Dermatology Practical & Conceptual

Dermoscopic Features of an Actinic Comedonal Plaque – a Rare Ectopic Form of Favre-Racouchot Syndrome

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Key words: Favre-Racouchot, actinic comedonal plaque, dermoscopy, cribriform, chrysalides, comedones

Citation: Visintainer Melo P, Ossanai Schoenardie B, Fortes Escobar G, Ranger Bonamigo R. Dermoscopic features of an actinic comedonal plaque – a rare ectopic form of Favre-Racouchot syndrome. *Dermatol Pract Concept.* 2023;13(1):e2023034. DOI: https://doi.org/10.5826/dpc.1301a34

Accepted: June 7, 2022; **Published:** January 2023

Funding: None.

Competing Interests: None.

Authorship: All authors have contributed significantly to this publication.

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Introduction

Cumulative solar exposure has been studied for years. In 1951, nodular cutaneous elastosis with cysts and comedones on sun damaged skin was described as Favre-Racouchot syndrome [1]. It usually manifests as symmetrical lesions on the periorbital or temporal areas and mostly affects older men [2]. The ectopic form of this syndrome, called actinic comedonal plaque, has rarely been reported and presents with lesions mainly on the upper extremities. However, there is a lack of dermoscopic descriptions of this entity.

Case Presentation

A 59-year-old female smoker, phototype IV, presented with two plaques on her arms that had been growing for the last two years. The first lesion, on the lateral aspect of the left arm, was an erythematous cribriform plaque, surrounding a central atrophic area, with comedones and small cysts (Figure 1A). The second lesion, on the right forearm, consisted in an area of few grouped erythematous papules, with comedones (Figure 1B). Dermoscopy (DermLite Cam®, magnification 10×, polarized capture with immersion fluid) showed an erythematous background, scar-like depigmentation areas, chrysalides and fine linear irregular vessels. In the central area, small islands of normal skin could be visualized, while at the periphery of the plaques there were milia cysts and comedones on (Figure 2, A and B). Possible dermoscopic differential diagnosis included colloid milium, milia, syringoma, discoid lupus and trichoepithelioma. Histopathology revealed accentuated infundibular dilatation with follicular plugging (seen clinically and dermoscopically as milia cysts and comedones) and circumjacent fibrosis with loss of elastic fibers (Figure 3), which corresponded to areas of the scar-like depigmentation and chrysalides on dermoscopy. Based on the clinical and histopathologic

