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Review Article

Psoriasis of oral cavity- A review

Shaik Ali Hassan^{1,*}, Sumit Bhateja¹

¹Manav Rachna Dental College, Faridabad, Haryana, India



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ABSTRACT

Psoriasis is a chronic, genetically seen, scales, and inflammatory disease of the skin. Oral manifestations of psoriasis are rare and are often difficult to diagnose. Elbows, knees, sacral portion, and scalp are usually infected. Nail association is commonly more occurring. oral inclusion is uncommon. A few doctors question whether psoriasis influences the oral mucosa, especially because early reports of oral psoriatic lesions needed histologic affirmation. In this review article, we will show what are various parts of the oral cavity affected by psoriasis.

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1. Introduction

Psoriasis is a constant, hereditary, layered, and provocative turmoil of the skin showing with reductions and intensifications. 1 We get the term psoriasis from the Greek word 'psora' which means itch. Willan first depicted this illness precisely.² Psoriasis influences around 2% to 3% of people around the globe. Exemplary cutaneous lesions are thick, erythematous, all around delineated plaques with a follower shiny scale. Plaques distinctively include the limits, and extensor surfaces asymmetrically. Elbows, knees, sacral territory, and scalp are usually affected. Nail association is commonly more occurring, oral inclusion is uncommon. A few doctors question whether psoriasis influences the oral mucosa, especially because early reports of oral psoriatic lesions needed histologic affirmation. 3,4 Some all-around archived examiners depict oral lesions in patients with psoriasis, and as far back as 1903, Oppenheim revealed the main oral psoriatic lesions with corroborative histologic discoveries.⁵ Later creators have looked into, throughout the English and European writing, roughly 60 cases with clinical and histologic highlights reliable with oral psoriasis. 6,7

E-mail address: alishaikhassan@gmail.com (S. A. Hassan).

When all is said in done, oral lesions of psoriasis are presumably very phenomenal, showing up more much of the time in certain subtypes of psoriasis, explicitly summed up pustular psoriasis. 8-10 In this ailment, the oral lesions can appear as a geographic tongue. The geographic tongue may speak to the oral partner of cutaneous psoriasis. The most widely recognized sort is psoriasis vulgaris, in which very much depicted papulosquamous plaques are watched. The plaques are red or salmon pink in shading and secured by white or dim scales. These lesions are commonly affected evenly, including most regularly the extensor parts of elbows and knees, scalp, lumbosacral district, and umbilicus. The lesions are described by the Koebner wonder in which new lesions create at the site of injury or pressure. 4 Although psoriasis is a typical constant skin issue, oral lesions are uncommon.⁵ Here we report a known instance of psoriasis giving oral side effects.

1.1. Symptoms

The side effects are frequently mellow and come and shoot. Also, specialists don't concede to what all the side effects are. Specialists believe that while signs can show up in various spots in your mouth, they're regular within your cheeks. You may take note:

^{*} Corresponding author.

- 1. Patches of red skin with yellow or white edges
- 2. Wound
- 3. Stripping skin on the gums
- 4. Blisters with discharge (pustules)
- Agony or consuming, particularly when eating hot nourishments
- 6. Changes in how things taste.

Also seen in various oral conditions like the following-

- 1. Fissured tongue: furrows or channels on your tongue
- Geographic tongue: red fixes on your tongue that resemble islands on a guide Swollen or contaminated gums

Individuals who have oral psoriasis will have side effects on their skin, for example, thick, flaky patches. The indications in your mouth will most likely show signs of improvement or more awful alongside the side effects on your skin. So if psoriasis side effects appear in your mouth, you will probably have skin flare-ups.

