LETTER TO THE EDITOR

ERYTHEMA MULTIFORME-LIKE IRRITANT CONTACT DERMATITIS AFTER APPLICATION OF AN ANTISCABIES TREATMENT

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We describe the case of an irritant contact dermatitis due to an antiscabies treatment in a man who presented to our clinic with an important cutaneous reaction with many hemorrhagic, "target" erythema multiforme-like lesions, as the result of an acute toxic insult of the skin by permethrin 5%. This is a possible, but very uncommon symptom of non-eczematous contact dermatitis and an unusual drug causing the acute hypersensitivity reaction typical of erythema multiforme.

A 61-year-old, retired man with no personal or family history of atopy was referred to our clinic for an itchy skin rash which he had had for five months. The patient was not undergoing any treatment when he was first seen, but he had been unsuccessfully treated for one month with topical methylprednisolone aceponate 0.1% cream, oral prednisone (starting dose of 25 mg) and oral antihistamines. The patient was eventually diagnosed with scabies infection and prescribed permethrin at 5% cream (Scabianil®) once daily for three consecutive days. After five days he developed widespread discrete lesions.

At a physical examination many skin lesions with a "target"- like appearance were present on both lower limbs. They featured raised, erythematous and roundish edges formed by purplish-brown papulas and a central squamous and serohemorragic crust. Some hemorragic scales and crusts, evident outcome of pre-existent vesicles and bullae, were noticed on the feet (Fig. 1 a,b,c). In addition, erythematous, infiltrate, itchy lesions, with a nummular appearance, were observed on the upper limbs and trunk. The skin was diffusely xerotic and finely scaly. A skin biopsy from the edge of a target lesion showed a compact hyperkeratosis and spongiotic dermatitis, with an intense infiltrate predominantly made of eosinophils. Direct immunofluorescence assay, performed on perilesional skin, was negative. Patch testing with Italian standard Sidapa series, all components of Scabianil® (Cetostearylic alcohol 20% in petrolatum, benzyl alcohol 5% in petrolatum, isopropyl myristate 5% in petrolatum, polyethylene glycol) and pyrethrum 2% in petrolatum [because permetrhin is a synthetic pyrethrum (1-2)], proved negative.

A diagnosis of irritant contact dermatitis from permethrin was made and the patient was successfully treated with a 3-month cycle of systemic steroids (oral prednisone 25 mg) and

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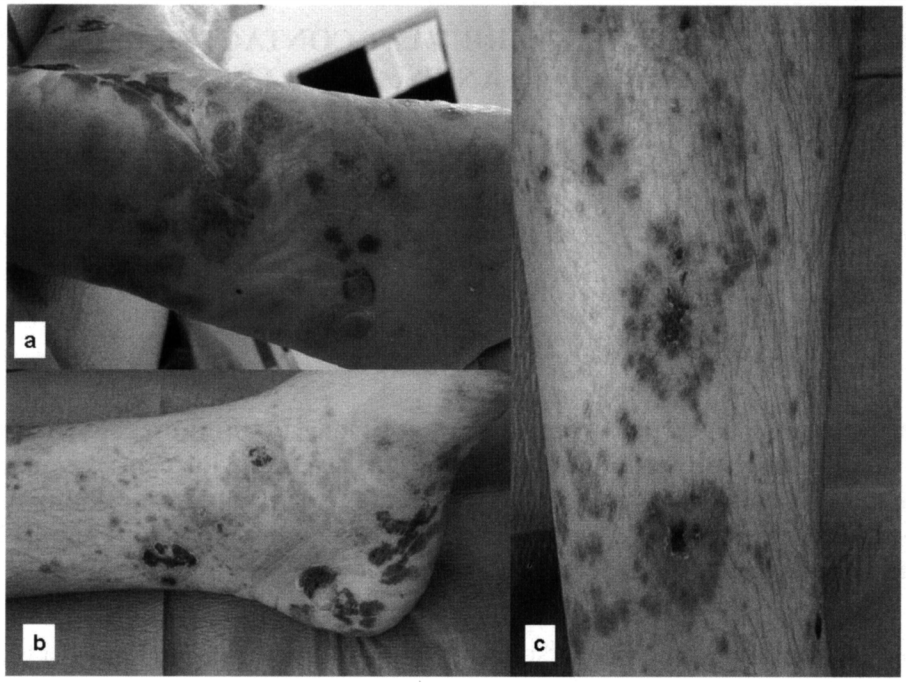

Fig. 1. *Hemorragic scales and crusts as an outcome of precedent vesicles and bullae on the feet (**a**, **b**) and the erythematous and "target"-like lesions on the lower limb (**c**).*

anthistamines (loratadine 5 mg). Permethrin is the most common drug used for the treatment of scabies infection. Dermal exposure to permethrin may worsen scabies symptoms such as itching, swelling, and redness. Mild burning or paresthesia at the site of contact may also occur. These symptoms rarely last more than 24 hours. A very serious allergic reaction to this drug is rare and it includes symptoms such as rash, swelling (especially of the face/tongue/throat), severe dizziness, and trouble breathing. Only one case of allergic contact dermatitis to an antiscabies treatment is reported in literature (3). In our case the reaction is the result of an acute toxic insult of the skin by permethrin, without any involvement of immunological processes or prior sensitization: in this case the substance induced damage by gradually exhausting the horny layer, denaturing the keratin removing stratum corneum lipids and exhausting the repair capacity of the skin (4). The clinical spectrum of acute irritant dermatitis may range from a mild irritant reaction with transient erythema or chapping to a much more florid dermatitis with oedema, inflammation, vesiculation, or in more severe cases there may be exudation, bulla formation and tissue necrosis such as in our patient with the hemorrhagic target lesions, erythema multiforme-like (EM). EM is an acute hypersensitivity reaction characterised by a typical target lesion, and it is usually triggered by infections (90%) while drugs are an uncommon cause (<10%). The most common drugs that have been reported to trigger EM include barbiturates, non-steroidal anti-inflammatory drugs, penicillin, sulphonamides, phenothiazines and anticonvulsants (5). These hemorrhagic target lesions are a possible but very uncommon symptom of non-eczematous contact dermatitis and an incorrect diagnosis can lead to expose the patient to a further and extended treatment with topical and systemic

steroids and antihistamines.

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