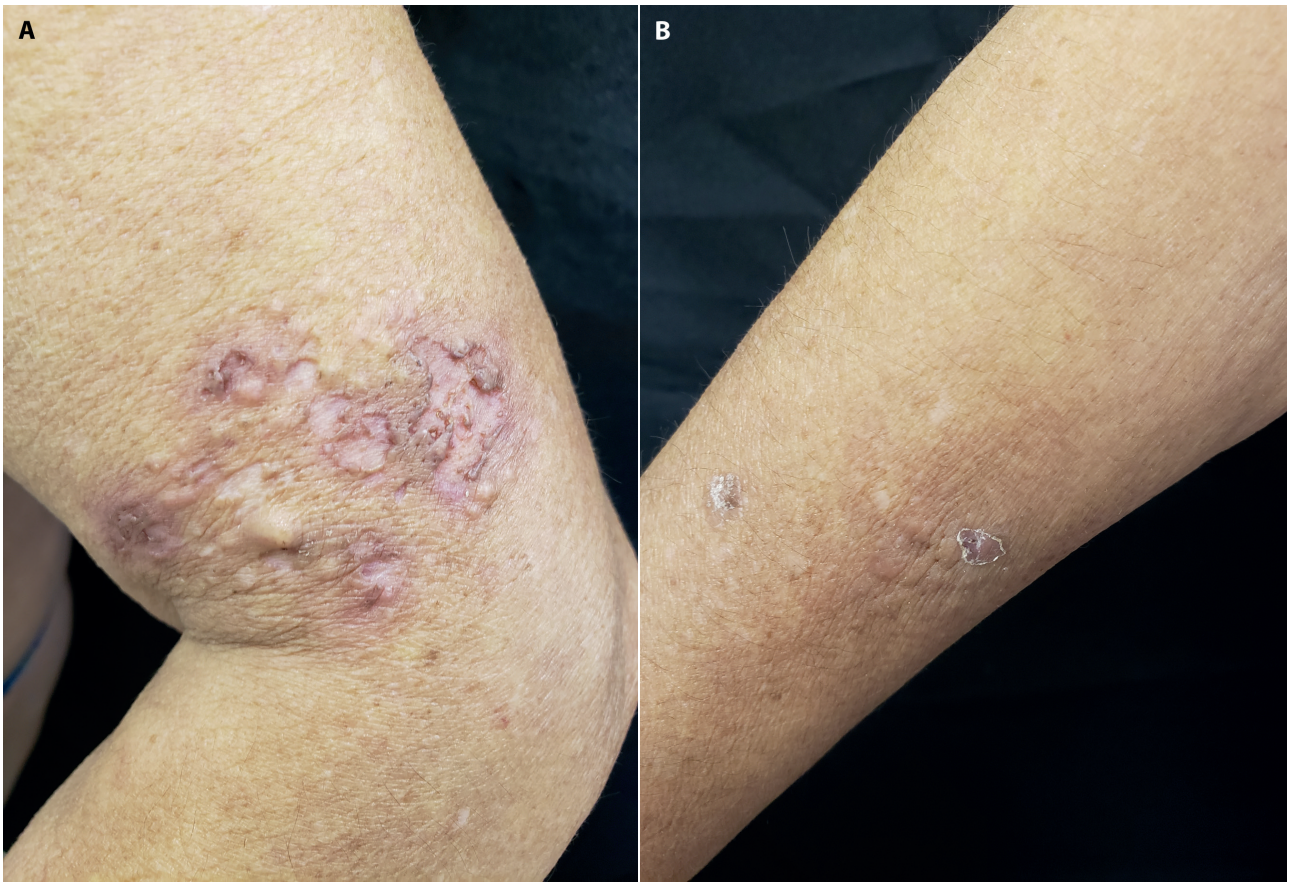

Figure 1. Clinical findings of actinic comedonal plaque. (A) Erythematous cicatricial cribriform plaque, with comedones and small cysts on the left arm. (B) Grouped erythematous papules with comedones on the right forearm.

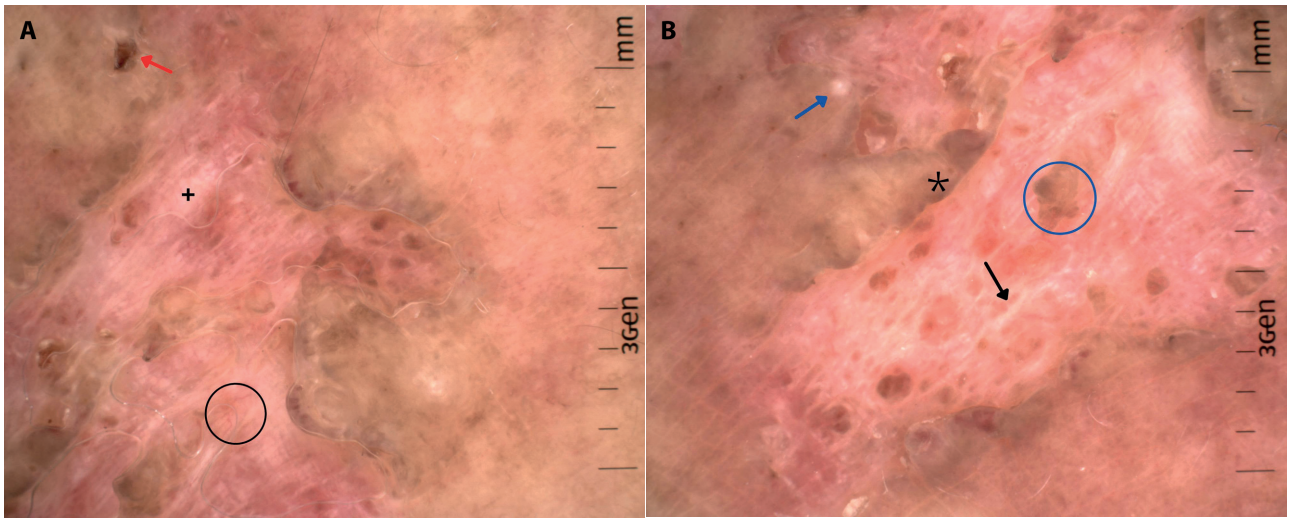

Figure 2. Dermoscopic findings of actinic comedonal plaque. (A,B) Clinical cribriform borders (asterisk) surrounding a dermoscopic erythematous background, scar-like depigmentation areas (plus sign), chrysalides (black arrow) and fine linear irregular vessels (black circle). In the central area, small islands of normal skin can be visualized (blue circle), as well as milia cysts (blue arrow) and comedones (red arrow) on the periphery of the plaques.

findings, the diagnosis of actinic comedonal plaque was established.

