

Systemic dermatitis with eosinophilia due to epsilon-aminocaproic acid

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Aminocaproic acid (EACA) is a synthetic monoamino carboxylic acid, which inhibits fibrinolysis and is useful in the treatment of excessive bleeding. Only in rare instances have adverse allergic reactions been reported.

A 70-year-old man presented with massive haemoptysis due to bronchiectasis. He gave a previous history of neomycin allergy. He received 3 days treatment with ceftriaxone, aminophylline, intravenous EACA, oral codeine, and inhaled albuterol and ipratropium bromide. After 24 h of treatment, he complained of pruritus and, after 3 days, developed a pruritic generalized micropapular eruption, without fever or mucous membrane lesions. By this time, treatment was clarithromycin, oral EACA and inhalers.

Although the antibiotic was stopped and symptomatic treatment with corticosteroids and antihistamines instigated, the lesions worsened over the next 7 days. Even after this intensive corticosteroid treatment, there was an eosinophilia (1079 eosinophils; 9.3%), which had not been present on admission (100 eosinophils; 0.09%). Once all the drugs were stopped, the patient healed in 10 days with symptomatic treatment.

Patch tests were performed to the drugs and preservatives administered and readings at D2 and D4 made (Table 1). Skin tests (prick and intradermal) with penicillin, cephalosporins and erythromycin were negative at immediate and delayed readings. Oral or parenteral challenges with codeine, ceftriaxone and erythromycin were well tolerated.

Table 1. Patch test results

Allergen	D2	D4
neomycin	—	++
gentamicin	—	++
aminocaproic acid	++	+++
aminophylline	—	—
ethylenediamine	—	—
theophylline anhydrous	—	—
erythromycin	—	—
ceftriaxone	—	—
codeine	—	—

Comment

This case of systemic dermatitis with eosinophilia due to EACA, confirmed by patch testing, appears to be the 1st such case reported. The patient had also sensitization to aminoglycosides, unrelated to this episode. The rare adverse reactions to EACA include: purpuric rash (1); bullous lesions (2); extensive muscle necrosis (3); anaphylactic shock (4); and contact dermatitis (5–8). The related compounds epsilon-caprolactam and nylon 6 have also caused allergic contact dermatitis, the former on occupational exposure (9) and the latter due to clothing (10). Most allergic contact reactions to EACA are due to eyedrops containing it.

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