

# Psoriasis Associated Oral Mucositis

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## ABSTRACT

The oral involvement of psoriasis is a very rare clinical observation; even though cutaneous occurrences are more common. The diagnosis of oral psoriasis is still a debatable matter. Correlation of all the classical features of psoriasis along with histopathological findings may be helpful in early and definitive diagnosis of these lesions. Here, we are reporting a case of oral involvement in an adolescent boy with cutaneous psoriasis. A detailed clinical and histopathological data are presented along with a brief review of literature.

**Keywords:** Psoriasis, Oral mucosa, Auspitz sign.

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## INTRODUCTION

Psoriasis is a chronic inflammatory, noncontagious, immunological and most common cutaneous disease. It is most commonly seen in the second and third decade of life. It may persist throughout a person's lifetime with periods of exacerbation and remission.<sup>1</sup> Lesions are symmetrical and most frequently seen on the extensor surface of the extremities particularly elbows, knees, back, chest, scalp, abdomen and nails. It rarely involves oral cavity. The etiology for psoriasis is unknown, but it is a multifactorial disease associated with genetic, immunologic and psychosomatic factors.<sup>1</sup> The clinical presentation of dermal psoriatic lesions appears as papules and plaques covered by silvery scales. When the scales are removed, small pinpoint bleeding is seen (Auspitz sign).<sup>2</sup>

Oral psoriatic lesion is a very uncommon occurrence and has been a subject of controversy. Presents with a variable clinical picture including whitish plaques or striae, papules, erythematous patches and lesions similar to geographic tongue. These posing a diagnostic prob-

lem. The diagnosis of oral psoriasis is best made when the clinical course of the oral lesion parallels that of the skin lesion and is supported by microscopic findings.<sup>3</sup> Additionally, a positive family history and HLA typing have been considered of great importance in supporting this diagnosis.<sup>4</sup>

## CASE REPORT

A 15-year-old adolescent boy presented to the Department of Oral Pathology and Microbiology, Government Dental College, Thiruvananthapuram, with the presenting complaints of redness on palate and gingival region of 7 months duration associated with pain and discomfort. On detailed history taking, it was understood that the lesions were present for the past 2 years and was showing seasonal variation with exacerbation duration. Medical history revealed it as a diagnosed case of psoriasis and he was under medication for the last 7 months. There was no history of trauma or any deleterious oral habits. The

