Ulcerative Lichen Planus in childhood. Case study

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Introduction

Lichen planus (LP) is an autoimmune, chronic, inflammatory disease that affects mucosal and cutaneous tissues. The exact etiology of LP remains unclear but it is believed to result from an abnormal T-cell mediated immune response in which basal epithelial cells are recognized as foreign because of changes in the antigenicity of their cell surface.

Oval lichen planus (OLP) is a common disease in the middle aged and elderly population, and has a prevalence of about 0.3% to 2%. In contrast, oral lichen planus in childhood (OLP) is rare and it was first reported in 1950's. Oral mucosal involvement in adult itself account for 0.5% to 19% (OLP) is rare and it was first reported by Ronald Laeijendecker et al, which have shown only 3 patients (0.03%) were diagnosed with OLP in India. Seven patients showed involvement of oral mucosa and with concomitant oral lichen planus.


Case Report

A 12 year old boy reported to the Department of Pedodontics and Preventive dentistry, with the chief complaint of ulcer on his dorsum of tongue which is burning in nature and obstructing talking and eating spicy foods. On intra oral examination, a white ulcerative lesion on the dorsum of tongue was observed. Diagnosis was made based on clinical examination and histopathological features. We instituted local treatment and patient responded well to the treatment. Although rarely reported in childhood, lichen planus should be considered in a differential diagnosis of hyperkeratotic, reticulate and ulcerative lesions of the oral mucosa in children. Keywords: Oral lichen planus (OLP), childhood, ulcer.

Histopathological examination showed hyperkeratosis of the stratified squamous epithelium and basal cell degeneration with dense band-like lymphocytic infiltration at the epithelial-connective tissue interface (Fig. 2). Both clinical and histopathological features were consistent with ulcerative oral lichen planus.

We have reported only one case had oral ulcerative lichen planus with 0.05% of the population. The mean interval between vaccina- tion and LP onset was three years, ranging between three months and 11 years. Hama and Saooh reported that oral lichen planus in childhood is more common in tropical countries like India1 Sharma and Mahabhashyam reported 50 children with LP and with concomitant oral lesions in 15 of them and they stated that the oral mucosa seems to be less extensively involved in children with LP than in adults.

Predisposing conditions such as graft-versus-host disease, active hepatitis, allergy, or smoking are reported to be associated with oral ulcerative lichen planus.

Conclusion

Oral lichen planus in childhood is rare, especially erosive form; diagnosis is difficult in children presenting with ulcerative white lesion in oral cavity. The schedule of follow-up of OLP in children should be 7 days, 15 days and 30 days after diagnosis to assess healing. Patient should be reviewed twice a year for regular follow up after complete recovery of the present condition. However generally, the prognosis of oral lichen planus in childhood seems to be more favorable compared to adults.

References


Fig. 1: Dorsum of Tongue showing Ulcerative lesion Fig. 2: Photomicrograph (5x magnification) of the Lesion

Fig. 3: Mid treatment (15th day of treatment) showing reduction in size & healing of the ulceration

Fig. 4: Complete healing of ulcer on Tongue after 30 days of treatment

Fig. 5: Pre treatment photograph

Fig. 6: Mid treatment photograph

Fig. 7: Post treatment photograph

Editorial Note: If you are a dental professional, you can get more information at the reference list below.

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