1.2. Involvement in various oral parts

1.2.1. Temporomandibular joint

Psoriasis is as often as possible related to different examples of joint inflammation, especially in patients with HLA-B27 inspiration. Albeit extraordinary, temporomandibular joint brokenness may create in patients with psoriatic joint pain, showing up as limited jaw agony, expanding, and constraint of development. Temporomandibular joint inclusion is normally one-sided, and the beginning is in middle age, around the fourth decade. People show up similarly influenced. Temporomandibular psoriatic joint pain is less incessant than other joint contributions. ¹¹

1.2.2. *Lips*

Psoriasis of the vermilion of the lips is uncommon and is usually connected with increasingly average plaque psoriasis somewhere else. ¹² It presents as layered zones that may stretch out over the vermilion fringe. ¹³ Keratotic lesions have additionally been depicted. ¹⁴ The involvement of the vermillion fringe can likewise happen without the contribution of the oral cavity, ^{12,15} also, it has appeared the event of precise cheilitis to happen in psoriatic patients ¹⁶ a bigger report invalidates this case. ¹⁷ Sometimes psoriasis of the vermillion fringe of the lip happens because of the Koebner marvel of the distended upper teeth. ¹⁸

Exfoliative cheilitis can once in a while create, either with flares of psoriasis vulgaris or, all the more usually, with summed up pustular psoriasis. Perleche (precisely cheilitis) with irritation, erythema, and scaling at the sides of the mouth has to been accounted for in patients with psoriasis. It isn't known whether the occurrence of perleche is higher than that in everyone. Curiously, the creators who noticed this predominance of rakish cheilitis discovered that most

patients influenced were more youthful than 35 years, it credits a recommendation to psoriasis and not to the normal jaw laxity of maturing. 18

1.2.3. Buccal mucosa

Lesions of buccal mucosa present as annular, serpiginous abundances, or as polycyclic papules and plaques, which are all the more normally saw during the intense phase of the illness. ¹⁹ Whitish and erythematous patches have been seen on buccal mucosa in 3.5% of 547 patients saw by Kaur et al. ²⁰ It is like GT however happens on the buccal mucosa and the detailed recurrence ranges from 0% to 19% of psoriasis patients.

1.2.4. Gingiva

Contribution of gingiva is uncommon. It shows an erythema of the gingival edge with white reticular plaques stretching out from the erythema. Periodontitis with strongly characterized erythematous gingival plaques has been seen in oral psoriasis. ^{21,22}

1.2.5. Tounge

Tounge changes in psoriasis can show in two significant sorts. The dominant kind joins mucosal anomalies with histopathology like psoriasis; these mucosal lesions follow a comparative clinical course as that of cutaneous psoriasis. These oral lesions are typically asymptomatic and henceforth mostly go unnoticed. The subsequent sort is normal and involves a scope of vague lesions, for example, geographic tongue (GT) and fissured tongue (FT). ²³ The pervasiveness of GT and FT is higher in patients with psoriasis contrasted and controls. ^{24,25}

GT is found on the dorsum surface of the tongue with a trademark radially spreading loss of filiform papilla, prompting the arrangement of erythematous zones or fixes. The propelling edge is marginally raised, serpentine, fit as a fiddle, and whitish-yellow in shading. It occurs in 1-5% of everyone, ²⁶ with a slight female preference. ²⁷ FT is described by an anteroposteriorly situated gap with stretching crevices and is accepted to be an acquired attribute. 28 It happens in 2-5% of everybody and the occurrence increments with age.²⁹ There is a successive event of GT with FT and almost half of the patients with GT additionally have FT, also, there is a change from GT to FT. 30,31 In an ongoing report, it has been seen that ectopic GT is seen in 5.4% of patients with psoriasis contrasted with 1% of control patients; GT was seen in 10.3% of patients with psoriasis and 2.5% of control patients. Hernandez-Perez F et al.⁶ found that FT and GT are more pervasive in patients having psoriasis than that of control subjects.⁶

1.3. Histopathology

The pathologic changes seen inside the mucous films equal those of cutaneous psoriasis. Extension and thickening

of the rete edges, with general acanthosis is noted. Parakeratosis is obvious, and this hyperplastic acanthotic epithelium perceptibly delivers the white lesions of the mucosa. The papilla of the lamina propria is lengthened also, edematous, with the diminishing of the overlying supra papillary epithelium and dilatation of shallow vessels. These progressions mirror those in cutaneous biopsy examples, and this unmistakable quality of the shallow vasculature produces the pinpoint draining incited on skin lesions (Auspitz sign). Comparative simple draining happens in the mouth One of the most trademark highlights of psoriasis permeation of neutrophils through the upper epithelium. These polymorphonucleocytes may gather in groups known as Munro's micro-abscesses, even though they are not fundamental for the determination of oral psoriasis, nor are they explicit. The absence of a stratum corneum in the non-masticatory oral mucosa may clarify why there are no perceptibly obvious pustules in the mouth.³²