The actinic comedonal plaque is a variant of Favre-Racouchot syndrome, which can be found on sun damaged skin, such as the forearms. It was first described by Eastern et al in 1980 in five fair-skinned men older than 50 years of age [3]. The pathogenesis is uncertain, but excessive chronic UV exposure, cigarette smoking and radiation therapy seem to be risk factors [4]. The disease can be associated with actinic keratosis, cutis rhomboidalis nuchae and even squamous cell carcinoma [5]. Histology reveals marked solar elastosis, epidermal and sebaceous gland atrophy, and enlarged dilated

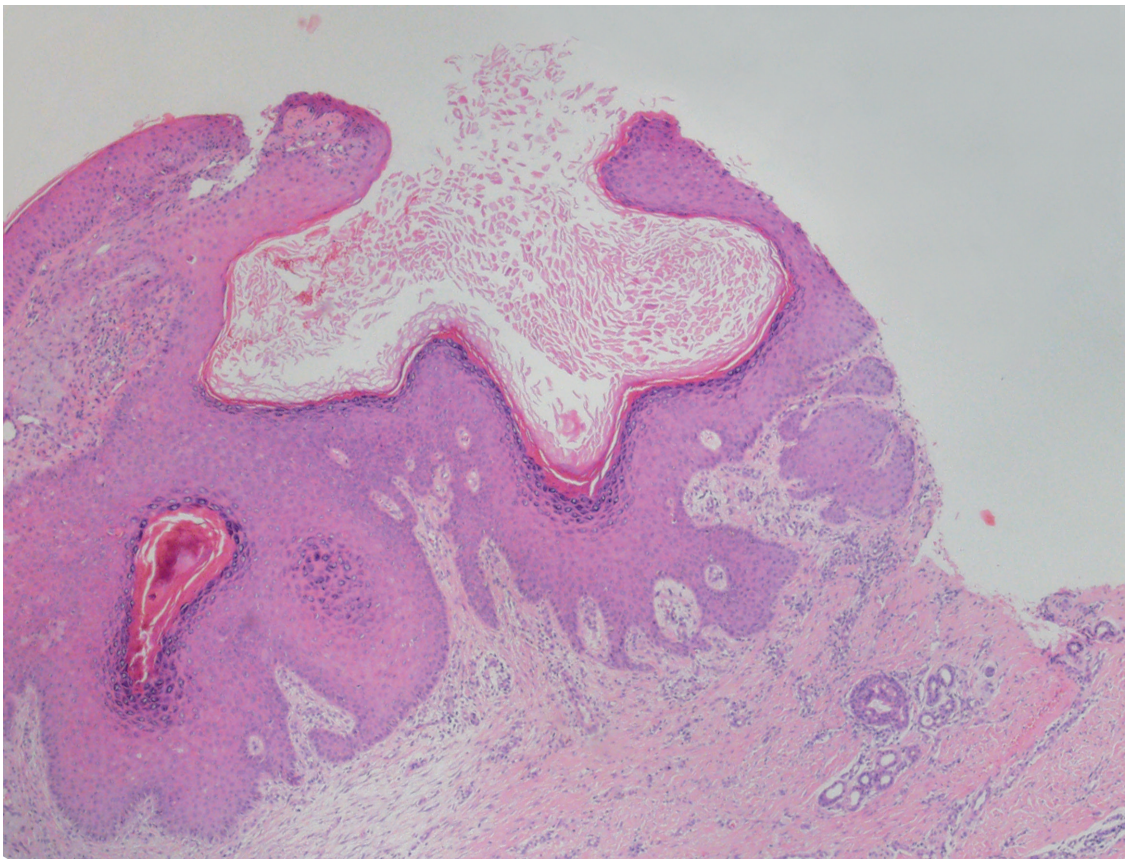

Figure 3. Histopathology showing infundibular dilatation surrounded by fibrosis and elastosis (H&E, x40).

pilosebaceous infundibulum with regularly stratified epithelium. Comedones are similar to those of acne vulgaris [4]. The differential diagnosis includes actinic granuloma, chloracne, acne vulgaris, milia cysts, sebaceous gland hyperplasia, syringoma and trichoepithelioma [1]. Treatment remains a challenge, with reports describing the use of CO_2 laser, retinoic acid cream, retinoid acid peeling and cryotherapy [3,5]. We prescribed a daily use of topic adapalene gel 1mg/g for our patient, however she was lost to follow-up during the COVID-19 pandemic and we were unable to evaluate the clinical response.

Conclusions

To the best of our knowledge, this is the first description in the literature regarding the dermoscopic features of the actinic comedonal plaque. We observed a clinical cribriform border, along with a dermoscopic central area with an erythematous background, chrysalides and fine linear irregular vessels. In addition, milia cysts and comedones were also visualized. Therefore, dermoscopy may be an additional tool for the assessment of this condition, improving the ability to identify structures in order to establish the correct diagnosis.

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