

Contact dermatitis due to nasturtium

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A 69-year-old woman presented with acute eczematous lesions in between her fingers; she had had two similar

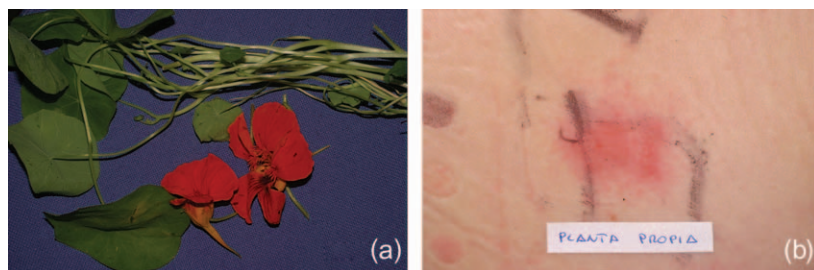


Fig. 1. (a) Plant provided by the patient: *Tropaeolum majus* or nasturtium. (b) Patch test using the plant provided by the patient, D4 ++.

episodes in the previous year. The patient suspected that handling one of the plants in her garden was responsible. Patch tests with GEI-DAC (Spanish Investigation Group for the Study of Contact Dermatitis and Cutaneous Allergy) baseline, cosmetic, and plants series (Chemotechnique Diagnostic, Vellinge, Sweden) were performed. We also patch tested with the plant provided by the patient (Fig. 1a), applying the stem and leaves separately. Reactions occurred to both the stem and the leaves (D2 + and D4 ++) (Fig. 1b). Ten controls to the plant materials were negative.

A diagnosis of allergic contact dermatitis to *Tropaeolum majus* (nasturtium, also known as 'capuchina' in Spanish) was made.

Discussion

Tropaeolum majus belongs to the *Tropaeolaceae* family and comes from South America. They are annual and perennial herbaceous plants, often climbers or creepers. The plant is edible, and recently, its extract has been proposed to treat patients with recurrent infections of the lower urinary tract (1). Both the stem and the leaves have allergic and irritant properties.

Phytoallergens are difficult to identify and usually form part of oleoresins or essential oils. Nasturtium contains mustard oil that in contact with water may be converted into isothiocyanates (2), which are potentially allergic and irritant substances. Only a few cases of allergic contact dermatitis due to this plant have been published (2–5). A diagnosis of allergic contact dermatitis caused by *Tropaeolum majus* may be difficult as there is no commercial allergen or preparation, and irritant reactions on patch testing may

occur. In our case, the latter was ruled out because the same material tested in 10 controls was negative.

Acknowledgements

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