

Consort photocontact dermatitis from piketoprofen

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Case Report

A 30-year-old man presented with an episode of vesiculobullous and intensely itchy lesions localized on the palmar area of his hands and fingers, which had developed some days after applying an anti-inflammatory gel (Calmatel[®] gel) containing pike-toprofen, 2 times a day, to his girlfriend's neck to treat a muscular pain for 3 days. Sun exposure on the beach was confirmed after gel application. He had not used the gel himself earlier, but he recognized an acute eczematous reaction after application of Fastum[®] gel (containing ketoprofen) and later sun exposure, about

10 years ago. The lesions cleared entirely within 7 days of discontinuing the gel and applying a topical corticosteroid. Patch testing with the standard series recommended by the Spanish Contact Dermatitis Investigation Group and an additional series of non-steroidal anti-inflammatory drugs (NSAIDs) (Aristegui[®] Lab, Bilbao, Spain) (Table 1), which included piketoprofen, was negative at 2 and 4 days. Subsequently, photopatch testing with the NSAIDs series and dexketoprofen 1% and 2% in pet. was carried out after UVA irradiation (5 J/cm²). We found positivity (++) with piketoprofen, ketoprofen and dexketoprofen in the photopatch test both at 2 and 3 days. Patch testing with benzophenones was not performed. Control tests were carried out in 8 healthy patients with negative results.

Discussion

Consort contact dermatitis is an allergic dermatitis caused by contact with environmental sensitizers borne by a partner. Connubial contact dermatitis should only be applied when the allergen comes from the spouse. In the term 'consort', which includes not only a spouse but also a companion or partner, the dermatitis is not necessarily produced by sexual exposure.

Several examples of consort dermatitis have been described from the use of various substances, including cosmetic products, feminine hygienic products (spermicides, lubricant gels and vaginal suppositories) and drugs, such as amoxicillin, inhaled corticosteroids or ketoprofen. However, there are few reports of consort photosensitivity (1, 2).

Piketoprofen is a NSAID derived from the arylpropionic acid group, which is available in Spain as aerosol, cream and gel for topical use. Although topical piketoprofen is widely used in Spain among sport and aged people, there are few reported cases of allergic and photoallergic dermatitis (3–5), which is probably because of an underestimation. To the best of our knowledge, this is the first case reported of consort photoallergic contact dermatitis caused by piketoprofen. Another point of interest in our case is the cross-reaction with ketoprofen and dexketoprofen in the photopatch test, which also has been described in some previous reports. Valenzuela et al. (6) reported a photodermatitis caused by dexketoprofen, which presented cross-reactions with piketoprofen and ketoprofen. Similarly, Garcia Bara et al. (7) reported a contact photodermatitis caused by ketoprofen and piketoprofen.

Nevertheless, cross-reactivity has not been shown in other cases of contact dermatitis caused by piketoprofen (4), dexketoprofen (8, 9) or ketoprofen (10). Presently, we cannot find an explanation to this fact. We believed that in cases of previous photosensitivity to ketoprofen, a cross-reaction with dexketoprofen and/or piketoprofen may be present. In a previous report, we always found cross-reaction between dexketoprofen and ketoprofen but not between dexketoprofen and piketoprofen (9).

This case confirms the usefulness of performing an allergological study in patients with contact dermatitis and photodermatitis secondary to NSAIDs, in order to establish which drugs should be avoided, given that information presently available is scarce and contradictory.

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Table 1. NSAIDs series of our department

Allergen	Concentration and vehicle
Piketoprofen	2% pet.
Ketoprofen	1% pet.
Indomethacin	1% pet.
Indomethacin	5% pet.
Indomethacin	10% pet.
Acetaminophen	1% pet.
Acetaminophen	5% pet.
Acetaminophen	10% pet.
Salicylic acid	1% pet.
Salicylic acid	5% pet.
Benzylamine hydrochloride	3% pet.
Benzylamine hydrochloride	5% pet.
Bufexamac	5% pet.
Naproxen	5% pet.
Ibuprofen	5% pet.
Phenylbutazone	1% pet.
Fepradinol	1% pet.
Thiosalicylic acid	0.1% pet.
Diclofenac	1% pet.
Diclofenac	5% pet.
Diclofenac	10% pet.
Piroxicam	1% pet.
Sodium salicylate	0.1% pet.
Salicylamide	0.1% pet.
Methyl salicylate	2% a.o.
Oxiphenylbutazone	10% pet.

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