1.4. Differential Diagnosis

The differential finding of oral psoriasis incorporates lichen planus, candidiasis, leukoplakia, pemphigoid, pemphigus, skin inflammation, lupus erythematosus, neurodermatitis, syphilis, idiopathic gingivostomatitis, Reiter's disorder, stomatitis medicamentosa, palatal hyperplasia, and squamous cell carcinoma.² In patients where the cutaneous appearance of psoriasis is missing, immunopathological examiners are useful in barring from other oral dermatoses, here and there still exists an uncertainty concerning its determination, making oral psoriasis a puzzle or all the more explicitly an indicative predicament. ^{33,34}

1.5. Treatment

The dentist must concentrate on the evacuation of aggravations and infective operators, which may drive psoriasis by the Koebner phenomenon or give proceeded with antigenic incitement to heighten the illness. Measures incorporate the expulsion and treatment of bacterial plaque and pits and regard for inadequately fitting false teeth, other dental apparatuses, or strangely sharp or broken teeth.

Palliative treatment incorporates the utilization of a topical sedative, for example, thick lidocaine or diphenhydramine (Benadryl); a covering mucosal protectant, for example, an emollient dental glue (Orabase) or magnesium and aluminum hydroxides (Maalox); and soluble washes. For suggestive patients, topical corticosteroids, for example, fluocinonide gel 0.05% (Lidex), can be applied to lighten manifestations. Corresponding consideration ought to be given to the chance of concurrent candidiasis, which may convolute finding and the board. All in all, oral injuries resolve with control of cutaneous sickness, and explicit treatment is frequently not required.

2. Conclusion

Oral psoriasis is an exceptionally uncommon element and can be mistaken for other oral mucous layer dermatoses. The essential for diagnosing oral psoriasis is the nearness of cutaneous injuries alongside oral sores that are analyzed histopathologically following a biopsy of the injury. Ongoing years have seen enormous advances in the comprehension of the pathogenesis of psoriasis because of fresher hereditary and immunological strategies. They have demonstrated it that psoriasis is a constant, immunologically interceded incendiary malady that can go about as a model for understanding different ailments of this type. So finally, to conclude oral psoriasis has to be properly diagnosed and proper medication to be provided based on the diagnosis.

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4. Conflict of Interest

None.

References

- Krueger GG, Duvic M. Epidemiology of Psoriasis: Clinical Issues. J Invest Dermatol. 1994;102:14S–8.
- Zhu JF, Kaminski MJ, Pulitzer DR, Hu J, Thomas HF. Psoriasis: Pathophysiology and oral manifestations. *Oral Dis.* 1996;2:135–44.
- Cataldo E, Mccarthy P, Yaffee H. Psoriasis with oral manifestations. Cutis. 1977:20:705–3.
- 4. Younai FS, Phelan JA. Oral mucositis with features of psoriasis. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 1997;84:61–7.
- Brice DM, Danesh-Meyer MJ. Oral Lesions in Patients With Psoriasis: Clinical Presentation and Management. *J Periodontol* . 2000;71(12):1896–903.
- Richardson LJ, Kratochvil FJ, Zieper MB. Unusual palatal presentation of oral psoriasis. J Can Dent Assoc. 2000;66:80–2.
- Griffiths CE, Barker JN. Pathogenesis and clinical features of psoriasis. *Lancet*. 2007;370:263–71.
- DAWSON TAJ. Tongue lesions in generalized pustular psoriasis. Br J Dermatol . 1974;91(4):419–24.
- O'keefe E, Braverman IM, Cohen I. Annulus migrans: identical lesions in pustular psoriasis. Reiter's syndrome, and geographic tongue. Arch Dermatol. 1973;107:240–4.
- Wagner G, Luckasen JR, Goltz RW. Mucous membrane involvement in generalized pustular psoriasis: report of three cases and review of the literature. *Arch Dermatol*. 1976;112:1010–4.
- Bork K, Hoede N, Korting GW. Diseases of the oral mucosa and the lips. Philadelphia: WB Saunders; 1996.
- 12. Tosti A, Misciali C, Cameli N, Vincenzi C. Guess what! Psoriasis of the lips. *Eur J Dermatol*. 2001;11:589–90.
- Rahman M, Fikree M. Perioral psoriasis. J Eur Acad Dermatol Venereol. 2000;14(6):521–2.
- Yamamoto T, Nishioka K. Oral psoriasis in a patient with hepatitis C virus. Eur J Dermatol. 2002;12:75–6.
- 15. Gül Ü, Kılıç A, Gönül M, Soylu S, Bilgili S, Han Ö, et al. Psoriasis of the lips: an unusual localization. *Int J Dermatol* . 2006;45(11):1381–2.
- Buchner A, Begleiter A. Oral lesions in psoriatic patients. Oral Surgery, Oral Medicine, Oral Pathology. 1976;41(3):327–32.
- Brenner S, Lipitz R, Ilie B, Krakowski A. Psoriasis of the Lips: The Unusual Köbner Phenomenon Caused by Protruding Upper Teeth. *Dermatol.* 1982;164(6):413–6.

