

CONTACT POINTS

CONTACT DERMATITIS 2006: 55: 192–195

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Stevens-Johnson syndrome from metronidazole

Contact Dermatitis 2006: 55: 192–193

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Key words: allergy; drug eruption; metronidazole; patch test; Stevens-Johnson syndrome.

The most frequently reported drug eruption caused by metronidazole is fixed drug eruption, followed by rash; pruritus; urticaria/angioedema; acute, generalized, exanthematous pustulosis; and toxic epidermal necrolysis (1). In 1 article, Stevens-Johnson syndrome caused by occupational exposure to metronidazole was reported (2).

Case Report

A 43-year-old woman presented to the emergency room with bullous skin lesions, general malaise, and chills. Before the development of the skin lesions, she was orally treated with amoxicillin and metronidazole for gingivitis. 1 day after this treatment, she developed a rash with pruritus. Her family practitioner discontinued amoxicillin and prescribed cefuroxim because of a possible drug eruption by amoxicillin. After 2 days, she developed bullous lesions and erosions on lips, back, submammary and axillary areas, and groin, accompanied by generalized erythema and oedema of the distal extremities (Fig. 1a). She had no involvement of eyes, oropharyngeal, and vulvar mucosa. She was admitted to the Department of Dermatology for diagnosis and treatment. Histological investigation of a skin biopsy showed a reactive epidermis with numerous apoptotic cells, vacuolar degeneration of the dermoepidermal junction, a moderate cellular

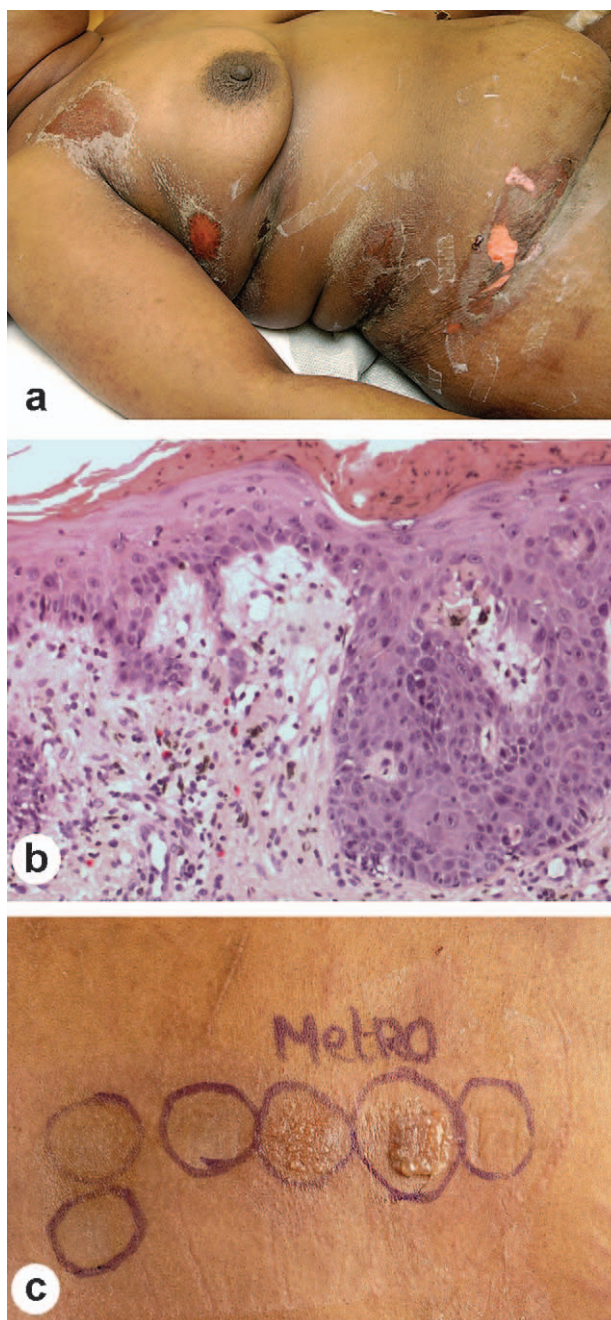


Fig. 1. **a**, Bullous lesions and erosions; **b**, apoptotic cells, vacuolar degeneration, dermal oedema, and dermal cell infiltrate containing eosinophils in the haematoxylin and eosin staining of the skin section; and **c**, positive vesicular test reactions to metronidazole in water (left) and in petrolatum (right).

infiltrate containing numerous eosinophils, and a pronounced pigment incontinence (Fig. 1b). Clinical and

pathological findings were found to be consistent with Stevens-Johnson syndrome and suggested to be possibly

caused by amoxicillin. After the discontinuation of antibiotics, the therapy consisted of 60 mg prednisolon per oral for 2 days, followed by betamethasone dipropionate 0.05% cream, which resulted in quick improvement in the skin lesions. 7 weeks after the resolution of the lesions, the patient was patch tested to amoxicillin, cefuroxim, and metronidazole tablets dissolved 50% in water and petrolatum. 48 hr after the application of the patch test, a vesicular (++) reaction to metronidazole both in water and petrolatum was seen, while there was no reaction to amoxicillin and cefuroxim (Fig. 1c). 1 control subject did not show any reaction to the same test materials. The patient was advised to avoid topical and systemic use of metronidazole.

Comment

Metronidazole is a very rare cause of Stevens-Johnson syndrome (1, 2). In our case, amoxicillin and cefuroxim were thought to be the most possible cause of the reaction. However, the patch test results showed a clear reaction to metronidazole and not to the other antibiotics. Metronidazole can cause Stevens-Johnson syndrome by therapeutic use and should promptly be discontinued in patients with this reaction.

References

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