MUCOSAL PSORIASIS

SMARANDA ȚĂREAN*, MIRCEA AMBROS**, NICOLETA NEAGU***,
ALEXANDRU OANȚĂ*

Summary

Psoriasis, with its wide variety of clinical forms and locations, some of which being rare, is a dermatological condition that often requires a differential diagnosis with numerous other skin disorders. With this paper we aim to present the main clinical characteristics that psoriasis can show on the mucous membranes, respectively genital psoriasis and the manifestations on the oral mucosa.

Key words: *psoriasis, mucosa, genital, cheilitis.*

Received: 21.11.2022 *Accepted: 12.12.2022*

Psoriasis has a wide variety of clinical forms and localizations, some of which rare, thus requiring differential diagnosis with many other dermatological conditions.

Genital psoriasis

Genital psoriasis, through its biological and therapeutic particularities, can be individualized within the clinical forms of psoriasis. Genital psoriasis can be classified into 3 categories: genital psoriasis associated with inverse extra-genital psoriasis, genital psoriasis associated with inverse psoriasis (especially inguinal and/or in the gluteal cleft) and psoriasis with only genital location. Genital involvement is present in 33 to 49% of men with psoriasis, with a male/female sex ratio of 1.3 to 2.4. The prevalence reaches 7% in patients with inverse psoriasis (men and women alike) and 2-5% in patients with only genital psoriasis.

Clinically, genital psoriasis presents as one or more small, well-defined erythematous plaques located on the glans, foreskin, frenulum or scrotum. On the glans, in circumcised patients, psoriasis presents as erythemato-squamous plaques, and in uncircumcised patients the lesions are usually scale-free due to the moisture maintained by the foreskin. In uncircumcised people, genital psoriasis is most commonly located on the glans and on the inner surface of the foreskin. Gland lesions can be diffuse, and when the internal surface of the foreskin is also involved, the clinical image resembles a diffuse erythematous balanoposthitis. Sometimes a painful urethritis can be associated and is clinically characterized by a discreet perimeatal erythema without urethral discharge, but accompanied by uncomfortable symptoms, which are difficult to treat in this area. In men, inverted psoriasis involves the inguinal folds and

* SC Dermamed SRL, Făgăraș, Romania.
** Dermatology Clinic, Mureș Country Hospital, Târgu-Mureș, Romania.
*** Epidemiology Department, University of Medicine, Pharmacy, Science and Technology 'George Emil Palade' of Târgu-Mureș, Târgu-Mureș, Romania.

the scrotum, but sometimes the lesions can extend to the gluteal cleft and be centred by a very evocative fissure. On the scrotum and frenulum, psoriasis appears as one or multiple slightly scaly, erythematous plaques, or as diffuse erythema, sometimes exudative, with fissures on the surface. When there is only genital involvement, the presence of buttock erythema or omphalitis can point towards the diagnosis of psoriasis. Rarely, pustular types of psoriasis with only genital involvement, prepuce fibrosis, or the presence of papular and infiltrated lesions on the gland can be observed.

As symptomatology, genital psoriasis lesions may be accompanied by itching, burning sensation or pain. Persistence of lesions through the Kobner phenomenon is possible due to urine, friction from wearing tight clothes and sexual intercourse.

Vulvar involvement is also common, although few women seek medical advice for this. Approximately one third of women with plaque psoriasis have simultaneous vulvar involvement. Complication with candidiasis makes the differential diagnosis difficult.

Regarding the relationship between genital psoriasis and circumcision, it was found that in uncircumcised patients the foreskin and the proximal part of the gland are especially affected, while in circumcised patients the lesions on the gland are more diffuse and scaly. A study carried out on 357 patients with penile dermatosis and 305 controls showed that genital psoriasis was the most common dermatosis (26% of cases) [1], appearing especially in uncircumcised men, possibly due to the Kobner phenomenon caused by the accumulation of epithelial deposits, glandular secretions and urine between the gland and foreskin. Another study conducted in the