- Usher B. Psoriasis of the mucous membranes. A report of two cases with a review of the literature. Arch Dermat Syph. 1933;28:488–96.
- Bruce AJ, Rogers RS. Oral psoriasis. Dermatol Clin. 2003;21(1):99– 104.
- Kaur I, Handa S, Kumar B. Oral lesions in psoriasis. Int J Dermatol. 1997;36:78–87.
- Ulmansky M, Michelle R, Azaz B. Oral psoriasis: report of six new cases. J Oral Pathol Med. 1995;24(1):42–5.
- Yamada J, Amar S, Petrungaro P. Psoriasis-Associated Periodontitis: A Case Report. J Periodontol. 1992;63(10):854–7.
- Daneshpazhooh M, Moslehi H, Akhyani M, Etesami M. Tongue lesions in psoriasis: a controlled study. BMC Dermatol. 2004;4:16.
- Pogrel MA, Cram D. Intraoral findings in patients with psoriasis with a special reference to ectopic geographic tongue (erythema circinata). Oral Surg Oral Med Oral Pathol . 1988;66(2):184–9.
- 25. Buchner A, Begleiter A. Oral lesions in psoriatic patients. *Oral Surg Oral Med Oral Pathol*. 1976;41(3):327–32.
- Halperin V, Kolas S, Jefferis KR, Huddleston SO, Robinson HBG. The occurrence of fordyce spots, benign migratory glossitis, median rhomboid glossitis, and fissured tongue in 2,478 dental patients. *Oral* Surg. 1953;6(9):1072–7.
- 27. Hume WJ. Geographic stomatitis: a critical review. *J Dent* . 1975;3(1):25–43.
- Eidelman E, Chosack A, Cohen T. Scrotal tongue and geographic tongue: Polygenic and associated traits. *Oral Surg* . 1976;42(5):591– 6.

- Scott EJV. Kinetics of Hyperplasia in Psoriasis. Arch Dermatol. 1963;88(4):67.
- Migliari DA, Penha SS, Marques MM, Matthews RW. Considerations on the diagnosis of oral psoriasis: A case report. *Med Oral*. 2004:9:300–3.
- Perlman S. Psoriatic arthritis: Natural history and prognosis. Grune and Stratton; 1985. p. 83–93.
- 32. Bruce AJ, Rogers RS. Oral psoriasis. Dermatol Clin. 2003;21:99-104.
- Pogrel MA, Cram D. Intraoral findings in patients with psoriasis with a special reference to ectopic geographic tongue (erythema circinata). Oral Surg Oral Med Oral Pathol . 1988;66(2):184–9.
- Nisengard RJ, Neiders M. Desquamative Lesions of the Gingiva. J Periodontol. 1981;52(9):500–10.

Author biography

Shaik Ali Hassan Dental Surgeon

Sumit Bhateja HOD

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