

Allergic Contact Dermatitis from Retapamulin Ointment

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Précis

We describe three patients who had positive patch-test reactions to retapamulin ointment. To date, reports of contact allergy to this antibiotic are lacking.

Discussion

The first patient was a 40-year-old atopic woman who presented with a 4-year history of a pruritic and vesicular hand dermatitis that had recently spread to involve her arms, legs, hips, back, and perioral area. Previous treatments included numerous topical corticosteroids, immunomodulating agents, retapamulin ointment, and mupirocin ointment. Patch testing with the North American Contact Dermatitis Group (NACDG) standard tray, corticosteroids, vehicles, preservatives, flavorings, corticosteroids, cosmetics, and 30 personal products showed a ++ reaction to retapamulin ointment, confirmed by a repeat open application test. The patient's dermatitis significantly improved within 2 months of her discontinuing retapamulin.

The second patient was a 16-year-old female who presented after another dermatologist had treated her for folliculitis with various topical antibiotics, including neomycin, bacitracin, and retapamulin. After this treatment failed to improve her condition, she was told to "use more retapamulin" for secondary impetigo. Subsequently, she developed an intensely pruritic, papular, and vesicular eczematous dermatitis on the trunk, arms, and thighs. Patch testing with neomycin, bacitracin, and retapamulin ointment showed a moderate papulovesicular reaction (++) to retapamulin. The dermatitis cleared within several months after discontinuation of retapamulin.

The third patient was a 6-year-old girl with type 1 diabetes who presented with an acute, pruritic, vesicular

PEARLS provide insight into understanding disease pathogenesis or improving treatment. ZEBRAS inform about previously unrecognized conditions or atypical variants of known disorders.

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dermatitis of her wrists, ankles, and right knee, confined to areas covered by bandages. Previous treatments included oral antibiotics, retapamulin ointment, and oral prednisone. Her mother described a similar eruption, localized to the patient's right cheek, which had developed 2 weeks previously while the patient and her family were on a cruise ship. The ship's physician treated the patient for impetigo with oral antibiotics and topical retapamulin ointment. The patient had previously used retapamulin ointment for minor cuts and abrasions and had a history of dermatitis associated with the application of triple antibiotic ointment and earlobe dermatitis after ear piercing. Patch tests with the NACDG standard tray and with personal items (retapamulin ointment, rubber boots, facial wipe, shampoo, medical alert bracelet) showed reactions to retapamulin (+++), neomycin (+), balsam of Peru (+), and potassium dichromate (+) (Fig 1). The patient's dermatitis resolved after treatment with topical corticosteroid ointment and discontinuation of retapamulin ointment.

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Figure 1. Patch-test reaction to retapamulin in patient 3.

Retapamulin was the first semisynthetic pleuromutilin antibiotic to be approved in the United States and has been available since 2007 for treatment of uncomplicated superficial skin infections caused by *Staphylococcus aureus* and *Streptococcus pyogenes*. It is currently formulated at a 1% concentration in petrolatum (Altabax, GlaxoSmithKline, Research Triangle Park, NC). Retapamulin has a unique site of action (on the 50S bacterial ribosomal subunit), and clinical trials have demonstrated an efficacy similar to that of oral cephalexin¹ and superior to that of a placebo.² Retapamulin is structurally unrelated to aminoglycosides and the polypeptide and macrolide classes of topical

antibiotics, all of which have been reported to cause allergic contact sensitization.³ Dermatologic side effects reported from clinical trials of Altabax include application-site pruritus (1.9%), application-site irritation (1.6%), pruritus (1.5%), and eczema (1.0%).⁴ Contact dermatitis was reported in less than 1% of study patients, but details were not published. A separate literature search found no published cases.

Zebra

Practitioners should be aware of potential sensitization to retapamulin, a new “zebra” allergen.

References

1. Parish LC, Jorizzo JL, Breton JJ, et al. Topical retapamulin ointment (1%) twice daily for 5 days versus oral cephalexin twice daily for 10 days in the treatment of secondarily infected dermatitis: results of a randomized controlled trial. *J Am Acad Dermatol* 2006;55:1003–13.
2. Koning S, Vander Wouden JC, Chosidow O, et al. Efficacy and safety of retapamulin ointment as treatment of impetigo: randomized double blind multicentre placebo-controlled trial. *Br J Dermatol* 2008;158:1077–82.
3. Gehrig KA, Warshaw EM. Allergic contact dermatitis to topical antibiotics: epidemiology, responsible allergens, and management. *J Am Acad Dermatol* 2008;58:1–21.
4. Altabax package insert. Available at: us.gsk.com/products/assets/us_altabax.pdf (accessed Jan 22, 2009).

Contact Dermatitis Due to Stockings

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Précis

It may be difficult to diagnose textile allergic contact dermatitis on the feet in patients who are already known to be sensitive to potassium dichromate or rubber accelerants. Stocking allergy needs to be considered.

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Discussion

A 49-year-old female sales assistant in a fabric shop presented with eczema of the soles and dorsal feet. Occasionally, lesions also appeared on her dorsal hands, her hips, her waist, and her lumbar region. The patient had been evaluated previously by the skin allergy unit of our department for a similar rash on the dorsal surface of the feet. At that time, she had positive patch-test reactions to potassium dichromate, nickel sulfate, cobalt chloride, and mercapto mix. The patient changed to chrome-free leather shoes and remained asymptomatic for 6 years. In view of the re-appearance of clinical symptoms, patch testing was performed with the Spanish Group for Research in