

Case report

Oral psoriasis: an atypical case

Rémi Curien*, François Maschino, Julie Guillet, Pierre Bravetti

Faculty of Odontology, Nancy, France

(Received 7 december 2011, accepted 16 december 2011)

Key words:
psoriasis / oral
manifestations /
oral ulcer / stomatitis

Abstract – Psoriasis is a chronic cutaneous inflammatory disease. We describe the case of a 60-year-old woman presenting both general psoriasis and oral erythematous-erosive lesions. History and histopathology of the lesions tend to prove a link with her general psoriasis. Local applications of betamethasone provides rapid improvement of the symptomatology.

Oral lesions of psoriasis are rare and controversial. There is some evidences that fissurated or geographic tongue present a statistical correlation with skin psoriasis. Our case present unusual features which were never described so far and that could be source of misdiagnosis.

Mots clés :
psoriasis /
manifestations
buccales / ulcérations
buccales / stomatite

Résumé – Psoriasis buccal : présentation d'un cas atypique. Le psoriasis est une pathologie inflammatoire cutanée chronique. Nous rapportons le cas d'une patiente de 60 ans atteinte d'un psoriasis et présentant des lésions buccales érythémato-érosives. L'histoire et l'histopathologie des lésions buccales évoquent fortement un lien avec le psoriasis cutané. Le traitement local par betaméthasone a induit une amélioration clinique significative. Les lésions buccales du psoriasis sont rares et controversées. Certains indices sont en faveur d'un lien statistique entre la langue géographique ou plicaturée et le psoriasis. Le cas rapporté présente certaines caractéristiques inhabituelles qui pourraient être source d'erreur diagnostique.

Psoriasis is a chronic inflammatory condition primarily affecting the skin [1,2]. Approximately 1–3% of the global population is affected and 50% of cases appear before the second decade of life [2]. It is characterized by erythematous papules covered by silvery scales, that gradually enlarge at the periphery, forming plaques. Its etiology remains unknown, but it appears to be multifactorial with genetic and psychosomatic factors. Various triggers, such as trauma, infection and stress, may cause new episodes [2].

Oral psoriasis is a rare entity and remains a subject of controversy [3,4]. In this paper, we report a case of oral psoriasis revealed by a geographic stomatitis.

Observation

A 60-year-old woman was referred in the Department of oral Surgery for the evaluation of erosive lesions of lips and cheeks, with a sensation of burning, which has lasted for 4 months.

In her antecedents we noted a history of inverted psoriasis. The intraoral examination revealed large erythematous papules of the right cheek with irregular areas of erosion surrounded by a discrete keratotic/jagged aspect (Fig. 1). She complains of a sensation of burning improved by meals. The appearance of these lesions have concorded with an emotional shock, concomitant with a crisis of inverted psoriasis. A fissurated tongue is also observed (Fig. 3).

The diagnosis of oral psoriasis was proposed, eventhough other diagnostic such as oral lichen planus, pemphigus or pemphigoid were possible. Two biopsy were performed at the periphery of the lesions for histological and direct immunofluorescence examination. Histologically, tissues showed a pattern consistent with psoriasis (Fig. 4). Direct immunofluorescence was negative. The diagnosis of oral psoriasis could be confirmed on the basis of three arguments: presence of a general psoriasis, concomitance between the beginning of the oral symptomatology and a general psoriatic crisis, and histopathological psoriasiform pattern.

* Correspondence: remi.curien@yahoo.fr



Fig. 1. Internal face of the right cheek at the first consultation. Note the erosive areas surrounded by a discrete keratotic, jagged border.
Fig. 1. Face interne de la joue droite lors de la première consultation. Noter les zones érosives entourées d'un discret halo kératosique, déchiqueté.



Fig. 3. Discretely fissurated tongue.
Fig. 3. Langue discrètement plicaturée.



Fig. 2. Internal face of the right cheek after 6 months of evolution. The erosive areas have strongly diminished in size and number.
Fig. 2. Face interne de la joue droite après 6 mois d'évolution. Les zones érosives ont nettement diminué en taille et en nombre.

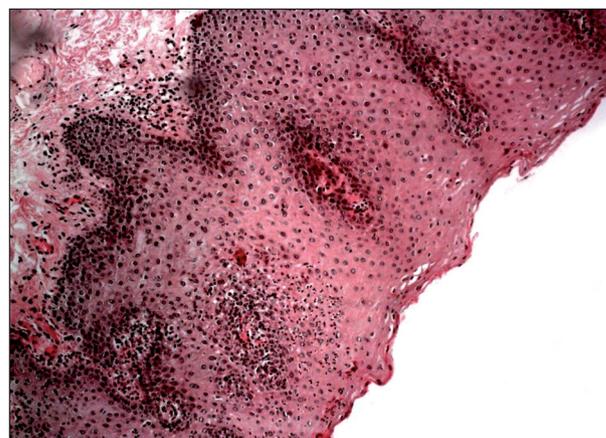


Fig. 4. Histopathological view of the lesion (mean magnification, hematoxylin-eosin staining). The epithelium is acanthotic and psoriasiform with a regular papillomatosis but no hyperkeratosis can be seen. The chorion is congestive and oedematous with an important inflammatory cell infiltrate and occasional exocytosis mainly in the papillas.
Fig. 4. Aspect histologique de la lésion (grossissement moyen, coloration hématoxyline-éosine). L'épithélium est acanthosique et psoriasiforme avec une papillomatose régulière, mais il n'y a pas d'hyperkératose. Le chorion est congestif et oedémateux avec un important infiltrat inflammatoire, et parfois une exocytose principalement dans les papilles.

