

Fixed eruption due to erythromycin

A case report

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A case of fixed eruption due to erythromycin is reported. To our knowledge, there have been only two previous descriptions. Cross-sensitivity with other macrolides were not demonstrated.

Key words: cross-sensitivity; erythromycin; fixed eruption.

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Since 1894 when Brocq (1) described fixed eruption (FE), numerous drugs and chemical complexes have been implicated (2) and FE is virtually a pathognomonic symptom for drug hypersensitivity. Erythromycin is a valuable and useful antimicrobial agent, its low rates of toxicity and sensitization making it an attractive agent for the treatment of a variety of respiratory and skin infections, particularly in patients allergic to penicillin.

Adverse reactions to erythromycin, particularly FE, are unusual (8). Only Naik (4) and Pigatto (7) have described two cases of adverse reactions, both FE, after administration of erythromycin. Cross-sensitivity between several drugs causing FE is well known (5) (9) and the diagnostic possibilities of the patch test have been demonstrated.

We report one case of FE due to erythromycin in which the patch test was positive, but no cross-sensitivity with other macrolides was found.

CASE REPORT

A 46-year-old man, presented with related adverse reaction to penicillin. Erythromycin, sulfamides and pirazolons were prescribed when

necessary. He presented macular and erythematous lesion on two occasions at the top of the left leg and around the genital area, and, subsequently, residual pigmentation.

Provocation test was performed with magnesium dipirona and trimethoprim-sulfamethoxazole (p.o. and i.m.) at therapeutic dosages, with negative outcome. Oral provocation test with 50 mg erythromycin was positive, and after 5 h the previously described lesions reappeared. Patch test with erythromycin 10% in dimethylsulfoxide (DMSO) was positive (hyperpigmented macula) on the skin with previous lesion, and negative on healthy skin. Oral provocation tests up to therapeutic dosage and patch tests with josamycin and diacetyl-midecamycin were negative.

DISCUSSION

FE appears in the same place each time the implicated drug is administered. Lesions may be macular, eczematous or even bullous, and range from pink to dark red or brown. Pruritus and systemic symptoms are unusual. After resolution, the site may remain hyperpigmented.

Although similar cases have been previously described, our case of FE due to erythromycin is

still exceptional, bearing in mind that erythromycin is widely used clinically and has a large number of indications.

Patch test profitability in the FE diagnostic continues to be low, perhaps because it is not a standardized test. However, using DMSO as diluent we reproduced a morphologic lesion similar to the one the patient presented after taking erythromycin in the oral provocation test.

As Gomez et al. (3), we consider that the reappearance of lesions after provocation test (for a short period) is currently the most reliable test for diagnosis of this adverse reaction.

The absence of cross-sensitivity with other macrolides (josamycin-midecamycin) confirms that the factor which determines localization and recurrence of lesions on the skin is very specific (6). Although there are reported cases of FE from two or more drugs without pharmacological connection, this lesion can appear in different places in the same patient (6).

REFERENCES

1. Brocq L. Eruption erythémato pigmentée fixe due à l'anti-pyrine. *Ann Dermatol Syphiligraphie* 5, 308, 1894.
2. Bruinsma W (ed.). *The guide of drug eruptions*, 3rd ed. Amsterdam University, Amsterdam, 1982.
3. Gómez B, Sastre J, Azofra J, Sastre A. Fixed drug eruption. *Allergol Immunopathol* 13, 87-91, 1985.
4. Naik RPC, Singh G. Bullous fixed drug eruption presumably due to erythromycin. *Dermatologica* 152, 177-180, 1976.
5. Nayyar KC, Pasricha JS. Fixed drug eruption due to oxyphenbutazone and phenylbutazone. *Dermatologica* 144, 214, 1972.
6. Pasricha JS, Shukla SR. Independent lesions of fixed eruption due to two unrelated drugs in the same patient. *Br J Dermatol* 101, 361, 1979.
7. Pigatto PD, Riboldi A, Riva F, Altomare GF. Fixed drug eruption to erythromycin. *Acta Derm Venereol* (Stockh). 64, 272-273, 1984.
8. Van Ketel WG. Immediate and delayed-type allergy to erythromycin. *Contact Dermatitis* 2, 363-364, 1976.
9. Welsh AL. Crossed fixed drug eruption from three antibiotics. *Arch Dermatol Syphilol* 71, 521, 1955.

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