

Contact Urticaria Due to Phenoxyethanol in an Aftershave

Dunia Lujan, Buenaventura Hernandez-Machin, Yeray Peñate, and Leopoldo Borrego

The occurrence of pruritus immediately after application of an aftershave product is usually due to irritant contact dermatitis. We report a case of contact urticaria in a male patient, produced by an aftershave product containing phenoxyethanol.

Case Report

A 38-year-old male reported a 2-month history of local pruritus and swelling that occurred on both cheeks immediately after the application of an aftershave product (Medicis, Isdin, Barcelona, Spain) and that lasted for 4 to 6 hours. He had been using the product for a number of years previously.

A use test with Medicis aftershave was performed and showed a strong positive result. Patch tests were performed with the standard Spanish Contact Dermatitis Research and Cutaneous Allergy Group and cosmetics series (Chemotechnique Diagnostics, Malmö, Sweden). Readings were positive for Euxyl K400 (Schülke & Mayr GmbH, Norderstedt, Germany) at 30 minutes and negative at 48 and 96 hours. Contact open application tests were carried out with both Euxyl K400 components (methylidibromoglutaronitrile and phenoxyethanol). Open-test results were negative for methylidibromoglutaronitrile 0.5% in petrolatum (pet) and positive for 2-phenoxyethanol 1% pet 20 minutes after application. Phenoxyethanol was identified as an ingredient in Medicis aftershave.

Discussion

Contact urticaria due to cosmetics has been attributed most commonly to fragrances.^{1,2} Here we report a case of contact urticaria caused by 2-phenoxyethanol, a preservative used in topical drugs and cosmetics. This substance has antimicrobial properties against fungi and against gram-positive and gram-negative bacteria and is widely used because of its bactericidal action against *Pseudomonas*. It is usually

combined with methylidibromoglutaronitrile in a 1:4 proportion to produce Euxyl K400.

Reactions to phenoxyethanol have rarely been reported. Three cases of contact urticaria induced by phenoxyethanol in cosmetics^{3–5} and three cases of contact dermatitis induced by phenoxyethanol in cosmetics and vaccines^{6–8} have been reported, which suggests that this preservative can be considered relatively safe. No cases of methylidibromoglutaronitrile-induced contact urticaria have yet been reported, indicating that phenoxyethanol should be considered as the causative agent in cases of reported Euxyl K400-induced contact urticaria.

In our experience, the occurrence of pruritus immediately after the application of a cosmetic product is usually due to an irritative reaction. However, pruritus and edema or puffiness occurring immediately after the application of a cosmetic should cause one to suspect contact urticaria.

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From the Department of Dermatology, Hospital Universitario Insular de Gran Canaria, Las Palmas, Spain.

Address reprint requests to Buenaventura Hernandez-Machin, Department of Dermatology, Hospital Universitario Insular de Gran Canaria, Avd. Maritima del sur s/n 35016, Las Palmas, Spain. E-mail: buenaventurahdezma@aadv.es

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