Erythema multiforme-like allergic contact dermatitis due to tioconazole

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Summary
Erythema multiforme-like contact dermatitis is a non-eczematous variant of allergic contact dermatitis, histopathologically indistinguishable from erythema multiforme. Its clinical presentation can be variable, from localized affection confined to the contact areas, to disseminated rash. We report the first case of erythema multiforme-like contact dermatitis associated to topical administration of tioconazole. A 44-year-old female presented with widespread erythematous-papular patches with a target-like aspect on lower limbs (Figure 1a). She also showed palpebral and genital erythema and oedema as well as desquamative lesions of the lips. Anamnestic evaluation revealed that the dermatosis developed after she had used topical tioconazole 28% nail solution for 7 days for an onychomycosis of toenails. Patch test with tioconazole 1% pet only gave a positive reaction ++ (72 and 96 hrs) (Figure 1b).

Discussion
EM-like eruption is a rare form of ACD. Its clinical presentation can be variable, from localized affection confined to the contact areas, to disseminated rash, to toxic epidermic necrolysis (9). Pathogenesis is still unclear. Some authors suggest that it could be simply a very severe ACD (type IV reaction) (10); alternatively, it may also be a true EM owing to the absorption of the antigen (type III reaction) (11). Several haptenes have been impli-
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cated in EM-like ACD eruption: paraphenylenediamine, steroids, non-steroidal anti-inflammatory drugs, rubbers, herbs, metals, and woods (9, 12-16). For example, Ferreira et al. reported the case of a 45-year-old man who developed maculopapular exanthema on the inferior cervical folder, axillae and umbilicus, as well as erythema multiforme-like lesions on the wrists after the introduction in his work of pao ferro (Machaerium scleroxylon) (12). Balato et al. reported the case of a 29-year-old woman who developed widespread EM-like lesions after local contact with paraphenylenediamine (13). An EM-like eruption due to the use of rubber gloves (sensitization to carbamates and thiuram) was reported by Leis-Dosil et al. (9) whereas Ajith C et al. described a localized EM-like contact dermatitis from laundry bar soap in a 25-year-old non-atopic pregnant woman who presented with recurrent itchy, urticarial plaques and target like lesions on the palms and soles (15). ACD to tioconazole is a frequent occurrence (2, 15), and seems to be associated with administration of highly concentrated preparations (tioconazole 28%) (2) like in the case of our patient. Moreover, tioconazole is reported to be the most frequent hapten among the entire class of azoles (17). In 1996 Heikkilä et al. conducted a study including tioconazole in the standard series of epicutaneous tests detecting contact allergy to tioconazole in 72/4816 patients (1.5%) over a 3 and 1/2 year period (2). The incidence of positive patch test reactions to tioconazole reported was over 1% of patients tested for contact allergy, and of the various imidazole derivatives, tioconazole was the most important contact allergen. Moreover, the authors reported that about half of patients with contact hypersensitivity to tioconazole had additional contact allergies detected by the standard series, suggesting that tioconazole should be included into the patch test series in countries where it is commonly used as a topical antifungal agent (2). Among tioconazole contact hypersensitivity, cross-reactions with other azoles are possible (17). Anyway cross-sensitivity among azoles seems to be a complex issue not completely understood (17). To our knowledge, this is the first case of EM-like ACD associated to topical administration of tioconazole. This case highlight the possibility of the onset of EM-like ACD to topical drugs. Even if not so common, this type of eruptions should be taken into account for differential diagnosis, and because of the growing tendency of patients self-medications and auto-prescriptions especially for topical products.

References


