

Short Communication

Allergic contact dermatitis due to methyl glucose dioleate

MONICA CORAZZA, ARIANNA LEVRATTI AND ANNAROSA VIRGILI

Section of Dermatology, Department of Clinical and Experimental Medicine, University of Ferrara,
Via Savonarola 9, 44100 Ferrara, Italy

Key words: methyl glucose dioleate; emulsifiers; allergic contact dermatitis; medicaments; material safety data sheets.
© Munksgaard, 2001.

Case Report

A 30-year-old woman presented with an itchy erythematous edematous dermatitis of the legs and abdomen. She had previously self-medicated with Oziderm[®] paste for a suspected interdigital mycosis on her left foot, where the dermatitis had started a few days later. The dermatitis healed in a month with topical corticosteroid therapy.

Patch tests with the Italian SIDAPA series showed positive reactions to nickel sulfate (+D2/+ + +D3), propyl betaine (−D2/+D3) and Myroxylon Pereirae resin (−D2/+D3). A patch test with Oziderm[®] paste, as is, was strongly positive (+ +D2/+ + +D3). Further patch tests with all the constituents of the paste, kindly supplied by the manufacturer, identified a reaction to methyl glucose dioleate (10% pet.) only (+ +D3). Patch tests with the same preparations of this constituent were negative in 5 control subjects.

Discussion

Methyl glucose dioleate (Glucate[®] DO) is a water-in-oil emollient and emulsifier which is used in topical and cosmetic products. It is the di-ester of a methyl glucoside and oleic acid.

To our knowledge, this is only the 3rd case of topical sensitization to methyl glucose dioleate; in both previously reported cases, the allergen was contained in topical medicaments for leg ulcers (1, 2). Another positive reaction to methyl glucose dioleate was found in a patient primarily sensitized to methyl glucose sesquisteate in cosmetics (3). Methyl glucose dioleate has previously been successfully patch tested at 5% pet.

The material safety data sheet of methyl glucose dioleate admits only the possibility of mild irritancy. Our review of the literature seems to suggest this substance to be a rare sensitizer, though other cases may have been missed.

References

1. Schianchi S, Calista D, Landi G. Widespread contact dermatitis due to methyl glucose dioleate. *Contact Dermatitis* 1996; 35: 257–258.
2. Foti C, Veña G A, Mazzarella F, Angelini G. Contact allergy due to methyl glucose dioleate. *Contact Dermatitis* 1995; 32: 303–304.
3. Doms-Gossens A, Vandekerckhove M, Verschave H, Degreef H. Cosmetic dermatitis due to methyl glucose sesquisteate. *Contact Dermatitis* 1984; 10: 312–313.