Our Dermatology Online

Case Letter

Erythema dyschromicum perstans resistant to treatment with topical calcineurin inhibitors

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Sir,

A 32-year-old woman with phototype IV and unremarkable medical history (no medication taken) consulted for lesions distributed symmetrically on her chest and both arms, which appeared three years prior to consultation (Figs. 1a and 1b). Clinical examination revealed round to oval gray lesions with hyperpigmented borders. A biopsy was taken, which showed an atrophic flattened epidermis, a sparse infiltrate composed of scattered lymphocytes, and numerous melanophages in the papillary dermis. This histological image was compatible with the diagnosis of erythema dyschromicum perstans. As previous publications reported good therapeutic results with topical calcineurin inhibitors [1], tacrolimus ointment 0.1% was prescribed for a period of four months combined with photoprotection. No improvement was observed following the treatment, although observance seemed inadequate. Clofazimine, a drug used in the treatment of leprosy, as well as griseofulvin, was not considered because of the frequent side effects, while laboratory tests were performed in view of isotretinoin prescription. HDL levels were elevated, indicating an important cardiovascular risk. The patient was advised cardiologic evaluation and was lost from the follow-up.

EDP is a disorder of pigmentation characterized by hyperpigmented, slate gray or blue-brown macules or patches. It is most commonly seen on the neck, trunk, and proximal extremities but may also occur on the face. It classically affects Latin Americans with Fitzpatrick types III and IV but has also been reported in Asians and Caucasians. In the 1970s, Pinkus proposed that EDP was caused by unidentified environmental antigens that were either inhaled, ingested, or came into contact with the patient's skin.

Figure 1: (a) Erythema dyschromicum perstans. Lesions symmetrically distributed on the chest. (b) Erythema dyschromicum perstans. Lesions on the upper left arm.

EDP has been associated with infection, following treatment with botulin neurotoxin for facial rhytides [2], adalimumab for psoriasis [3], after influenza vaccine [4], and also the administration of epidermal growth factor inhibitors for malignancies [5,6]. It has also been associated with frontal fibrosing alopecia [7].

In our patient, no causative factor except the presence of phototype IV was documented. Failure of cure highlights the difficulty that the disease presents. EDP is, in fact, a disease of the basal cell layer and future treatment modalities should aim this as the therapeutic target.

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Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

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