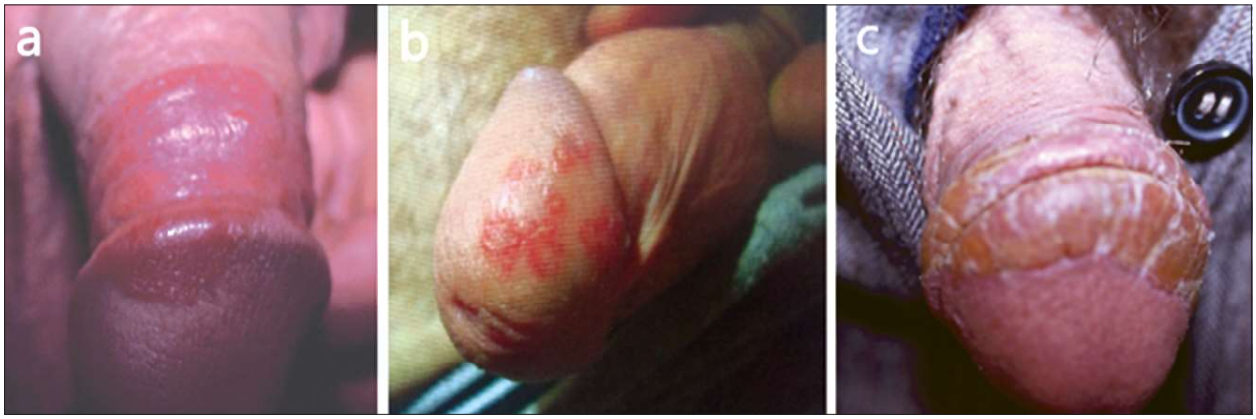

Figure 1. a, c. Genital psoriasis with glans involvement. b. Genital pustular psoriasis (photo collection).

Figure 2. a. Geographic tongue. b. Fissured tongue. c. Psoriatic cheilitis (photo collection).

Netherlands on 87 patients showed an important alteration of the quality of life in patients with genital psoriasis, especially in women, leading to disturbances of their sexual life [2].

The differential diagnosis of genital psoriasis includes various conditions such as atopic dermatitis, seborrheic dermatitis, contact dermatitis, dermatophytoses, nonspecific balanitis, lichen planus, Zoon balanitis, Queyrat erythroplasia, genital Paget's disease, epidermoid carcinoma, candida balanitis (in the pustular form), sclerous lichen (in foreskin fibrosis), secondary syphilis with condyloma lata presentation (in the papulo-infiltrative form), and in women especially with candida vulvo-vaginitis.

Oral psoriasis

Geographic tongue

Geographic tongue or benign migratory glossitis clinically represents the physiological lingual exfoliation, relatively common in the general population (between 1% and 2.5%), without gender predisposition. The condition is significantly more common in people with psoriasis and can also occur after certain medications: oral corticosteroids [3], tyrosine kinase inhibitors (sorafenib, sunitinib) [4].

Clinically, it presents as depapilated lingual areas with dimensions of 0.5-5 cm affecting the filiform papillae, enclosed by a slightly raised serpiginous margin, yellowish-white in colour, located on the dorsal and lateral surfaces of the tongue. The topography of these lesions is unpredictable, changing over time. Atypical forms of the condition can be located on the ventral surface of the tongue or on extralingual buccal surfaces, recurring in the same place. Among patients with geographic tongue, 10% are symptomatic requiring mostly topical treatment with tacrolimus 0.1% cream [5], corticosteroids [6], retinoids [7] or oral retinoids [8].

The diagnosis of geographic tongue is clinical, based on the anamnesis (migration of lesions, their resolution and spontaneous recurrences), not requiring a complementary assessment. Biopsy of the lesions shows an appearance similar to pustular psoriasis.

Furrowed tongue

Furrowed (fissured or scrotal) tongue is characterized by the presence of an antero-posterior median groove located on the dorsal surface of the tongue from which multiple lateral fissures branch. Its prevalence is estimated between 5% and 6.5% in the general population, most of the time it is isolated, but it can also be associated with geographic tongue [9]. The diagnosis is clinical, histopathological examination not being necessary. Furrowed tongue is found in Melkersson-Rosenthal syndrome, but also in psoriasis.

In a study [10] of 306 patients with psoriasis, 8% of them had fissured tongue, 5.6% geographic tongue, and 1.6% simultaneous involvement. Also, this study showed the absence of the link between geographic language and tobacco and alcohol consumption. In contrast, a study performed in Turkey only showed the protective role of smoking in the occurrence of geographic tongue [9]. A Lebanese study [11] on 400 patients with psoriasis and 1000 controls found the presence of furrowed tongue in 33.2% versus 9.9% of cases and geographic tongue in 7.7% versus 1% of cases. In case of pustular psoriasis, the prevalence of furrowed tongue was 83.3%.

