Dermatology Practical & Conceptual

A Rare Case of Follicular Porokeratosis Ptychotropica: When Dermoscopy Enghlitens Clinics

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Introduction

Porokeratosis is an epidermal keratinization disorder characterized clinically by annular plaques with keratotic ridge and an atrophic center. Several variants have been described [1]. Porokeratosis ptychotropica (PP) has been recently individualized as a new variant [2]. It is characterized by verrucous plaques localized in the regions of the buttocks, most commonly the gluteal cleft. Its dermoscopic features have been rarely reported [2]. Herein, we describe a rare case of PP with follicular involvement and particular dermoscopic patterns.

Case Presentation

A 48-year-old man with no particular medical history presented to our outpatient department with the chief complaint of pruritic gluteal lesions evolving for 15 years. Family history revealed no similar lesions. Physical examination noted well-demarcated, red–brown and verrucous plaques located on both buttocks with satellite hyperkeratotic, papules (Figure 1A). Dermoscopy showed a raised scaly rim, limiting a non-atrophic center, gray-brown dots, and pigmentation along the keratin rim (Figure 1B). Interestingly, we noted prominent follicular plugging and follicular spicules in 2 lesions (Figure 1, C and D). Multiple polymorphous vessels are present within the keratin rim as well as peripheral vascularization adjacent to but outside the keratin rim (Figure 1, C and D). A skin biopsy specimen showed epidermal hyperplasia, multiple cornoid lamellae in the stratum corneum with an absence of underlying granular zone, and dyskeratotic cells in the spinous layer. Slight lymphocytic infiltration was also seen in the upper dermis. Multiple serial sections revealed cornoid lamella involving the follicular infundibulum (Figure 2). Based on clinical, dermoscopic, and histopathological features, the diagnosis of PP with follicular

