Case Report

Erosive Pustular Dermatosis of the Scalp Induced by Imiquimod

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1. Introduction

Erosive pustular dermatosis of the scalp (EPDS) is a rare condition characterized by sterile pustules, erosions, and crusted lesions on the scalp of elderly patients. This inflammatory disorder has an unknown origin and it could develop into areas of alopecia that tend to be atrophic. An 84-year-old Caucasian man presented with a several months history of painful erythematous erosions and crusts on his scalp. The lesions appeared after treatment with imiquimod cream for actinic keratoses. Previous therapies included topical antibiotics and topical steroids. Physical examination revealed the presence of extensive erosions and crusts on the scalp, with minute pustules on the sides. The clinical features and the medical history led us to the diagnosis of EPDS. Treatment with systemic steroid was administered with improvement observed after ten days. The clinical manifestations of EPDS completely resolved after 2 months, without clinical relapses.
of EPDS was made. According to timing of clinical manifestations and anamnestic data, we could infer that the disease was associated with a history of actinic keratosis and androgenetic alopecia and had been triggered by a previous treatment with imiquimod. Systemic steroid therapy with prednisone 0.75 mg per kg was started and a complete resolution of the disease was observed after few weeks. Therapy was then slowly reduced and the clinical manifestations of EPDS completely resolved in about 2 months (Figure 2). The patient did not show cutaneous exacerbations of the disease and is currently in complete remission.

3. Discussion

EPDS is probably not an uncommon disease but, rather, an underdiagnosed one. Due to the lack of specific laboratory test and pathognomonic histologic hallmarks, its identification is always a diagnosis of exclusion. The features that should guide the physicians to the correct diagnosis are the following: chronic erosions of the scalp, scarring with pustules, elderly patients with atrophic skin and multiple actinic keratoses, negative microbiological tests, a negative direct immunofluorescence, and dermatological lesions resistant to antibiotics but responsive to corticosteroids [7]. There are many pharmacological treatments for EPDS, notably topical corticosteroids, topical tacrolimus, calcipotriol, systemic corticosteroids, isotretinoin, dapsone, and photodynamic therapy [8]. In addition to acute treatment, long-term lesions should be monitored, because there is a risk of developing squamous cell carcinoma over EPDS scar [7].

Only one case of EPDS developed after therapy with imiquimod has been reported [9]. The differentiation of EPDS from an intense local reaction to topical imiquimod is mainly based on the fact the EPDS lesions last for several months whereas skin reactions to imiquimod tend to resolve within a few weeks. Although EPDS could appear as a rare adverse effect, its incidence in our opinion is probably underestimated because the condition is generally underrecognized. It is important to consider this condition in the differential diagnosis of a patient with pustules and erosions of the scalp. A diagnosis of EPDS is fundamental for an appropriate and effective therapy because the condition, if not treated adequately, could result in scarring alopecia.

In conclusion, a diagnosis of EPDS should be taken in consideration in patients treated with imiquimod, who present a persistent erosive pustular dermatosis of the scalp.

Conflict of Interests

The authors declare that they have no conflict of interests.

References
