

Photocontact dermatitis because of oral dexametopfen

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Topical ketoprofen and dexametopfen are widely used because of their anti-inflammatory effect. There is an increasing number of case reports of allergic and photoallergic contact dermatitis from ketoprofen and dexametopfen. However, no photoallergic reaction because of oral dexametopfen has been reported to the moment.

Case Report

A 39-year-old man with personal history of psoriasis and familiar history of atopy, after 3 days of treatment with oral dexametopfen twice a day, suffered from a pruritic papulovesicular dermatitis in the body and arms of 7-day duration. The rash resolved in a few days following topical corticosteroid and oral antihistamines treatment without sequelae. In the next 2 weeks, he presented similar symptoms after 1 pill of dexametopfen in a few hours. He admitted to moderate sun exposure in the beach in the last case, and he did not remember sun exposure in the first episode. He recalled an acute dermatitis after applying topical ketoprofen in the back during one summer a few years ago. After that, he has followed treatment with ibuprofen and acetaminophen successfully.

Prick test with aeroallergens and foods were positive for *Olea europea*

and *Cupressus arizonica*. Prick and intradermal tests with metamizol and ibuprofen, and prick test with dexametopfen were negative. Patch test results with a non-steroidal anti-inflammatory drugs (NSAIDs) series (acetaminophen 5%, acetylsalicylic acid 5%, ketoprofen 2.5%, piroxicam 1%, benzydamine 1%, indometacin 5%, bufexamac 5%, naproxen 5%, ibuprofen 5%, phenylbutazone 1%, thiosalicylic acid 0.1%, diclofenac 5%, and dexametopfen 2.5%) were negative. Photopatch test (following irradiation with UVA 8 J/cm² at D2) results were positive for ketoprofen 1% pet. (++) and dexametopfen (+++).

Discussion

Dexametopfen is an NSAID of the arylpropionic acid group, (S)-(+)-enantiomer of ketoprofen (1). Since 1983, several cases of allergic and photoallergic contact dermatitis because of topical ketoprofen have been reported in Italy and Spain (2). Photoallergy is because of the benzophenone moiety of ketoprofen rather than the arylpropionic function (3). This induces cross-reactivity to the benzophenone-3 included in oxybenzone, fenofibrate, and some arylpropionic acid derivatives such as tiaprofenic acid or piketopfen (4). However, other arylpropionic derivatives that do not contain the benzophenone moiety (naproxen and ibuprofen) are usually well tolerated (5). This cross-reactivity has not been shown in all cases (6). There are some cases reported of photocontact dermatitis because of topical dexametopfen since 2003 (1, 7–9). This is the first report of photoallergy because of oral dexametopfen to our knowledge. He also presented photocontact dermatitis because of ketoprofen in the past, but tolerated oral ibuprofen without any problem.

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