

CONTACT POINT

Allergic contact dermatitis caused by benzyl salicylate in hair products

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Benzyl salicylate (benzyl-o-hydroxybenzoate; CAS no. 118-58-1) is a fragrance ingredient and also an ultraviolet light absorber (filter). It is a common ingredient in a large number of products for daily use. However, the frequency of allergic contact dermatitis associated with its use is very low.¹⁻³

CASE REPORT

A 70-year-old woman presented with a 2-month history of facial dermatitis. She reported recurrent periocular lesions bilaterally. These resolved with topical corticosteroid treatment, but reappeared upon discontinuation of therapy. Scaly erythematous plaques affecting the upper and lower eyelids and extending to both infraorbital regions were found (Figure 1).

The patient was patch tested with the Spanish Contact Dermatitis Research Group (GEIDAC) baseline series (TRUE Test, supplemented with allergens obtained from Chemotechnique [Vellinge, Sweden]), applied in Finn Chambers (Epitest, Tuusula, Finland) on Omnifix E (Hartmann, Heidenheim, Germany) tape, and a cosmetics series from Chemotechnique. The patch tests were applied on the upper back for 2 days. Readings were performed on day (D) 3 and D7. Patch test results were positive on D3 (++) and D7 (++) for benzyl salicylate 10% pet. The patient had come into contact with several hair products that contained this component (L'oreal Elvive hair conditioner and Garnier Fructis shampoo). Hence, allergic contact dermatitis caused by benzyl salicylate contained in these products was diagnosed. After avoidance of these hair products, the lesions disappeared completely.

DISCUSSION

Benzyl salicylate is one of the most common fragrance-related ingredients found in various cosmetics and personal care products,¹ and



FIGURE 1 Scaly erythematous plaques affecting the upper and lower eyelids, and extending to both infraorbital regions

has been used since the 1920s. Since 2005, as specified in European regulation (EC No. 1223/2009), its presence must be indicated in the ingredient lists of the products that contain it if the concentration is ≥ 10 ppm in leave-on and at ≥ 100 ppm in rinse-off cosmetic products or household products.⁴

However, despite its ubiquity, cases of allergic contact dermatitis associated with its use are very rarely reported. It has been claimed that benzyl salicylate is unlikely to induce hypersensitivity reactions or elicit reactions in previously sensitized individuals under actual conditions of consumer exposure.¹ Moreover, a prevalence of 0.1% positive patch test reactions to benzyl salicylate in dermatitis patients has been reported.^{2,3}

Facial allergic contact dermatitis with eyelid involvement is apparently very rare, and, in the literature reviewed, a single case was found, associated with the application of various products to parts of the body other than the scalp.⁵ We describe the first case, to the best of our knowledge, of facial allergic contact dermatitis with eyelid involvement caused by benzyl salicylate included in hair products. We emphasize the importance of being aware of the ubiquity of this

compound, which, although rarely, can cause allergic contact dermatitis with diverse clinical presentations.

Conflict of interest

The authors declare no potential conflict of interests.

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