Case Letter

Acute urticaria induced by methylprednisolone in universal alopecia areata

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Sir,

Systemic glucocorticoids only exceptionally produce immediate allergic-type reactions, despite their frequent use for a number of diseases. The diagnosis is often unrecognized early on, hence the value of skin tests [1,2].

Herein, we report the case of a twenty-year-old patient followed for universal alopecia areata without a notion of atopy. The patient received the first bolus of methylprednisolone at a dose of 1 g without incident yet, during the second bolus, five minutes after the infusion of methylprednisolone dilute in 500 cc of 5% glucose serum, the patient developed an especially itchy, erythematous rash on the body. There were no other medications or foods that were specific or likely to trigger a hives reaction. An examination found a patient with no signs of severity, with multiple, hot, well-limited, edematous papules and erythematous plaques on the areas of the extensions of the upper limbs, trunk, and face (Figs. 1a and 1b).

The evolution was marked by the regression of the lesions after the immediate withdrawal of the infusion. One hour later, the bolus was re-administered with the same clinical observation, which made it necessary to stop any infusion with a good progress. A pharmacovigilance statement implicated methylprednisolone. A prick test was positive and an intradermoreaction (IDR) was positive for methylprednisolone and negative for 5% glycose serum without any late reaction after 48 hours.

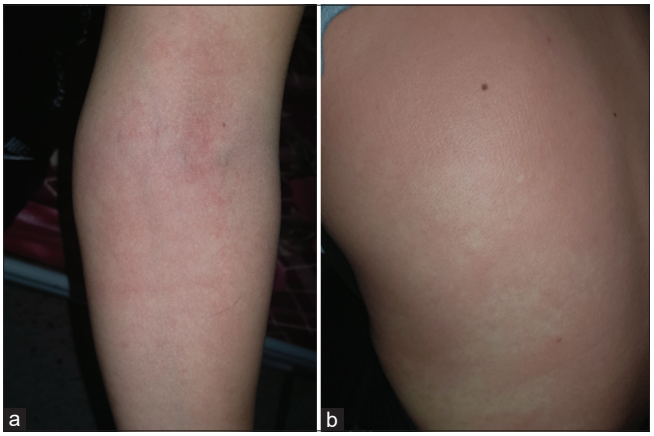

Figure 1: (a) Edematous erythematous plaque on the trunk. (b) Edematous erythematous plaque on the arms.

Immediate hypersensitivity reactions secondary to a glucocorticoid are extremely rare, varying in incidence between 0.1% to 5% [1,2]. They include mild, moderate, or severe reactions (laryngeal edema, anaphylactic shock). It is essential to perform a prick test as well as an intradermoreaction for diagnostic purposes; if they are negative, a provocation test in a hospital setting is necessary [3].

Allergies to corticosteroids may be due to the molecule itself, yet also to excipients (in particular, carboxymethyl cellulose) and salts (succinate) [4]. This is the reason why it is necessary to test the excipients and salts as well [4-6].

The place of glucocorticoids in the therapeutic arsenal for alopecia areata is essential. However, other therapeutic alternatives may be proposed either

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topically or systemically. Some studies find that azathioprine, methotrexate, and ciclosporin may be employed, alone or in combination, with prednisone as a second line to initiate regrowth and prevent relapse [7].

In our observation, the clinical picture and the positive skin test suggested an immediate hypersensitivity mediated by IgE to methylprednisolone. The outcome was favorable after discontinuation and a proposed treatment of a topical corticosteroid, methotrexate combined with prednisone.

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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