### **QUIZ SECTION**

# A Brownish Verrucous Plaque on the Intergluteal Cleft: A Quiz

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A 62-year-old woman presented with a 3-year history of a pruritic skin rash on the intergluteal cleft area. It first appeared as discrete yellowish scaly papules, which, over time, became confluent and formed a plaque. The patient had no past medical history, and there was no personal or family history of any skin disease. Physical examination

revealed a brownish hyperkeratotic verrucous plaque with well-demarcated satellite papules (Fig. 1A).

An incision biopsy from the peripheral margin of the lesion (Fig. 1B) was taken for histopathological examination.

What is your diagnosis? See next page for answer.

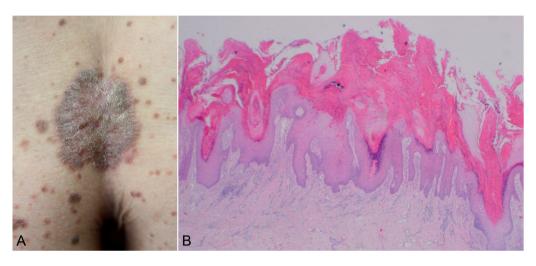


Fig. 1. (A) A brownish hyperkeratotic verrucous plaque with well-demarcated satellite papules. (B) Digitated psoriasiform epidermal hyperplasia with elongated rete ridges showing a multiple cornoid lamellae with underlying hypogranulosis and dyskeratotic keratinocytes in the centre (haematoxylin and eosin × 20).

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### **ANSWERS TO QUIZ**

# A Brownish Verrucous Plaque of the Intergluteal Cleft: Comment

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## Diagnosis: Porokeratosis ptychotropica

Haematoxylin-eosin staining of the specimen showed digitated psoriasiform epidermal hyperplasia with elongated reteridges. It also revealed the formation of multiple columns of parakeratosis with underlying hypogranulosis and dyskeratotic keratinocytes, consistent with cornoid lamellae. In the superficial dermis there was a sparse superficial perivascular lymphocytic infiltration. The clinical and histological features led to a diagnosis of porokeratosis ptychotropica.

#### DISCUSSION

Porokeratosis is a disease of epidermal keratinization with characteristic findings, namely an expanding keratotic lesion and an atrophic centre. Clinically, 5 variants of porokeratosis are characterized: porokeratosis of Mibelli, disseminated superficial actinic porokeratosis, porokeratosis palmaris et plantaris dissemniata, linear porokeratosis, and punctuate porokeratosis. A lesser-known and rare variant, porokeratosis ptychotropica, was initially reported by Lucker et al. (1) in 1995. The name porokeratosis ptychotropica is derived from the Greek words ptyche and trophe, meaning "fold" and "turning". It is used to describe the flexural involvement (1). There have been 11 cases of porokeratosis ptychotropica reported in the dermatological literature (2–6). Some authors suggest that porokeratosis ptychotropica is not a distinct clinical variant of porokeratosis, but a subset of genital porokeratosis of Mibelli (7). In our opinion, the characteristic clinical and histological features of bilateral distribution, pruritus, confluence, and multiple cornoid lamellae, distinguishes porokeratosis ptychotropica from other clinical variants of porokeratosis.

Like other clinical variants of porokeratosis, the disease does not respond well to treatment. The only success reported was seen after dermabrasion (3). Other treatments attempted include fluorouracil, isotretinoin, acitretin, carbon dioxide laser ablation, pulsed dye laser, Q-switched Nd-YAG laser, and cryotherapy (3). However, recurrences are common and it is difficult to treat the lesion completely.

### REFERENCES

- 1. Lucker GP, Happle R, Steijlen PM. An unusual case of porokeratosis involving the natal cleft: porokeratosis ptychotropica? Br J Dermatol 1995; 132: 150–151.
- Mcguigan K, Shurman D, Campanelli C, Lee JB. Porokeratosis ptychotropica. A clinically distinct variant of porokeratosis. J Am Acad Dermatol 2009; 60: 501–503.
- 3. Wallner JS, Fitzpatrick JE, Brice SL. Verrucous porokeratosis of Mibelli on the buttocks mimicking psoriasis. Cutis 2003; 72: 391–393.
- Thomas C, Ogboli MI, Carr RA, Charles-Holmes R. Hypertrophic perianal porokeratosis in association with superficial actinic porokeratosis of the leg. Clin Exp Dermatol 2003: 28: 676–677
- 5. Huang SL, Liu YH, Chen W. Genitogluteal porokeratosis. J Eur Acad Dermatol Venereol 2006; 20: 899–900.
- 6. Yu HJ, Park KT, Oh DH, Kim JS, Park YW. A case of the hyperkeratotic variant of porokeratosis Mibelli. J Dermatol 2006; 33: 291–294.
- Chen TJ, Chou YC, Chen CH, Kuo TT, Hong SH. Genital porokeratosis: a series of 10 patients and review of the literature. Br J Dermatol 2006; 155: 325–329.