A topical treatment of betamethasone was given to the patient for 10 days and for each new crisis. At the 15-days and 6-months controls, she reported a great decrease of pain and of the duration of the episodes. Nevertheless, lesions were always seen on the buccal mucosa even if their erosive component was considerably diminished (Fig. 2). Furthermore, we observed a migration of the lesions, which was characteristic of a geographic stomatitis.

Comments

Oral lesions of psoriasis are very uncommon and their existence is still disputed [5-7], because neither the clinical nor the histological changes are absolutely specific [1,2,5,8]. Nevertheless, for some authors a diagnosis of oral lesions of

psoriasis can be proposed when their clinical course runs parallel to that of the skin and is supported by histologic examination [1,2,5,6,8,9].

Fissurated tongue [4,7,10,11] and geographic tongue or stomatitis [10-12] are classically described as typical oral manifestations of psoriasis and seem to be statistically more prevalent in the psoriasis group. However, their link with psoriasis remains unproven [7]. Their histologic features are similar to those of a cutaneous psoriasis [3,9,13-15], but the histological distinction between psoriasis and isolated geographic/fissurated tongue cannot be made [11].

In this case, the oral lesions have an aspect of geographic stomatitis with atypical aspects that could also be assigned to a lichen planus or a bullous disease.

Geographic stomatitis is very rare [9,16] and usually shows flattened, circinate, erythematous areas surrounded by a keratotic border [15,17].

In the present case, the erythematous and erosive aspects are predominant and keratosis is clinically discrete and histologically absent. The erosive aspect was never described in the literature.

Like in geographic tongue, the lesions can migrate with time and show both active and remission phases [18]; our diagnosis of geographic stomatitis is mainly based on this feature.

Like in this case report, an association of geographic stomatitis with geographic/fissurated tongue is possible [19] and some patients report a sensation of burning and/or dryness [15].

Conclusion

Despite of a large controversy, there is some evidence that fissurated/geographic tongue or stomatitis present a statistical correlation with skin psoriasis. This fact has many clinical implications. Oral lesions usually do not interfere with daily activities but in some rare cases they can cause disability. In these cases, recognition of the pathology is essential. The diagnosis of an oral psoriasis depends mainly on the convergence of clinical arguments and histological arguments.

Finally, the reported case present unusual features which were never described so far and that could be source of misdiagnosis.

Competing interests: none

References

1. Younai FS, Phelan JA. Oral mucositis with features of psoriasis: report of a case and review of the literature. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 1997;84:61-7.
2. Zhu JF, Kaminski MJ, Pulitzer DR, Hu J, Thomas HF. Psoriasis: pathophysiology and oral manifestations. *Oral Dis* 1996;2:135-44.
3. Heitanen J, Salo OP, Kanerva L, Juvatoski T. Study of the oral mucosa in 200 consecutive patients with psoriasis. *Scand J Dent Res* 1984;92:50-4.
4. Tomb R, Hajj H, Nehme E. Oral lesions in psoriasis. *Ann Dermatol Venereol* 2010;137:695-702.
5. Sklavounou A, Laskaris G. Oral psoriasis: report of a case and review of the literature. *Dermatologica* 1990;180:157-9.
6. Migliari DA, Penha SS, Marques MM, Matthews RW. Considerations on the diagnosis of oral psoriasis: a case report. *Med Oral* 2004;9:300-3.
7. Costa SC, Hirota SK, Takahashi MDF, Andrade Jr H, Migliari DA. Oral lesions in 166 patients with cutaneous psoriasis: A controlled study. *Med Oral Patol Oral Cir Bucal* 2009;14:e371-5.
8. Bruce AJ, Rogers RS 3rd. Oral psoriasis. *Dermatol Clin* 2003;21:99-104.
9. Van der Wal N, Van der Kwast WA, Van Dijk E, Van der Waal I. Geographic stomatitis and psoriasis. *Int J Oral Maxillofac Surg* 1988;17:106-9.
10. Daneshpazhooh M, Moslehi H, Akhyani M, Etesami M. Tongue lesions in psoriasis: a controlled study. *BMC Dermatol* 2004;4:16-20.
11. Hernández-Pérez F, Jaimes-Avelaño A, Urquizo-Ruvalcaba Mde L, Díaz-Barcelot M, Irigoyen-Camacho ME, Vega-Memije ME, Mosqueda-Taylor A. Prevalence of oral lesions in patients with psoriasis. *Med Oral Patol Oral Cir Bucal* 2008;13:E703-8.
12. Morris LF, Phillips CM, Binnie WH, Sander HM, Silverman AK, Menter MA. Oral lesions in patients with psoriasis: a controlled study. *Cutis* 1992;49:339-44.
13. Fishman SL, Barnett ML, Nisengard RJ. Histopathologic, ultrastructure and immunologic findings in an oral psoriatic lesion. *Oral Surg Oral Med Oral Pathol* 1977;44:253-60.
14. Harrison PV, Skerrow D. A comparative study of psoriatic patients. *Br J Dermatol* 1982;106:637-42.
15. Espelid M, Bang G, Johannessen AC, Leira JI, Christensen O. Geographic stomatitis; report of 6 cases. *J Oral Pathol Med* 1991;20:425-8.
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;66:184-9.
17. Brooks JK, Balcrinas BA. Geographic stomatitis: review of the literature and report of five cases. *J Am Dent Assoc* 1987;115:421-4.
18. Hume WJ. Geographic stomatitis: a critical review. *J Dent* 1975;3:25-43.
19. Kaur I, Handa S, Kumar B. Oral lesions in psoriasis. *Int J Dermatol* 1997;36:78-9.