Psoriatic cheilitis

Psoriatic cheilitis has very rarely been described in the literature, as well as the involvement of the oral mucosa. Clinically, it presents as erythemato-squamous plaques with pearly-white scales and fissures, which can affect both lips. It can be accompanied by other specific skin locations, or it can be the only manifestation of psoriasis, preceding the appearance of skin lesions by several years [12]. Repeated micro-trauma, infectious cheilitis, as well as dietary changes can lead to the appearance of psoriatic cheilitis in people with a genetic predisposition to psoriasis [11]. Psoriatic cheilitis with chronic evolution can be accompanied by moderate to severe discomfort in various daily activities such as chewing and swallowing. In women, it can also be a cosmetic and psychological problem [13].

Chronic cheilitis, especially actinic cheilitic, candidia infections, chronic lupus erythematosus, lichen planus and eczema can be confused with lip psoriasis. In the case of a long-standing eczematiform treatment-refractory (with dermatocorticoids) eruption of the lips, psoriasis should always be suspected and a biopsy should be performed. In children, lip psoriasis can be confused with dermatitis secondary to salivation or oral candidiasis.

Bibliography

1. Mallon E, Hawkins D, Dinneen M, et al. Circumcision and genital dermatoses. *Arch Dermatol*. 2000;136(3): 350-354. doi:10.1001/archderm.136.3.350.
2. Meeuwis K a. P, de Hullu JA, van de Nieuwenhof HP, et al. Quality of life and sexual health in patients with genital psoriasis. *Br J Dermatol*. 2011;164(6):1247-1255. doi:10.1111/j.1365-2133.2011.10249.x.
3. Shulman JD, Carpenter WM. Prevalence and risk factors associated with geographic tongue among US adults. *Oral Dis*. 2006;12(4):381-386. doi:10.1111/j.1601-0825.2005.01208.x.
4. Hubiche T, Valenza B, Chevreau C, Fricain JC, Del Giudice P, Sibaud V. Geographic tongue induced by angiogenesis inhibitors. *Oncologist*. 2013;18(4):e16-17. doi:10.1634/theoncologist.2012-0320.
5. Ishibashi M, Tojo G, Watanabe M, Tamabuchi T, Masu T, Aiba S. Geographic tongue treated with topical tacrolimus. *J Dermatol Case Rep*. 2010;4(4):57-59. doi:10.3315/jdcr.2010.1058.
6. Lazaro P. [Current findings in geographic tongue]. *Inf Dent*. 1983;65(20):1759-1767.
7. Helfman RJ. The treatment of geographic tongue with topical Retin-A solution. *Cutis*. 1979;24(2):179-180.
8. Casper U, Seiffert K, Dippel E, Zouboulis CC. [Exfoliatio areata linguae et mucosae oris: a mucous membrane manifestation of psoriasis pustulosa?]. Hautarzt. 1998;49(11):850-854. doi:10.1007/s001050050837
9. Miloğlu O, Göregen M, Akgül HM, Acemoşlu H. The prevalence and risk factors associated with benign migratory glossitis lesions in 7619 Turkish dental outpatients. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2009;107(2):e29-33. doi:10.1016/j.tripleo.2008.10.015
10. Zargari O. The prevalence and significance of fissured tongue and geographical tongue in psoriatic patients. *Clin Exp Dermatol*. 2006;31(2):192-195. doi:10.1111/j.1365-2230.2005.02028.x.
11. Tomb R, Hajj H, Nehme E. [Oral lesions in psoriasis]. *Ann Dermatol Venereol*. 2010; 137 (11): 695-702. doi:10.1016/j.annder.2010.08.006.
12. Oanță A, Irimie M. Psoriazisul buzelor. În: Oanță A, Irimie M. *Dermatologia în cazuri clinice*, vol II. Brasov: Editura Universității Transilvania; 2004; 60-62.
13. Hedström L, Bergh H. Sublingual varices in relation to smoking and cardiovascular diseases. *Br J Oral Maxillofac Surg*. 2010;48(2):136-138. doi:10.1016/j.bjoms.2009.05.005.

Conflict of interest
NONE DECLARED

Correspondance address: Dr. Ambros Mircea
Dermatology Clinic, Mureș Country Hospital, Nr. 12 Gh. Doja Street, Târgu-Mureș, Romania
e-mail: ambrosmircea@yahoo.fr