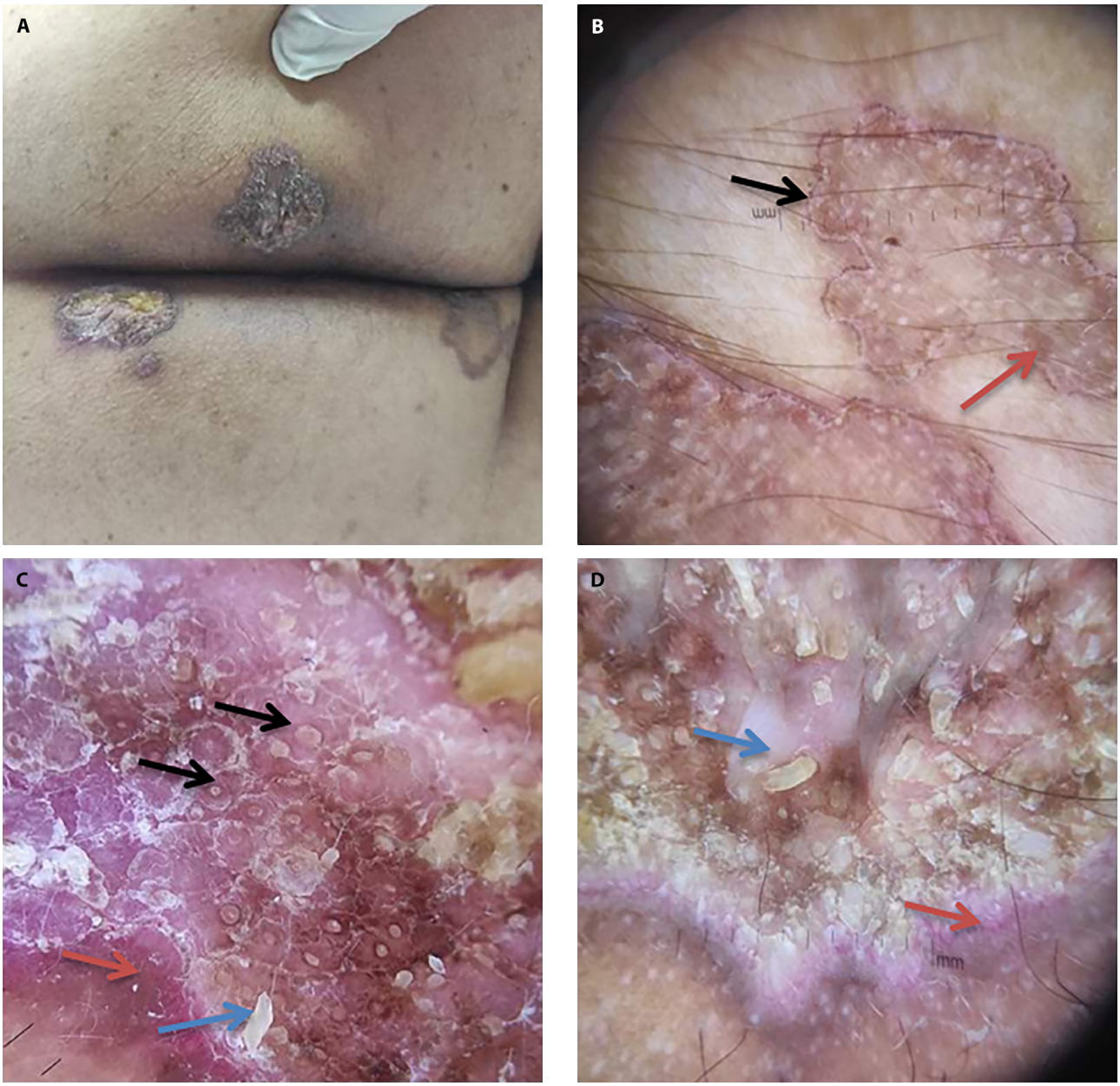

Figure 1. (A-D) A 48-year-old man with no particular medical history who presented with: (A) Ptychotropic porokeratosis showing well-demarcated, red–brown, and verrucous plaques located on both buttocks with satellite roundish, hyperkeratotic, brownish papule. (B) Polarized dermoscopic image (10X Dermlite DL4) showing a raised scaly rim (black arrow), limiting a non-atrophic center with gray-brown dots and pigmentation along the keratin rim (red arrow). (C,D) Polarized dermoscopic image (10X Dermlite DL4) showing a cobblestone-like pattern with prominent keratotic follicular plugs (black arrow) and spicules (blue arrow). Multiple polymorphous peripheral vessels are present within the keratin rim (red arrow).

involvement was established. The patient was treated with CO2 laser vaporization for the verrucous lesions. We obtained the patient's consent.

Conclusions

PP is a rare form of porokeratosis. Since its first description by Lucker *et al* in 1995, about 30 cases have been reported in the literature. Misdiagnosis of PP is common, and differential diagnosis often includes psoriasis, chronic eczema, Bowen disease, dermatophytosis and candidiasis [2]. Histopathology generally confirms the diagnosis showing multiple cornoid lamellae [2]. Dermoscopy is of recognized value in assisting the diagnosis of porokeratosis. However, only a few cases describe the dermoscopic features of PP [2,3]. The most common dermoscopic patterns, which are not specific to this variant include a characteristic keratin rim and dotted vessels [2,3]. The peripheral vascularization observed in our case have been rarely reported in porokeratosis [3]. Moreover the keratotic follicular plugs which were present in our patient have been recently described in only 3 cases: 2 in the face and one in the scalp [4,5]. It reflects the follicular involvement in porokeratosis. In fact, follicular porokeratosis is a newly described variant with less than 20 reported cases,

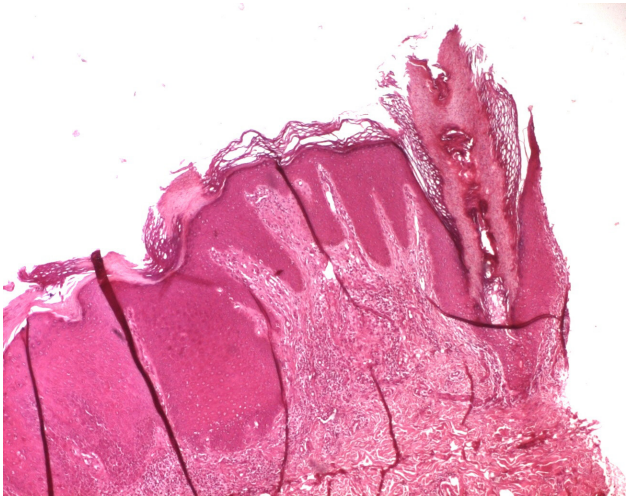

Figure 2. The epidermis shows hyperplasia, multiple cornoid lamellae in the stratum corneum with cornoid lamella involving the follicular infundibulum, an absence of underlying granular zone and dyskeratotic cells in the spinous layer. The superficial dermis contains slight lymphocytic infiltration (H&E stain X40).

in which dyskeratosis extending into the follicular infundibulum is the hallmark of histopathology. It classically presents, in middle-aged patients with porokeratosis of Mibelli and disseminated superficial actinic porokeratosis [6].

In conclusion, we reported a rare case of follicular PP and highlighted the role of dermoscopy in guiding the diagnosis of such atypical clinical presentation with the recently-described dermoscopic pattern of follicular plugging and spicules as a diagnostic key for the follicular involvement. We aimed by presenting this case to gain up-to-date knowledge on this rare entity.

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