Ulcerative Lichen Planus in childhood. Case study

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Abstract
Lichen planus (LP) is a chronic inflammatory mucocutaneous condition which is relatively common in adults but rarely affects children. The present study is on report of unusual case of ulcerative oral LP involving the dorsum of tongue in 12 year old boy. Patient complained of painful oral lesion on the tongue which was 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.

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 the tongue which is causing burning sensation while consuming spicy foods from past 1 year.

There is no significant Medical history observed. On extra oral examination patient was normal. On intra oral examination, a single irregular red and white ulcerative lesion measuring approximately 2.5x0 cm in musculature 3.5 times per day for the duration of one week. Topical antifungal therapy was given for the pain relief. Histopathological examination revealed hyperkeratosis and acanthosis with inflammatory infiltrate. The differential diagnosis was lichen planus and lichenoid lesions. To exclude lichenoid reaction, we investigated his medical status and there was no history of any drug intake. The patient and his parents also denied any habits that may potentially cause mucosal ulcerations.

Histopathological examination showed hyperkeratosis with 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 suggestive of ulcerative oral lichen planus. Specific treatment for ulcerative oral lichen planus in children is extremely rare and it was first reported in 1950's. Oral mucosal involvement in adult itself account for 0.5% to 2% which remains unknown, but an immune reaction at epithelial-connective tissue interface may involve in the development of oral lichen planus.

The lesions were found more common in tropical countries like India. Sharma and Maheshwar 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 often involved in children with LP than in adults.

The mean interval between vaccinations and LP onset was three years, ranging between three months and 11 years. Hinda and Sahoo reported 87 patients with children LP in India. Seven patients showed involvement of the oral mucosa and only one patient had oral ulcerative lichen planus without skin involvement.

A year retrospective study done by Patil , Sr, Vyas, S. in United Kingdom by Alam and Hamburger in boys aged between 6-14 years over a period of 10 years has proved only 0.01% children had oral ulcerative lichen planus without skin involvement.

A study done by Davids and follicular ulcerative oral lichen planus had completely healed at the end of 30 days (Fig. 4) and a similar observation was present on periodic recall follow up.

Oral lichen planus in childhood (OLP) is rare and only a few reports are available in the literature. In a review of oral lichen planus can be divided into a hyperkeratotic/white variant, commonly without symptoms, a reticular type with Wickham striae (often symmetrical), papular and plaque like type.

The atrophic/erythematous (red) variant and the erosive/ulcerative (yellow) variant often have persistent symptoms of pain or stinging aggravated during talking and eating spicy foods. These variants may occur together in one patient or may transform one to another. The lesions were found more common in tropical countries (often symmetrical), lateral margins of the tongue, gingiva and lips.

Whereas cutaneous LP is self-limiting, ulcerative OLP is chronic, rarely undergoes spontaneous remission. The family history of LP is more common in OLP in childhood than in adulthood. The exact cause of ulcerative OLP is not clearly understood. Malignant transformation of ulcerative OLP in adults is 0.02% to 5%; however malignant transformation of OLP in children is not documented in the literature till now.

Conclusion
Oral lichen planus in childhood is rare, especially erosive form, diagnosis is less likely 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 review twice a year for regular follow up after complete progress of the present condition. However generally, the prognosis of oral lichen planus in childhood seems to be more favorable compared to adults.

References
2. Eisen D. The clinical features, manifestations of 10,000 patients comprised of 1:1 which have shown only 3 patients ranging between three months and 11 years. Hinda and Sahoo reported 87 patients with children LP in India. Seven patients showed involvement of the oral mucosa and only one patient had oral ulcerative lichen planus without skin involvement.

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