

longed to 10 min and 3 days later, to 20 min. The exposure time was gradually prolonged to 45 min and thereafter the concentration was elevated to 0.03%, with an application time of 15 min. At this step, she experienced irritation. Treatment was stopped for 3 days, after which she continued with 0.03% for 5 min. She experienced no more irritation and treatment was successfully ended 2 weeks later (PASI 0.4, with an area of 0.5%). The dithranol concentration had not exceeded 0.03%.

Discussion

Viluksela et al. (5), in animal models, concluded that dithranol had only minor contact sensitizing potential. Patch testing with dithranol in sensitive patients is advised by most authors, though they describe different irritant thresholds (1–5, 7–11). Short contact treatment was started in our patient with a low dithranol concentration, 10× higher than the minimal erythema concentration (MEC) determined by patch testing. The dithranol concentration was increased gradually (11) and the psoriatic lesions cleared.

In patients with a history of increased sensitivity to dithranol, we suggest that patch testing with serial dilutions of freshly prepared dithranol be carried out to determine the patients' individual threshold. Treatment should then be resumed with an adjusted dithranol concentration. Gradual increase in concentration and/or exposure time should be adopted, according to the patient's skin reaction. We postulate that in most patients with increased dithranol sensitivity, their psoriasis can still be cleared in this man-

ner, regardless of whether they have delayed-type allergy or intolerance.

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Occupational allergic contact dermatitis, partly airborne, due to isocyanates and epoxy resin

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Key words: diphenylmethane diisocyanate; toluylene diisocyanate; 4,4'-diaminodiphenylmethane; BIS-GMA; epoxy resin, airborne; allergic contact dermatitis; occupational, grinding tool manufacture. © Munksgaard, 1999.

Allergic contact dermatitis from isocyanates has comparatively rarely been described (1–4).

Case Report

A 32-year-old woman, with no previous history of skin or atopic diseases, worked in a plant manufacturing grinding tools. She glued single sheets of sandpaper together creating an endless belt, using a 2-component adhesive, freshly prepared each shift by herself. After 1½ years, she

developed dermatitis of both hands, forearms and face. Clearance was achieved with systemic corticosteroids. Thereafter, she was transferred to where moulds were built from various epoxy resins. However, despite avoidance of contact with polyurethane resins, she developed recurrences of dermatitis with a similar airborne distribution. After the patient quit her job, her dermatitis cleared completely and did not recur.

Patch testing was performed according to ICDRG guidelines and after complete resolution of dermatitis (Table 1).

Table 1. Positive patch test results

	D2	D3	D4	D6
diphenylmethane-4,4'-diisocyanate (MDI)	—	—	—	+
toluylene diisocyanate (TDI)	—	?+	+	+
4,4'-diaminodiphenylmethane	+	+	?+	—
BIS-GMA	++	++	++	+
epoxy resin	++	+++	++	—

No specific IgE-antibodies against MDI and TDI were detected (CAP-FEIA).

Discussion

The safety data sheet of 1 of the polyurethane adhesives provided unequivocal proof of contact with MDI in the original work. The patient may have had contact with TDI and BIS-GMA in other adhesives or may have cross-reacted (5). Later, airborne contact with epoxy systems may also have included 4,4'-diaminodiphenylmethane, or its formation from hydrolysis of MDI may explain this reaction (1, 3). While air-

borne allergic contact dermatitis from epoxy resin is not uncommon (6), this is, to our knowledge, the 1st report of airborne allergic contact dermatitis caused by isocyanates.

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Allergic contact dermatitis from 1,2,6-hexanetriol in fluocinonide cream

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Key words: 1,2,6-hexanetriol; fluocinonide cream; allergic contact dermatitis; medicaments; excipients. © Munksgaard, 1999.

Case Report

A 35-year-old woman presented with a 3-week history of pruritic erythema, edema and linear vesiculation of the upper arms. Patch tests were positive to a Japanese

rose, a 'marvel-of-Peru' and fluocinonide cream, with fluocinonide ointment being negative. Subsequent patch tests with the individual ingredients of fluocinonide cream showed 1,2,6-hexanediol to be positive (Table 1, Fig. 1). Patch tests with 1,2,6-hexanetriol in 20 healthy persons were negative in all cases. The eruption cleared without any further topical treatment.

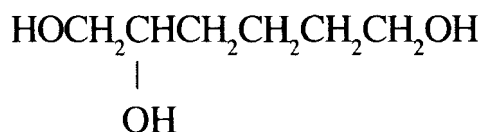


Fig. 1. 1,2,6-hexanetriol

Table 1. Patch test results

	D2	D3	D7
fluocinonide cream (as is)	—	+++	+++
fluocinonide 0.05% pet.	—	—	—
1,2,6-hexanetriol 5% pet.	—	+++	+++
1,2,6-hexanetriol 2.5% pet.	—	—	++
1,2,6-hexanetriol 0.5% pet.	—	—	++
pet.	—	—	—
other ingredients	—	—	—

Discussion

Contact dermatitis from fluocinonide cream was first reported by Shores (1), followed by several other reports, all concluding that the cream base was the culprit (2–4). 1,2,6-hexanetriol was the only cause in some cases and 1 of more than 1 in others. 1,2,6-hexanetriol is used as a humectant, solvent and viscosity-controlling agent in medicaments and cosmetics.

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