

Short Communication

Zinc acexamate allergy

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Key words: drug reactions; flare-up; leg ulcer; positive patch test; zinc acexamate. © Munksgaard, 1998.

Zinc acexamate (ZAC) is used in the treatment of gastric and duodenal ulcers, and in the prevention of gastric lesions caused by non-steroidal anti-inflammatory drugs (NSAIDs) (1).

Case Report

A 60-year-old man had a chronic stasis ulcer of the left leg. He had developed a pruritic dermatitis around the ulcer, with intermittent secondary spread, in the last 7 years. He had used various topical antibiotics and antiseptics to treat the ulcer. 6 months before the patient was referred to us, and 12 h after taking tenoxicam (Til-

cotil®), an NSAID, and ZAC (Copinal®), he developed a generalized rash, which resolved with slight desquamation after several days of oral corticosteroids and antihistamines. Previously, he had taken both drugs with good tolerance. He had previously been diagnosed as allergic to sulfonamides.

We carried out patch tests with the GEIDC standard series, excipients, cosmetics and antimicrobials series (all supplied by J. Marti Tor, Barcelona, Spain), and with the drugs and excipients listed in Table 1, on the back with Leukotest® (Beiersdorf AG, Hamburg, Germany). Readings were made according to ICDRG guidelines after 2 and 4 days. The results are shown in Table 1.

A double-blind placebo-controlled oral challenge test was carried out with pure ZAC (supplied by Laboratorios Viñas S. A., Barcelona, Spain). After 12 h, the patient developed a generalized eruption of pruriginous maculopapular lesions with urticarial characteristics, predominant on the trunk. A biopsy showed a normal epidermis with mild loss of the rete ridges and mild edema in this zone, with a superficial, slight perivascular infiltration of lymphocytes, compatible with an urticarial reaction. The ZAC patch test reaction was reactivated by the oral challenge test. Biopsy of the flare-up patch test demonstrated some foci of spongiosis in the epidermis, and in the dermis a moderate perivascular infiltration of lymphocytes with eosinophils, compatible with eczema.

Discussion

To our knowledge, this is the 1st case report of ZAC allergy. The mixed picture of urticaria and eczema has been found before by us (2). To assess the possibility of zinc in the ZAC molecule being the responsible antigen, we patch tested with zinc sulfate, with negative results. Adverse reaction to Copinal®, due to the peppermint oil used as an excipient, which elicited a positive patch test, was excluded by the positive oral challenge with pure ZAC. The patient was sensitized to numerous other compounds, which is commonly the case in stasis ulceration and dermatitis (3, 4).

During the oral challenge test with ZAC, we observed a flare of the pre-existing positive patch test to ZAC. This phenomenon, of a specific flare of an existing or

Table 1. Patch test results

	D2	D4
GEIDC standard series		
balsam of Peru	+	++
fragrance mix	+++	+++
Kathon CG	+	++
metallic mercury	+	++
neomycin	?+	++
p-tert-butylphenol	++	++
others	-	-
Excipients, cosmetics and antimicrobials series:		
propylene glycol	++	++
geraniol	++	++
mercurochrome	++	++
mercuric ammonium	+	++
others	-	-
Drugs and excipients:		
Tilcotil® 10% pet.	-	-
sulfamethoxazole 5% pet.	-	-
trimethoprim 5% pet.	++	++
excipients of trimethoprim	-	-
Copinal® as is	++	+++
zinc acexamate 5% aq.	++	++
peppermint oil (excipient of Copinal®) 1% pet.	++	++
other excipients of Copinal®	-	-
zinc sulfate 10% pet.	-	-

10 control subjects patch tested were negative with drugs and excipients.

pre-existing dermatitis or a flare of a pre-existing skin test, is termed "flare-up". It has been described after patch testing with nickel (5), after systemic intake of nickel, and also after challenge tests with amoxycillin (6).

References

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