

Contact dermatitis due to octyldodecanol in clotrimazole cream

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Case Report

A 46-year-old man presented with a recurrent pruritic rash affecting the groins and scrotum, for which he had applied 1% clotrimazole (Canesten) cream for a number of years. Although the eruption initially responded well, it subsequently failed to clear and he developed a more widespread eczematous eruption. Exacerbations occurred within days of application of the cream. There was no history of other topical medicament use.

He was initially patch tested to the European standard series, a corticosteroid series and Canesten cream, showing a positive reaction (++) to Canesten cream at D2 and D4. The remainder of the tests were negative. The constituents of Canesten cream (clotrimazole 1%, sorbitan stearate 2%, polysorbate 60 1.5%, cetylpalmitate 3%, cetylstearyl alcohol 10%, octyldodecanol 13.5%, and benzyl alcohol 1%) were obtained through Bayer Pharmaceuticals. The vehicle used by the manufacturer for clotrimazole and benzyl alcohol was 96% ethanol, whilst for the other constituents, it was liquid paraffin. The patient was patch tested to them. There was a positive reaction to octyldodecanol 13.5% in liquid paraffin on D2 (+) and D4 (++). This was then diluted to 10%, 5% and 1% (of 13.5% of octyldodecanol) in liquid paraffin and further patch testing carried out at these concentrations. Patch tests were positive to 10% D2 (+) D4 (++), 5% D2 (+) D4 (++) and 1% D2 (-) D4 (+).

Discussion

Clotrimazole (Canesten) cream has been in use as an effective topical antifungal preparation since 1973. Con-

sidering its frequent use, contact allergy to clotrimazole (Canesten) cream has been rare. It was first reported by Roller (1) in 1978, and there have subsequently been 5 other patch-test-proven cases reported (2-6). While the imidazole compound clotrimazole is usually the offending allergen, there has been 1 previously published report of sensitivity to octyldodecanol (Eutanol G) in clotrimazole (Canesten) cream (6). Octyldodecanol is used as a pharmaceutical solvent in some creams and moisturizing lotions. Therefore, in patients with a history of an allergic reaction to Canesten cream, one cannot assume that clotrimazole is the offending allergen. Contact sensitivity to octyldodecanol should also be considered.

References

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