CASE REPORT

CHILDDHOOD ORAL LICHEN PLANUS: A CASE REPORT

Vinay Kumar Reddy, Sri Sai Ramya, Kotya Naik Maloth, K Sunitha

ABSTRACT
Oral lichen planus is a chronic inflammatory immune-mediated disease. The etiology of oral lichen planus is not fully understood. It is common in the fifth to sixth decades of life, and rare in children. This paper reports a case of oral lichen planus affecting a 13-year-old child without cutaneous lesions.

Keywords: Autoimmune disorder; Graft-versus-host disease; Lichen planus

Introduction
Oral lichen planus (OLP) is a common chronic immunologic inflammatory mucocutaneous disorder.1 Even though the etiology of oral lichen planus is not fully understood, the autotoxic CD8+ T-cells play an important role by triggering apoptosis of the basal cells of the oral epithelium.2,3 The clinical presentation of OLP ranges from mild painless white keratotic lesions to painful erosions and ulcerations.4,5 About 28% of patients who have OLP have skin lesions.6,9 OLP affects primarily middle aged adults and is rare in children.10 It affects 1 to 2% of the general adult population, the reported prevalence of OLP in childhood is 0.03%11,12 and in the Indian population is 2.6%.6 OLP has been reported more frequent in females5 and occurs more predominantly in Asians.13 This paper reports a case of oral lichen planus affecting a 13-year-old child without cutaneous lesions.

Case Report
A 13-year-old boy reported to the department of oral medicine and radiology with a chief complaint of burning sensation in the mouth for last one month. Medical history reveals that he had seizures ten years back and was under medication for two years. His family history was noncontributory and there was no history of drug intake for last eight years. On extra-oral examination no cutaneous lesions were present. On intra-oral examination erythematous gingival lesions were seen involving marginal and attached gingiva of all the teeth, more severely involving the right side (Figure 1). Diffuse erythematous areas surrounded by white striae were seen in relation to both right and left buccal mucosa (Figure 2.3). The lesions were non-scrapable. The patient had no caries or amalgam restorations. An incisional biopsy was performed and histopathological examination shows (Figure 4,5) atrophic stratified squamous hyper parakeratinized epithelium with few areas of discontinuity, indicating erosion with liquefactive degeneration of basal cell layer. There is a sharply defined, dense, band-like infiltrate predominantly of lymphocytes hugging the basement membrane. The connective tissue showed perivascular inflammatory cells, suggestive of Atrophic Lichen Planus. The patient was motivated for maintaining proper oral hygiene and was prescribed 0.1% triamcinolone acetonide ointment 2 to 3 times a day.

Discussion
OLP is classified into reticular, erosive, atrophic, bullous and pigmented types.5,7,14-16 The reticular form is the most common type of OLP followed by erosive OLP.17,18 Atrophic OLP

Figure 1. Desquamative gingivitis involving the marginal and attached gingiva on the right side, Figure 2. Diffuse erythematous areas surrounded by white striae seen on the right buccal mucosa, Figure 3. Diffuse erythematous areas surrounded by white striae seen on the left buccal mucosa, Figure 4. Histopathological picture 10x view, Figure 5. Histopathological picture 40x view appears as diffuse, erythematous patches surrounded by fine white striae.14 This form can cause significant discomfort. The reported prevalence of OLP in childhood is significantly lower than that in adults.11,19 The difference in prevalence rates has been partially attributed to the low number of associated systemic diseases, autoimmune phenomenon, drugs, and dental restorations in childhood.20,21 In our case the gingival involvement was more evident due to mild to moderate amount of plaque accumulation. Moreover, exacerbation of symptoms in our patient may be related to intake of spicy foods. Children affected with OLP are often asymptomatic or minimally symptomatic,1,3,11,20 Our case can be considered rare and unique owing to its age of occurrence and involvement of gingiva, which has been reported to be less common. The differential diagnosis of erosive OLP includes squamous cell carcinoma, discoid lupus erythematosus, chronic candidiasis, benign mucous membrane pemphigoid, pemphigus vulgaris, chronic cheek chewing, lichenoid reaction to dental amalgam or drugs, graft-versus-host disease (GVHD), hypersensitivity mucositis and erythema multiforme.18,21-23 Excellent oral hygiene is believed to reduce the severity of the symptoms, but it can be difficult for patients to achieve high levels of hygiene during periods of active disease.24 Treatment is aimed primarily at reducing the length and severity of symptomatic outbreaks. Topical corticosteroids are the mainstay in treating mild to moderately symptomatic lesions.16,22,24-25 Other documented treatment modalities include retinoids and vitamin-A analogues, cyclosporine rinse, the immunomodulating agent levamisole, dapsone, griseofulvin, azathioprine and cryotherapy.26-27

Conclusion
In conclusion, it is important to consider lichen planus as one of the differential diagnosis for hyperkeratotic and erosive lesion of the oral mucosa in children.
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