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GENITAL POROKERATOSIS CONFIRMED BY HISTOPATHOLOGY AND REFLECTANCE CONFOCAL MICROSCOPY: A RARE CASE REPORT**G. Frattin^{1,2}, A. Bolzon^{1,2}, E. Pezzolo¹, L. Germini¹, L. Gnesotto¹, A. Corrà¹, G. Mioso¹, Z. Fratton¹, L. Schiesari¹**¹UOC Dermatologia, Ospedale San Bortolo, Vicenza, Italy; ²Università degli Studi di Padova, Clinica Dermatologica, Italy**Keywords:** Porokeratosis, Reflectance Confocal Microscopy.

Introduction. Genital porokeratosis is a rare presentation of porokeratosis, a disorder of epidermal keratinization defined by the presence of cornoid lamellae. Because of its uncommon location and variable morphology, it may mimic inflammatory, infectious or neoplastic genital dermatoses, often leading to delayed diagnosis. Reflectance confocal microscopy (RCM) may provide non-invasive clues and help select the most appropriate biopsy site.

Materials and Methods. A 45-year-old otherwise healthy man, with no history of immunosuppression or sexually transmitted infections, presented with multiple pruritic annular plaques involving the inguinal region, inner thigh, penile base and scrotum. The lesions had been present for approximately four years. Clinical examination, RCM and histopathological assessment were performed. A biopsy was obtained from the raised keratotic border of a representative lesion on the right inner thigh.

Results. RCM showed a well-defined peripheral rim corresponding to the clinically visible keratotic border, associated with focal interruption of the epidermal architecture and loss of the physiological honeycomb pattern. Hyperreflective parakeratotic material within the epidermal furrow was observed, suggesting the in vivo counterpart of cornoid lamellae. Histopathology revealed compact hyperkeratosis, focal erosion, moderate-to-severe irregular acanthosis, moderate spongiosis with mild lymphocytic exocytosis, and two areas

of dyskeratosis surmounted by marked hyperparakeratosis, consistent with cornoid lamellae. A moderate discontinuous band-like lymphocytic infiltrate was present in the superficial dermis. PAS, PASD and Alcian blue stains were negative for fungal elements; immunohistochemistry for herpes simplex virus and *Treponema pallidum* was negative. Previous treatment with topical corticosteroids had been ineffective, and the patient is currently receiving acitretin 25 mg/day with clinical follow-up.

Conclusions. This case highlights genital porokeratosis as a rare and underrecognized diagnosis in chronic annular genital and paragenital plaques. The combined use of clinical examination, RCM and targeted histopathology may improve diagnostic accuracy, support biopsy site selection and strengthen clinicopathological correlation in anatomically sensitive areas.

References

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POSTERS

