

The safety of topical erythromycin

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The prevention of allergic complications depends on the use of topical medications which have proved to be rare sensitizers. This is particularly true for stasis ulcers and eczemas which are notoriously readily sensitized. Topical erythromycin has proved to be such a non-sensitizing topical antibiotic. In a series of 60 patients with stasis ulcers, erythromycin in the form of Ilotycin ointment (erythromycin in petrolatum) was applied. Not a single instance of allergic sensitization occurred. No instances of sensitization with positive patch tests to topical erythromycin have been reported. Maximization tests with topical erythromycin did not produce sensitization. Topical erythromycin, an effective antibiotic, should be substituted for neomycin which is a common sensitizer.

Key words: erythromycin - neomycin - non-sensitizing topical antibiotic - sensitizing antibiotic - stasis ulcers.

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Angelini et al. (1975), in a recent study of contact dermatitis in patients with leg ulcers, revealed that patch tests with 63 substances in 306 patients with stasis dermatitis of the legs, with or without ulceration, demonstrated the presence of sensitivity to one or more substances in 177 cases. The highest percentage of positive responses was recorded with neomycin (16.3 %) confirming other reports (Wereide 1970, Rudzki & Kleniewska 1971). Of the reactions with various topical medicaments, the highest percentage of responses was reported with neomycin.

In my own experience, neomycin also proved to be such a common sensitizer that I abandoned its use a long time ago. As a substitute for the past six years, I have used topical erythromycin in the form of Ilotycin ointment (5 % erythromycin in petrolatum) which has proved effective for the treatment of all types of impetigo, assorted types of

infected dermatoses, including stasis eczema and ulcers. Ilotycin ointment has been applied routinely to skin which has been the site of dermabrasion and curettage and desiccation.

Most significant is the fact that repeated applications of Ilotycin ointment to stasis ulcers in 60 patients has not resulted in a single instance of allergic sensitization to this topical antibiotic.

Dr. A. M. Kligman, in a personal communication, has informed me that my clinical impression that topical erythromycin is an extremely rare sensitizer is borne out by repeated maximization tests which he has performed with this topical antibiotic. Dr. Kligman has introduced the use of topical erythromycin for severe cases of acne vulgaris and anticipates no sensitization from its use.

We should adhere to the dictum, "Don't use an antibiotic topically which you may

have to use systemically since topical sensitization would preclude systemic administration". However, as far as erythromycin is concerned, since topical sensitization has not occurred with repeated and prolonged use, including its use on stasis ulcers, this antibiotic would appear to be a "safe", non-sensitizing topical antibiotic which will not preclude its use systemically.

Angelini et al. (1975) in their article on contact dermatitis in patients with leg ulcers conclude by agreeing with Fisher (1971) and Malten et al. (1973), that the prevention of allergic complications essentially depends on the use of topical applications normally unassociated with allergic reaction.

It would appear that topical erythromycin would fit the category of a non-sensitizing topical medication. It is urged that whenever possible erythromycin should be substituted for neomycin which is often associated with allergic reaction.

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