

Allergic contact dermatitis from indomethacin

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Case Report

A 14-year-old boy was admitted to hospital with a pruriginous, erythematous, papulovesicular eruption on the right ankle that appeared 10 days after he had started therapy with indomethacin gel (Inacid®) for a sprained ankle. The lesions disappeared some days after application of the gel was suspended. Previously, he had taken NSAIDs orally but never topically. Personal and family histories were negative for allergy.

Several months after resolution of lesions, he was patch tested with the European standard series (TRUE Test™, Pharmacia), indomethacin gel and NSAIDs available topically: piroxicam, naproxen, diclofenac,

ketoprofen and ibuprofen. We also performed patch tests with pure indomethacin (1% pet.) and excipients of the gels supplied by the manufacturers. Oral challenge test with indomethacin was performed after written consent.

The standard series was negative, in contrast to the +++ reactions on patch testing with both pure and gelled indomethacin. The other NSAIDs tested, as well as the excipients, were negative (Table 1). Oral administration of indomethacin (Inacid® 25 mg per tablet) up to the therapeutic dose was tolerated.

Discussion

Indomethacin is an NSAID of the indol-acetic family used frequently in osteo-muscular pathology. Contact dermatitis is a frequent adverse reaction to topical NSAIDs (1–3), though indomethacin has rarely been implicated in such reactions (1, 4).

Table 1. Patch test results

Patch tests	Results
European standard series	–
indomethacin	
gel (Inacid®), as is	+++
pure 1% pet.	+++
other NSAIDs	
diclofenac (Voltaren® emulgel, as is)	–
naproxen (Naprosyn® gel 1%, as is)	–
piroxicam (Feldene® 0.5%, as is)	–
ibuprofen 5% pet.	–
ketoprofen 5% pet.	–
excipients	
di-isopropanolamine	–
hydroxypropyl cellulose 5%	–
carbopol	–
alcohol 96°	–
benzyl alcohol	–

References

1. Pigatto P D, Mozzanica N, Bigardi A S, Legori A, Valsecchi R, Cusano F, Tosti A, Guarrera M, Balato N, Sertoli A. Topical NSAID allergic contact dermatitis. Italian experience. *Contact Dermatitis* 1993; 29: 39–40.
2. Ophaswong S, Maibach H I. Topical nonsteroidal antiinflammatory drugs: allergic and photoallergic contact dermatitis and phototoxicity. *Contact Dermatitis* 1993; 29: 57–64.
3. Gonzalo M A, Revenga F. Multiple cutaneous sensitization to nonsteroidal antiinflammatory drugs. *Dermatology* 1996; 193: 59–60.
4. Beller U, Kaufmann R. Contact dermatitis to indomethacin. *Contact Dermatitis* 1987; 17: 121.