

Actinic comedonal plaque-variant of Favre-Racouchot syndrome: report of two cases*

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Abstract: The actinic comedonal plaque is characterized by papules, cysts and comedones forming a yellowish plaque in areas of chronic sun exposure skin. There are few reports in literature about this entity, considered a rare and ectopic form of Favre-Racouchot Syndrome. We report two cases of lesions located on forearms and thorax. Favre-Racouchot Syndrome is a condition usually restricted to the periorbital area; however, there are reports of similar findings in atypical locations, such as forearms and chest, which are known as actinic comedonal plaque. Ultraviolet radiation exposure is the main factor involved in its pathogenesis. The objective of this study was to provide accurate knowledge of this dermatosis and stimulate dermatologists to provide a correct diagnosis of the condition.

Keywords: Facial dermatoses; Photosensitivity disorders; Skin aging; Ultraviolet rays

INTRODUCTION

The term photoaging refers to cutaneous alterations caused by chronic sun exposure. Among these alterations we can mention the Favre-Racouchot syndrome, which is characterized by multiple open comedones and cysts which develop in the lateral and lower periorbital region, with marked solar elastosis of adjacent skin.¹⁻³ We report two cases of atypical locations of this anomaly, named actinic comedonal plaque, composed of papules, cysts and comedones in sun-exposed areas such as forearms, thorax and chest. There are few reports of similar cases in literature considering the actinic comedonal plaque, a rare and ectopic form of Favre-Racouchot Syndrome.^{1,2}

CASE REPORT

Case 1: Male patient, 51 years old, bricklayer and smoker, presented erythematous plaques on forearms and anterior region of thorax with progressive growth, that had been evolving for 1 year. Lesions were painful and drained seropurulent secretion sporadically. At the dermatological examination we noticed yellowish erythematous crusted plaques with presence of some comedones and papulous surface with cicatricial aspect around the edges, measuring approximately 5 cm, located on the anterior thorax region and forearms (Figures 1 and 2). Initially we raised diagnostic hypotheses of actinic keratosis and basal cell carcinoma and biopsy of lesions was performed. The treatment proposed was antibiotics

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FIGURE 1: Erythematous plaque of papulous surface with edges of cicatricial aspect in the anterior region of thorax



FIGURE 2: Erythematous plaque of papulous surface and raised edges which drain seropurulent secretion under pressure. Presence of some comedones was noticed

therapy with cefalexin for 7 days, without success. The biopsy revealed pseudocarcinomatous epidermal hyperplasia, basophilic degeneration of collagen and chronic inflammatory suppurative infiltrate involving the follicular epithelium, compatible with actinic comedonal plaque (Figure 3). Proposed therapy was the use of sunscreen and retinoic acid in 0.1% concentration, with significant improvement of lesions after 3 months of follow-up. The patient remains under outpatient clinic monitoring at this service.

Case 2: Female patient, 75 years old, reported the onset of asymptomatic hyperchromic macular lesion on right forearm with progressive increase of local volume. At the physical examination she presented an erythematous plaque with papular surface and about 3 cm in diameter on the extensor side of right forearm, with elevated edges and presence of comedones (Figures 4 and 5). Histopathological

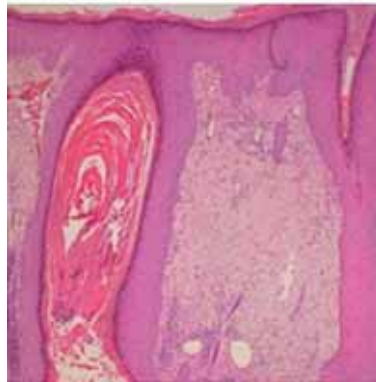
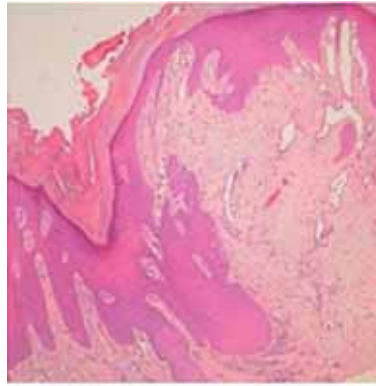


FIGURE 3: Pseudocarcinomatous epidermal hyperplasia, basophilic degeneration of collagen and chronic inflammatory suppurative infiltrate involving the follicular epithelium, compatible with actinic comedonal plaque

examination showed an actinic comedonal plaque. Treatment was conducted with retinoic acid 0.05% cream, 1 cryotherapy session of 20 seconds freezing and 1 session of peeling with retinoic acid 8%, all of them with good response.

DISCUSSION

The variant of Favré-Racouchot syndrome named actinic comedonal plaque corresponds to development of yellowish plaques with cysts and comedones which drain secretion and are found on the neck, thorax, dorsum of the nose, helix of ears and forearms.^{1,2} It is known that ultraviolet radiation causes hyperplasia of sebaceous glands inducing elastic fiber degeneration. The loss of supporting properties of dermis induces distension of the infundibular canal of the sebaceous follicles, which explains the onset of comedones in uncommon sites, such as forearms and chest.³ Clinically these lesions are mistaken for basal cell carcinoma, amyloidosis and nodular chondrodermatitis of the helix.³ Histopathology demonstrates a slightly acanthotic epidermis with orthokeratosis. Dilated follicles and large cystic structures are detected in middle and lower dermis, coated with flattened epidermis containing comedones. In the upper dermis there is focal elastosis with severe degeneration and basophilic fragmentation of collagen bundles.^{3,4} John SM and Hamm H observed,



FIGURE 4: Erythematous plaque of papulous surface, approximately 3 cm in diameter, on extensor side of right forearm.



FIGURE 5: In greater magnification, erythematous plaque of papulous surface, with elevated edges and presence of comedones

in 1993, the development of comedones and cysts under a yellowish plaque in the forearm region of a 59-year-old woman with a history of 3-year evolution of chronic sun exposure, with secretion drainage. The patient underwent treatment with topical retinoic acid and courses of oral minocycline, with remission of inflammatory lesions but discrete improvement of cysts and comedones.⁴ In our reports, we observed significant improvement of lesions with long-term use of retinoic acid and cryotherapy, associated with photoprotection. Hauptman G and Kopf A, in 1997, reported a case of actinic plaque located on the forehead of a 75-year-old man with significant

photodamage.⁵ Sudy E et al, in 2006, described a case of actinic plaque onset in a previous granuloma annulare lesion in a patient who developed insulin-dependent diabetes mellitus. The treatment of diabetes resulted in total remission of lesions.⁶ Complementary studies are necessary with the goal of identifying other factors associated with the development of these lesions, finding other therapeutic possibilities and studying long-term evolution of the pathology. The correct diagnosis, orientation regarding the benign character of the disease and incentive to wearing photoprotection are important measures which should be clearly explained by the dermatologist. □

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