

Allergic contact dermatitis from a depilatory wax

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Colophonium, also known as colophony or rosin, is a natural by-product derived, for example, from the distillation of Pinaceae tree oil. Because of its tackiness, and emulsifying and insulating properties, it is used in a wide variety of common products, such as adhesives, cosmetics, and toiletries.

CASE REPORT

A 44-year-old woman presented with a 5-hour history of edematous pruritic plaques involving the periorbital area and the upper lip. The skin lesions developed 16 hours after wax epilation had been performed on her eyebrows and upper lip. A short course of systemic steroids was prescribed with resolution of the eruption in a few days.

The patient was patch tested with the Spanish Contact Dermatitis Research Group (GEIDAC) baseline series (TRUE Test, supplemented with allergens obtained from Chemotechnique Diagnostics, Vellinge, Sweden), applied in Finn Chambers (Epitest, Tuusula, Finland) on Omnifix E (Hartmann, Heidenheim, Germany) tape, and a cosmetics series from Chemotechnique Diagnostics. 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 nickel sulfate (+), colophonium (+), and ethylenediamine dihydrochloride (++). The wax epilation product used in the patient's salon was found to contain colophonium. Hence, allergic contact dermatitis caused by colophonium contained in this product was diagnosed.

DISCUSSION

Colophonium is a common contact allergen, with reported frequencies of patch test positivity of 1.4% to 4.2% in consecutively patch tested European patients.¹⁻³ Colophonium is found in a great variety of common products such as topical medications, surface coatings, lubricants, adhesives and sealants, and personal care and beauty products.

Colophonium is a common ingredient in wax epilation products; however, there are very few cases in the literature of contact eczema caused by colophonium contained in these products, which is surprising considering the frequency of colophonium sensitization.⁴⁻⁶

We describe a new case of allergic contact eczema due to colophonium contained in hair removal products, which is an expectable association, but little reported in the literature. We emphasize the importance of knowing this exposure to facilitate early diagnosis. In our case, a positive patch test to colophonium facilitated the diagnosis. However, it is important to note that commercially available colophonium screening preparations used in patch testing often fail to detect patients who are sensitized to modified colophonium, making it necessary in many cases to also test patients with these derivatives as well as their own products.

CONFLICT OF INTERESTS

None declared.

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