

Photocontact dermatitis due to dexketoprofen

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Case Report

A 61-year-old woman presented in November 2001 with an acute eczematous plaque, over the upper 1/3 of her left leg, of 10 days' duration. She had been applying Enangel® (dexketoprofen trometamol 1.25%, Laboratorios Menarini, Barcelona, Spain) 2 × to 3 × daily to that area for several days prior to the onset. She admitted to moderate sun exposure of the treated area, but did not recall any previous topical or oral treatment with either ketoprofen or dexketoprofen trometamol. The rash resolved in 1 week following topical corticosteroid treatment, without sequelae or persistent photosensitivity.

Patch test results with the GEIDC standard series were positive for nickel sulfate (+++), Myroxylon Pereirae resin (++), cobalt chloride (+++), and palladium chloride (++). Patch test results with an NSAIDs series (ketoprofen 1% pet., piroxicam 1% pet., diclofenac 5% pet., fepradinol 1% pet., benzydamine chloride 3% pet., ibuprofen 5% pet., thiosalicylic acid 0.1% pet., phenylbutazone 1% pet., pikeprofen 2% pet.) plus Enangel® 1.25% as (is) were negative. Photopatch test (following irradiation with UVA 8 J/cm² at D2) re-

sults were positive for ketoprofen 1% pet. (+++), pikeprofen 2% pet. (+) and Enangel® 1.25% as is (+++).

Patch and photopatch tests were then done with the components of Enangel® (dexketoprofen, trometamol, ethyl alcohol 96%, carbomer, lavender essence HBE-8028), kindly provided by the manufacturer. Only the photopatch test with dexketoprofen 1% pet. was positive at D4 (+++).

Discussion

Photocontact dermatitis due to topical ketoprofen was first reported in 1985 in Spain (1), and has since been the subject of several single case reports and series, especially in countries where topical application is popular and/or sun exposure is likely (1–5). Cross-reactions have been demonstrated between ketoprofen and other arylpropionic derivatives, such as tiaprofenic acid, suprofen, ibuprofen, pikeprofen or flurbiprofen, both clinically and by patch and photopatch testing (2, 4, 5). Photoallergy is due to the benzophenone moiety of ketoprofen, but not to the arylpropionic function (4, 6). This induces cross-reactivity to fenofibrate (3, 4), unsubstituted benzophenone (4) and benzophenone-containing sunscreens (3), such as benzophenone-3 or benzophenone-10, which should probably not be used in such patients.

The therapeutic effect of ketoprofen, a racemic mixture of 2 enantiomers, is due to the (S)-(+)-enantiomer (dexketoprofen), while the (R)-(-)-enantiomer is devoid of biological activity (7). This is the 1st report of topical photocontact dermatitis from dexketoprofen trometamol, to our knowledge. Our patient was also shown to cross-react to racemic ketoprofen and pikeprofen, which are also available topically. Concomitant sensitization to both ketoprofen and pikeprofen has previously been described (2), but cross-reactivity has not been demonstrated in

other patients with contact dermatitis from ketoprofen (8) or photocontact dermatitis from pikeprofen (9).

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