

Fixed Drug Eruption to Erythromycin

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A case of repeated eruption after administration of erythromycin is described. It is the first report of erythromycin as proven agent of such an allergic reaction. *Key words: Drug allergy; Erythromycin.* (Received December 14, 1983.)

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Fixed eruption induced by treatment with drugs, in contrast with other kinds of skin rash, is virtually a pathognomonic symptom for drug hypersensitivity. In fact, while urticaria and other toxo-allergic exanthema may be non-iatrogenic, fixed erythema is always induced by drugs or by chemical compounds (1).

The list of drugs that most frequently induced fixed erythema has not included the antibiotic erythromycin. Erythromycin, a macrolide, is a valuable and useful antimicrobial agent. Its low indices of toxicity and of sensitization make it an attractive agent for the treatment of a variety of respiratory and skin infections in patients allergic to penicillin. Despite its use over more than two decades, development of allergy, in susceptible subjects has not been a real problem. Only Putzi (2) and van Ketel (3) have reported immediate and delayed type allergy and side effects due to erythromycin. Only Naik (4) has described a bullate fixed drug eruptions after erythromycin, but without proof that erythromycin was the causative agent.

To our knowledge, ours is the the first report of erythromycin as the proven cause of fixed drug eruption.

CASE REPORT

A man aged 47 years, after taking 11 tablets of erythromycin (equivalent to 5.5 g) within 3 consecutive days for treatment of a worsening bronchiectasis from which he had suffered for years, developed red-to-violet edematous-infiltrative patches on both hands with flaccid blisters. Treatment with erythromycin some years earlier did not have this effect. Histologic examination of the edge of the lesion showed edema and vasodilation of the papillary and middle derma plus moderate perivascular lymphocyte and monocyte infiltration.

After this eruption had subsided, a patch test with the antibiotic appeared to give negative results. In order to be more sure of etiology a challenge test was performed. 100 mg of erythromycin ethylsuccinate (drops) were administered to the patient. During the 24 hours following this a moderate renewal of dermatitis in the same site as before was observed.

DISCUSSION

Fixed drug eruption is characterized by one or several sharply circumscribed erythematous plaques which may blister, and that heal with marked hyperpigmentation. The lesion always recur in exactly the same spots. Tetracycline, phenolphthalein, quinine, sulphonamides, barbiturates, oxyphenbutazone and phenylbutazone are commonly associated with this reaction.

Our case deserves reporting because of its remarkable rarity. Erythromycin has been considered, up to now, a safe drug from an allergologic point of view. However, a number of anaphylactic reactions and a few cases of eczematous reactions after treatment with erythromycin have been described (3). Allergic contact dermatitis was also observed in

patients using erythromycin for treatment of leg ulcers (5). Nevertheless macrolide antibiotics are rarely involved in cases of allergic reaction, and little information on erythromycin has been published. Ours is the first published case of fixed drug eruption proven to be due to erythromycin therapy.

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