

Short Communication

Occupational airborne allergic contact dermatitis from azithromycin

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Occupational skin diseases result from direct contact between the skin and the causal agent (1). Patch testing is used to confirm such a relationship for allergens (2). Nethercott (3) reported that the sensitivity and specificity of patch testing were approximately 70%.

Case Report

A 32-year-old pharmaceutical worker, employed for 13 years in the synthesis of antibiotics, was referred with forearm and face symptoms. For the past 3 years, he had been loading reactors at 3 different stages of azithromycin synthesis and been exposed to airborne powders. He wore overalls and latex gloves. Symptoms had persisted for a year in the form of pruritus, erythema, vesicles, and scaling of the face and forearms. He had no previous history of respiratory or dermal allergy.

Patch tests with the European standard series plus latex allergen (ALK-Abello, Denmark) were negative at D2 and D3. Prick tests with common inhalatory allergens were also negative and the total serum IgE was

within the normal range (55 kU/l). A patch test with pure azithromycin was ++ at D2 and D3, and negative in 5 non-atopic control subjects. A week of workplace exposure confirmed progressive worsening of skin symptoms, which cleared after cessation of such exposure.

The patch test and the workplace challenge were considered reliable in the diagnosis of occupational allergic contact dermatitis induced by azithromycin, which has not previously been reported. After transfer to another work station that excluded exposure to azithromycin, the patient showed no further work-related symptoms.

References

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