Unilateral Eczema on the Dorsum of the Hand

Eccema unilateral del dorso de la mano

Eczema of the hands is a very common cause of consultation in dermatology. The differential diagnosis is broad and includes irritant and contact allergic dermatitis, atopic dermatitis, psoriasis, and dermomyositis. In unilateral eczema of the hands we must exclude tinea manuum and investigate possible causes of photoallergic contact eczema.

We present the case of a 90-year-old woman with a history of hypertension, chronic obstructive pulmonary disease on long-term treatment with inhaled fluticasone, salmeterol, and diltiazem, and squamous cell carcinoma of the vulva arising on lichen sclerosus et atrophicus, partially excised in 2012 and on follow-up in gynecology.

The patient was seen at the end of the summer for a 1-month history of erythema, desquamation, and pruritus on the dorsum of the right hand. She had been treated with topical clobetasol and fusidic acid, but the condition continued to deteriorate.

Examination revealed a very well-defined, intensely erythematous plaque on the dorsum of the right hand, with peripheral desquamation and fissures, with no involvement of the palm or of the other hand (Fig. 1). No lesions were observed at other sites.

In a targeted medical history, the patient stated she had regularly used Rosalgin sachets (benzidine hydrochloride, Angelini Farmacéutica S.A.) to perform daily lavage of the genital region because of her gynecological disease. She did not use other cosmetic or cleansing products in the area. She was instructed to discontinue the use of the sachets and treatment was started with oral prednisone at a dose of 30 mg/d, leading to a rapid resolution of the lesions within a week.

After resolution of the lesions, patch and photopatch testing was performed using the standard series of the Spanish Contact Dermatitis and Skin Allergy Research Group and the Marti Tor anti-inflammatory drug series. Patch tests were negative, but photopatch tests were positivity (+) for 1% benzidine hydrochloride in petrolatum. On the basis of these results we made a diagnosis of photoallergic contact eczema due to benzidine hydrochloride (a component of Rosalgin sachets). The patient has developed no further lesions and has remained asymptomatic since she was advised to avoid the product.

Benzidine (1-benzyl-3-[3-(dimethylamino)propoxy]-1H-indazole hydrochloride) is a nonsteroidal anti-inflammatory drug with anti-inflammatory, antipyretic, and analgesic properties.1 In Spain it is used topically as an expectorant (Etermol), mouthrinse, lozenges, cream, ointments for joint pain (Tamtum), eyedrops (Vincisepil), and as a solution for vaginal lavage (Rosalgin). It is also available in capsule form for the treatment of benign prostatic hypertrophy (Prosturoil).2 Benzidine is a substance with sensitizing and photosensitizing capacity after long-term topical use. In addition, some patients can present symptoms of photosensitivity due to mucocutaneous absorption.

In 1971, Ikemura reported a case of eczema in sun-exposed areas after the ingestion of benzidine hydrochloride,1,3 and De la Cuadra4 described the condition after the use of benzidine as a vaginal lavage. Presentation is usually as chronic hand eczema, typically in a unilateral distribution on the dorsum of one hand, particularly in older women who perform vaginal lavage. Cheilitis is also a common presentation, perhaps even the most common according to some authors.2 After ketoprofen, benzidine is the most common photoallergen to produce photosensitivity.6

In our patient, the presence of lesions on the dorsum of the dominant hand, with no involvement of the area to which the product was applied (external genitalia) or of the contralateral hand, combined with the results of patch and photopatch testing, enabled us to make a diagnosis of photoallergic contact eczema.

References

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