

Contact allergy to thiocolchicoside

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Thiocolchicoside is a semi-synthetic derivative of colchicoside (Fig.1), from which it differs by the substitution of a methoxy group for a methyl sulfide group (1, 2). Because of its muscle relaxant, anti-inflammatory and analgesic actions, thiocolchicoside is successfully used in the treatment of painful muscular contractures. Administered orally, parenterally and topically, it is commonly well-tolerated (3–5). Local adverse reactions due to thiocolchicoside have rarely been reported (5–7).

Patch tests with the GIRDCA standard series were negative. Patch tests with the ointment, as is, and with its individual components (including thiocolchicoside 0.5%, 1%, 3% and 5% pet.) were positive to the ointment, to the hydrogenated lanolin it contained (8), and to thiocolchicoside 1%, 3% and 5% pet (Table 1). Photopatch tests with the same substances were negative. The dermatitis rapidly improved after cessation of the ointment and treatment with topical corticosteroids.

Case Report

A 27-year-old woman presented with an acute erythematovesicular dermatitis on the right shoulder. For 15 days previously, she had applied 2× a day an ointment containing thiocolchicoside (MuscoRil®) for backache.

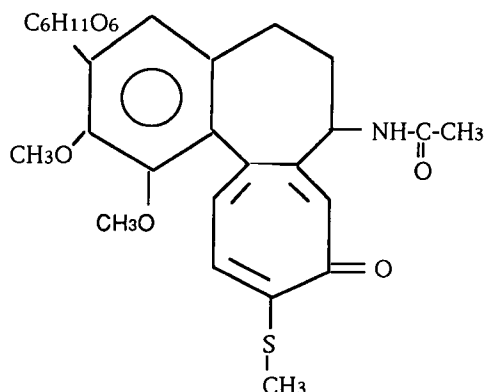


Fig. 1. Molecular structure of thiocolchicoside

Discussion

Foti et al. (7) have previously described a case of photocontact allergy to thiocolchicoside (0.1% and 0.2% aq. and 0.2% pet.), contained in MuscoRil® cream, used for a sprained ankle. In the current patient, patch tests with thiocolchicoside at less than 1% were negative: we recommend using 2% pet. The sensitizing potential of thiocolchicoside has been poorly investigated: in a group of 10 guinea pigs, treated with 100 mg /kg ointment, rubbed for 20 consecutive days on the back, no signs of sensitization were noted (2). However, its α , β -polyunsaturated ketone group is identifiable as allergenic.

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Table 1. Patch tests results

Substances	% vehicle	Results
MuscoRil® ointment	as is	++
thiocolchicoside	0.5% pet.	–
thiocolchicoside	1% pet.	++
thiocolchicoside	3% pet.	++
thiocolchicoside	5% pet.	++
hydrogenated lanolin	30% pet.	++
stearic acid	5% and 10% pet.	–
spermaceti	5% pet.	–
polyoxyethylene sorbitan mono-oleate	5% pet.	–
sodium lauryl sulfate	0.5% pet.	–
sodium alginate	0.5% and 5% pet.	–
paraben mix	15% pet.	–
silicone oil	5% pet.	–
lavender extract	5% pet.	–

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