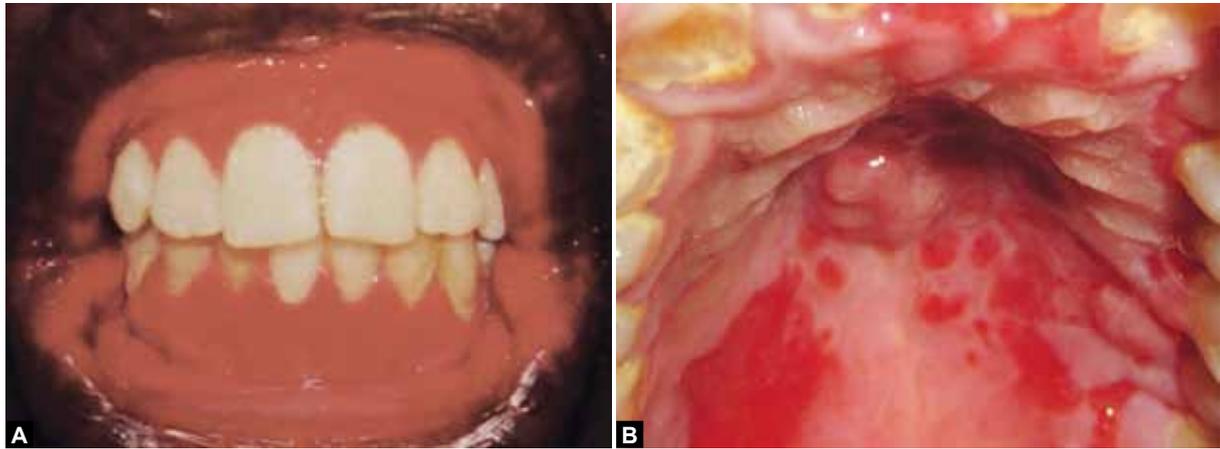


**Figs 1A and B:** Psoriatic lesions on lower part of the legs and scalp

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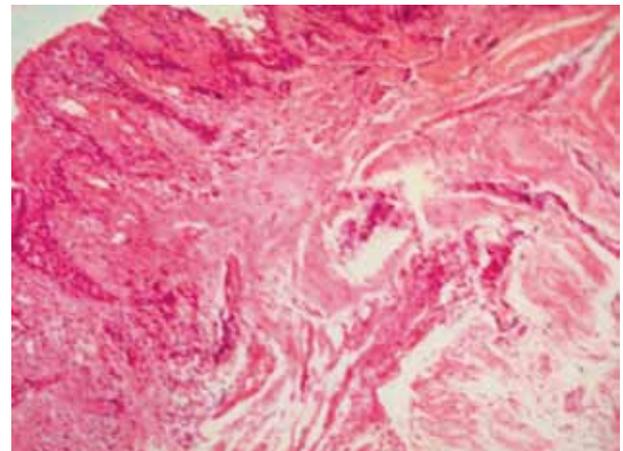
**Figs 2A and B:** Lesions on the gingiva, labial mucosa and palate

family history was noncontributory. Patient was moderately built and nourished. On dermatologic examination, patient presented with psoriatic lesions on the scalp and lower part of the legs on extensor surface with abnormalities detected in nails (Figs 1A and B). Intraoral findings revealed asymptomatic, erythematous lesion on palate with extensive involvement of gingiva and labial mucosa (Figs 2A and B). Based on the above findings, a provisional diagnosis of intraoral psoriasis was made. After getting informed consent, incisional biopsy was done. Microscopic examination revealed mucosal surface with thin epithelium over the connective tissue papillae which contained dilated and tortuous capillaries. Areas of parakeratosis, focal vacuolation and loss of granular cell layer were seen. The rete ridges were relatively narrow and test tube shaped but thickened toward their tip presenting a club-like appearance. Lamina propria shows moderate inflammatory cell infiltrate along with engorged blood vessels (Fig. 3). The clinical and microscopic features confirmed psoriasis associated oral mucositis and the dermatologic diagnosis of cutaneous psoriasis supported this. The lesion was treated with corticosteroid therapy and the patient is under regular follow-up.

## DISCUSSION

The oral involvement of psoriasis is a very rare clinical presentation, even though cutaneous occurrences are more common. Psoriasis may or may not be associated with oral lesions. The occurrence of oral psoriasis without skin lesion is very rare.

In some studies, it has been found that the oral mucositis is usually one of the manifestations of psoriasis.<sup>5</sup> Some authors believe that the oral lesion needs to follow the same clinical course so as to accept them as same entity.<sup>5</sup> Psoriasis associated oral lesion were first documented by Oppenheim and Thinn in the year of 1903.<sup>6</sup> Minimum documentation has been filed so far regarding psoriasis associated oral lesions.<sup>7</sup>



**Fig. 3:** Elongated test tube-shaped rete ridges and thinned epithelium overlying the connective tissue papillae with dilated capillaries and inflammatory cells (H and E, 10x)

DeGregori et al<sup>8</sup> reviewed 15 cases reported in the literature until 1971. Of which, three had gingival involvement. Younnai and Phelan reviewed the literature and presented a case of oral mucositis with features of psoriasis and they could divide the 46 lesions into 2 large categories (20 white lesions and 11 erythematous lesions) and small categories of 6 mixed red and white lesions, 5 ulcerative, 2 vesicular, 1 pustular and 1 indurated lesion.<sup>3,9-13</sup> Occurrence of the psoriatic lesion within the oral cavity involves tongue, palate, gingiva, buccal mucosa, lip, and floor of the mouth.<sup>14,15</sup> The clinical appearance of oral psoriasis is variable and their patterns range from raised white scaling lesion predominantly on the palate or buccal mucosa to well-demarcated flattened, erythematous lesion with a slightly raised white annular or serpiginous border.<sup>3</sup> The present case showed the clinical appearance of erythematous lesion on the palate along with the gingival and labial mucosal involvement.

