

Octyl salicylate: a new contact sensitivity

Contact Dermatitis 2007; 56: 48

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We describe acute contact sensitivity to octyl salicylate, an ultraviolet filter, used in many cosmetics and sunscreens.

Key words: allergic contact dermatitis; cosmetics; octyl salicylate.

Case Report

A 53-year-old woman was seen with a history of irritation on the side of her face followed by tightness and redness of the face extending down to the cheeks, lasting for 1 week. This was followed by flaking of the skin for 2 weeks. She had applied Olay Total Effects™ on 2 separate occasions and reported irritation within 30 min to 1 hr after application.

Patch tests were undertaken to our standard series, face series, hairdressing dyes, the ingredients of fragrance mix, her own face wipes, and E45 cream™. Photopatch tests were also undertaken to our photopatch test series and Olay Total Effects™.

There were ++ reactions to octyl salicylate in 10% white soft paraffin and Olay Total Effects™ as is at 48 and 96 hr. There was no augmentation on the irradiated side of these 2 responses.

Discussion

Olay Total Effects™ contains octyl salicylate also known as 2-ethylhexyl-salicylate. Octyl salicylate is a common ultraviolet (UV) filter used in cosmetics and sunscreens. The absorption spectrum ranges from 280 to 320 nm encompassing UVB radiation. The salicylates are weak UV absorbers, but are highly water insoluble, and sensitization is rare. They are considered to be one of the safest sunscreens even when used in high concentrations (1). The most widely used salicylates are homosalate and octyl salicylate.

In the past 15 years, there has been an exponential increase in the use of sunscreen products. This reflects awareness by the public for the need for photoprotection against photoageing and the carcinogenic potential of UV radiation. As a consequence, there have been many reports in the literature of contact allergy and photoallergy to UV filters (2–5). However, rates reported remain low compared to the widespread use of these substances. In the general population, contact and photoallergy to chemical sunscreens is estimated to be less than 2%. It is more frequently reported in populations with suspected photodermatoses (2%–25%) (6). To our knowledge, there have been no published reports of contact allergy to octyl salicylate. We highlight this case to inform colleagues of a new contact sensitivity.

References

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