

Contact allergy to the ingredients of moisturizers in a boy with atopic dermatitis

Sirje Kaur^{1,2} and Maire Vasar^{3,4}

¹Clinic of Dermatology, Tartu University, 50417 Tartu, Estonia, ²Clinic of Dermatology, Tartu University Hospital, Tartu, Estonia, ³Children's Clinic, Tartu University, Tartu, Estonia, and ⁴Children's Clinic, Tartu University Hospital, 51014 Tartu, Estonia

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There are previous reports describing children with atopic dermatitis (AD) who are sensitized to Compositae plants (1, 2). In our case, sesquiterpene lactone (SL) allergy as the cause of treatment resistance was not suspected for several years.

Case Report

A 10-year-old boy was referred to our clinic for patch testing because of widespread dermatitis resistant to treatment, which had worsened during the summer. He had a history of AD from the age of 6 months, and of non-allergic asthma, diagnosed at the age of 1.5 years. Prick tests with indoor allergens, food allergens and pollens had repeatedly given negative results.

The patient presented with papular rashes on the face, neck, axillary folds, and distal parts of the extremities. On the hands, there were also vesicles and crusts (Fig. 1). The child was patch tested, according to international recommendations (3), with the European baseline series

(Chemotechnique Diagnostics, Vellinge, Sweden), applied on the upper back with Finn Chambers[®] on Scanpor[®] tape (SmartPractice, Phoenix, AZ, USA) for 2 days. Results were graded on day (D) 3 and D5. On D5, ++ reactions to SL mix (2.5% pet.), colophonium (20% pet.), *Myroxylon pereirae* resin (25% pet.), and formaldehyde 2% aq., and a + reaction to benzocaine (5% pet.), were observed. Reassessment of the patient's past history confirmed the clinical relevance of SL contact allergy: He had experienced exacerbations of dermatitis at the age of 5 years, after application of a wet-wrap containing chamomile tea, and in the previous summer, when he handled dandelions mowed by his father. In addition, for his skin care, products containing chamomile and marigold were preferred.

Discussion

Emollients relieve skin dryness and pruritus in most cases of AD. However, recent clinical studies have suggested



Fig. 1. Vesicular and crusted dermatitis on the palmar (a) and dorsal (b) aspects of the hands of a 10-year-old boy sensitized to sesquiterpene lactones and several components of moisturizers.

Correspondence: Sirje Kaur, Clinic of Dermatology, Tartu University, 31 Raja St, 50417 Tartu, Estonia. Tel: +37 27 319 720; Fax: +37 27 319 701. E-mail: Sirje.Kaur@kliinikum.ee

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an association between AD and sensitization to topical therapeutics (4), and an association between Compositae sensitization and AD (1, 2). To provide the best for their child, parents increasingly prefer emollients with 'natural' plant-derived products. The potential benefit of these additional ingredients is mostly supported by experience rather than scientific evidence, but they usually do no harm. However, some ingredients of these products, for example resin of *M. pereirae* and the plants of the Compositae family, have been reported to cause contact sensitization in children (5). In our case, the boy was sensitized to several contact allergens found in skin

care products, such as formaldehyde, colophonium, benzocaine, and a natural scent (*M. pereirae*).

Therefore, dermatologists and their patients can both benefit from being aware of cutaneous side-effects of skin care products, including 'natural' body creams. In patients with AD who do not respond to treatment, patch testing is necessary.

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