

Allergic contact dermatitis of the face caused by *Magnolia officinalis* bark extract

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Allergic contact dermatitis caused by ingredients of personal care products is well known. Over the last few years, *Magnolia officinalis* bark extract (MOBE) has been used in

facial 'anti-ageing' skin care products, and cases of allergic contact dermatitis caused by MOBE exposure have recently been published (1, 2). We describe a patient with

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allergic contact dermatitis of the face caused by MOBE after repeated exposure to an 'anti-ageing' cream.

Case Report

A 66-year-old non-atopic woman was referred with dermatitis on the face and neck, and orbital oedema, accompanied by a burning skin sensation. Dermatitis had gradually developed 1 week after the patient began using Eucerin® volume-filler day and night cream on her face. Her general practitioner initially suspected ophthalmic herpes zoster, and prescribed valaciclovir, but her condition continued to deteriorate. Thereafter, an emergency room physician prescribed potent topical corticosteroids (mometasone furoate) twice daily and oral antihistamines (cetirizine), with limited effect.

Upon referral of the patient to our department, patch testing was performed with the European baseline series, the extended Gentofte series, the 26 fragrance ingredients to be declared on cosmetic products, and the patient's personal care products 'as is'. Finn Chambers® (8 mm; SmartPractice®, Phoenix, AZ, USA) on Scanpor® tape (Norgesplaster, Alfarma, Venesla, Norway) were used. Allergens from Allergeaze®



Fig. 1. A repeated open application test was performed in the left antecubital fossa, and became positive after 24 h.



Fig. 2. Eucerin® volume-filler day cream.



Fig. 3. Positive patch test (1+) reaction to *Magnolia officinalis* bark extract on the right upper back near the shoulder.

(SmartPractice®, Phoenix, AZ, USA) and (Chemotechnique, Diagnostics, Vellinge, Sweden) were used. The patch tests were applied to the upper back, and occluded for 2 days. Readings were performed on day (D) 2, D3, and D7, according to ESCD recommendations (3). Besides two doubtful test reactions to methyl dibromoglutaronitrile (D3) and oxidized linalool (D3 and D7), a positive reaction was observed only to Eucerin® hyaluron volume-filler day and night cream (++) on D3 and + on D7). Neither linalool nor methyl dibromoglutaronitrile was found in the patient's products. A repeated open application test with Eucerin® volume-filler night cream in the right antecubital fossa resulted in dermatitis after 24 h (Figs 1 and 2). A second patch test was performed with ingredients provided by the manufacturer (Beiersdorf, Hamburg, Germany), and a positive test reaction was observed to MOBE 0.5% pet. (+ on D3) (Fig. 3). The patient was treated with a short course of topical corticosteroids,

and instructed to stop using the product; this resulted in rapid resolution.

Discussion

MOBE has been used in traditional Chinese medicine for decades in the treatment of a variety of conditions, owing

to its alleged anti-inflammatory and analgesic effect (4). Over recent years, MOBE has been introduced into personal care products, as it has 'anti-ageing' and filling effects. We highlight, like previous case reports, the fact that contact allergy to MOBE should be suspected in patients with face dermatitis who have used 'anti-ageing' creams.

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