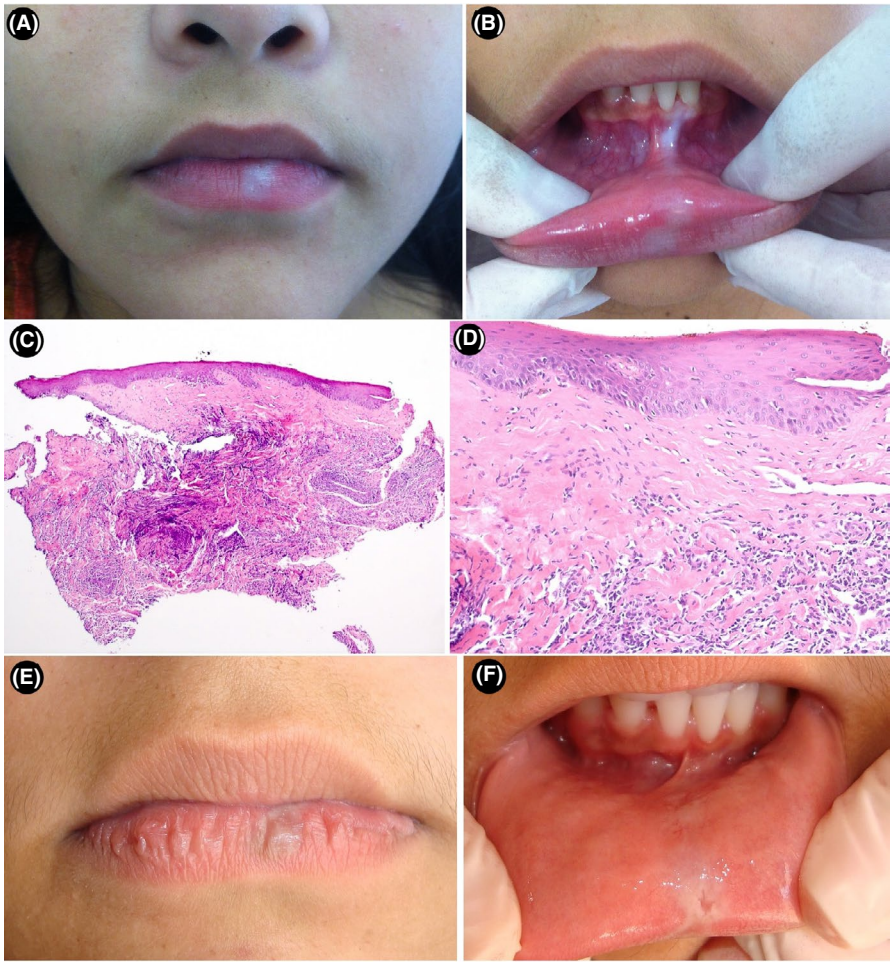

FIGURE 1 A, Lichen sclerosus lesion in oral mucosa. White macule in lower lip vermilion next to midline. B, Extending to labial mucosa, buccal sulcus, and gingiva. C, Photomicrograph (H&E × 4.3) showing variable epithelial atrophy, conjunctive tissue homogenization overlying an intense lymphocytic infiltrate. D, Photomicrograph (H&E × 40) showing focal hydropic degeneration of basal epithelium, and homogenization of upper submucosal collagen overlying an intense lymphocytic infiltrate. E, Outcome of triamcinolone intralesional injection 2 mo after third therapeutic session. The vermilion border now appears normal. F, Labial mucosa showing a residual whitish macule with a central erosion due to nibbling habit and normal-appearing gingiva and buccal sulcus

whitish lesions that can vary from small localized macules to extensive plaques in the mucosa and skin.[1,2] Here, we describe the diagnosis and treatment of an unusual oral manifestation of LS in a pediatric patient.

A 12-year-old girl presented with a 3-month history of a white oral lesion. Clinical examination revealed a whitish macule on the lower lip vermilion, extending to the labial mucosa, buccal sulcus, and gingiva in the region of teeth 31 and 32, associated with gingival recession (Figure 1A,B). The patient admitted to a lip-nibbling habit and was otherwise asymptomatic. The differential diagnosis included LS, vitiligo, and oral lichen planus. Histopathologic analysis demonstrated discrete basal cell hydropic degeneration, epithelial atrophy, and superficial collagen homogenization overlying a diffuse bandlike lymphocytic infiltrate (Figure 1C,D), confirming the diagnosis of LS. Neither genital nor skin lesions were found.

Intralesional triamcinolone acetonide 10 mg/mL was injected in decreasing dosage at 2-month intervals (0.3, 0.2, and 0.1 mL). Two months after the last injection, the buccal sulcus and gingiva appeared clinically normal, whereas gingival retraction was unchanged. In the vermilion border, a white stain with slight atrophy is still clinically evident with a central erosion (Figure 1E,F) that, according to the patient, is the result of a bite.

2 | DISCUSSION

Since 1957, when the first three cases of oral LS were described, few cases have been reported.[2] In our previous review,[2] we found that oral LS affects primarily women.[2] Although most extragenital lesions are associated with genital lesions,[3] this is not seen with most oral LS cases.[2,3] Any intraoral site can be affected by LS, without predilection for any particular one.[2,3]

Lichen sclerosus is thought to result from an autoimmune mechanism with the potential to cause local tissue destruction,[3] manifested in this case by gingival retraction, similar to cases described by Jimenez et al[4] and Meng et al.[5] Hence, early diagnosis and treatment of LS is essential to prevent and control structural destruction and functional impairment in pediatric patients.

Intralesional corticosteroid injection was effective in this case. Although there is no consensus regarding optimal treatment for oral LS, six other cases had a good response to triamcinolone.[2] Local corticosteroids were effective in most cases reported.[2,3] In this case, intralesional injection of triamcinolone was facilitated by the small size and the location of the lesion. Clinicians can individualize the best route of application and corticosteroid based on the extent and location of the lesion(s).

Oral LS is rare but should be considered in the differential diagnosis of white oral mucosal lesions in order to diagnose and treat the condition in timely fashion, owing to its potential for destructiveness.

KEYWORDS

autoimmune diseases, gingival recession, lichen sclerosus et atrophicus, oral lichen sclerosus

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