Differential diagnosis of oral psoriasis are benign migratory glossitis, erythema migrans, Reiters syndrome, and fissured tongue having similar clinical and histopathologic findings. Recent report has quoted that 35% of the patient with psoriasis have a family history of

the disease.<sup>8</sup> In our case, there was no such associated family history.

Usually, the histopathologic findings reveal a psoriasiform oral mucositis associated with psoriasis and it is important to include the parameters like clinical presentation, family history, HLA association with B13 antigen, and dermatological involvement to support the diagnosis of oral psoriasis. Thus, in our present case, the clinical and histopathologic finding were taken into consideration along with the characteristic dermatological lesions involving scalp and lower part of the legs in arriving at a diagnosis of psoriasis associated oral mucositis.

## CONCLUSION

Our case report illustrates the classical clinical features of oral psoriasis even in an unusual site like palate, with strong evidence of dermatological psoriatic lesions. The diagnosis of oral psoriasis is still a debatable matter. Correlation of all classical features of psoriasis along with histopathological findings may be helpful in early and definitive diagnosis of these lesions. More number of case reports from all parts of the world should come up for a detailed in depth knowledge on oral psoriasiform lesions.

## REFERENCES

1. Watson W, Cann HM, Faber EM, Nall ML. The genetics of psoriasis. *Arch Dermatol* 1972;105(2):197-207.
2. Regezi JA, Sciubba JJ, editors. *Oral pathology: clinical-pathological correlations*. Philadelphia: WB Saunders; 1989. p. 134-141.
3. Weathers DR, Baker G, Archard HO, Burkes EJ Jr. Psoriasiform lesions of the oral mucosa (with emphasis on 'ectopic geographic tongue'). *Oral Surg Oral Med Oral Pathol* 1974; 37(6):872-888.
4. Economidou J, Papasteriadis C, Varla-Letterioti M, et al. Human lymphocyte antigen A, B and C in Greek patients with psoriasis: relation to age and clinical expression of the disease. *J Am Acad Dermatol* 1985;13(4):578-582.
5. Hernandez-perez F, Jaimer Aveldanez A, Urquizo-Ruvalcebamde L, Diaz Barcelof M, Irigoyen-Camacho ME, Vega memijie ME, et al. Prevalence of oral lesion in patient with psoriasis. *Med Oral Pathol Oral Cir Buccal* 2008;1(13): E703-708.
6. Oppenheim M. Psoriasis mucosae oris. *Monatsschr Prakt Dermatol* 1903;37(1):481.
7. Yesudian PD, Chalmers RJ, Warren RB, Griffiths CE. In search of oral psoriasis. *Arch Dermatol Res* 2012;304(1):1-5.
8. De Gregori G, Phippen R, Davies E. Psoriasis of the gingiva and the tongue: report of a case. *J Periodontol* 1971;42(2):97-100.
9. Levin HL. Psoriasis of the hard palate. *Oral Surg Oral Med Oral Pathol* 1954;7(3):280-286.
10. Norins A, Yaffe H. Psoriasis of the hard palate. *AMA Arch Dermatol* 1957;76(3):357-358.
11. Baker H, Ryan TJ. Generalized pustular psoriasis. A clinical and epidemiological study of 104 cases. *Br J Dermatol* 1968;80(12):771-793.
12. White DK, Leis HJ, Miller AS. Intraoral psoriasis associated with widespread dermal psoriasis. *Oral Surg Oral Med Oral Pathol* 1976;41(2):174-181.
13. Eastman JR, Goldblatt LI. Psoriasis. Palatal manifestation and physiologic considerations. *J Periodontol* 1983;54(12):736-739.
14. Pindborg JJ. Diseases of the skin: In: Jones JH, Mason DK, editors. *Oral manifestation of systemic diseases*. London: Saunders; 1980. p. 336-340.
15. Laskaris G. *Color atlas of oral diseases*. 2nd ed. Stuttgart, Thieme; 1988. p. 218-219.

