

Short Communication

Facial contact dermatitis from chloramphenicol with cross-sensitivity to thiamphenicol

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Case Report

A 73-year-old woman, with no history of atopy or contact dermatitis, was referred with acute facial eczema. She had been treated for bilateral conjunctivitis with Ster-dex[®] cream (oxytetracycline and dexamethasone; Laboratoires Ciba), Dacryoserum[®] (boric acid, sodium borate, phenylmercuric borate, sodium chloride and rose water; Laboratoires Martin), and Cébédexacol[®] (chloramphenicol 0.4% and dexamethasone 0.1%; Laboratoires Chauvin). A day after initiation of treatment, she developed redness, oedema and pruritus of the eyelids which worsened over the following days, becoming more intense and progressively leading to occlusion of the eyelids. Lesions cleared within 10 days with topical corticosteroid therapy.

Patch tests were then performed with the European standard series, toluene-sulfonamide formaldehyde resin, and the medicaments applied. Finn Chambers[®] on Scanpor[®] were used. There was a positive (++/++) reaction at D2 and D5 to Cébédexacol[®] eyedrops undiluted. Breakdown of Cébédexacol[®] was then carried out, with additional thiamphenicol 5% and 1% pet., showing positive reactions to both antibiotics (Table 1).

Discussion

Allergic contact dermatitis from chloramphenicol is said to be rare in Europe, since its use has progressively decreased, and because eyedrops are the only topical forms

available, particularly in France. The last cases reported in the literature were caused by eyedrops (1, 2), or due to a leg ulcer cream (3), or to an ointment applied on excoriated skin (4). A similar source of sensitization was observed with azidamphenicol, a closely-related molecule (5). We have not observed any other positive patch test to chloramphenicol in our department over the past 10 years. Cross-reactions between chloramphenicol and synthetic derivatives, such as thiamphenicol, are highly probable, considering their chemical structures (Fig. 1).

Surprisingly, there was no mention of possible contact dermatitis among the side-effects of Cébédexacol[®] in the Vidal[®] dictionary (6). 2 other chloramphenicol-based eyedrops are available in France: Cébénicol[®] (Laboratoires Chauvin) and Tifomycine[®] (Laboratoires Roussel). Paradoxically, Cébédexacol[®] and Cébénicol[®] are marketed by the same company, and the possibility of hypersensitivity to chloramphenicol is clearly indicated only for the latter eye lotion (6). Chloramphenicol remains of particular interest in patch testing patients with eyelid dermatitis (7).

References

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Table 1. Results of patch testing

	D2	D4
chloramphenicol 5% pet.	++	+++
boric acid 1% pet.	–	–
thiamphenicol 5% pet.	++	++
thiamphenicol 1% pet.	++	++
sodium metabisulfite 1% pet.	–	–
methyl parabens (in parabens-mix)	–	–
dexamethasone 1% ethanol	–	–
dexamethasone 0.1% ethanol	–	–

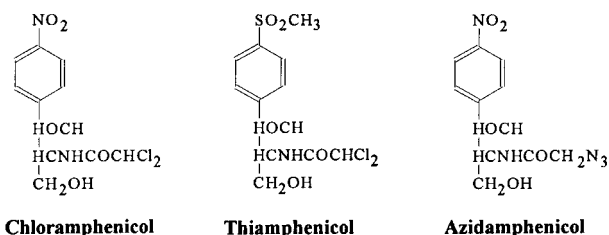


Fig. 1. Chemical structure of chloramphenicol and related antibiotics.

- matitis from chloramphenicol in a leg ulcer cream. *Contact Dermatitis*. 1991; 25: 64–65.
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