

CONTACT POINT

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Sensitization to clavulanic acid in Augmentin®

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Case Report

6 months before presentation, a 1½-year-old girl was prescribed an Augmentin® (amoxicillin and clavulanic acid combination) suspension for pneumonia complicating cystic fibrosis. After a few days of taking the medicine, she developed a scarcely perceptible widespread rash, which subsided spontaneously after discontinuing the drug. During a subsequent episode, she received amoxicillin alone, without any adverse effects. A few months later, she needed antibiotics and was again prescribed Augmentin suspension. This resulted within a few days after the 1st dose in large urticarial wheals, scattered all over her body, which disappeared approximately 1 week after discontinuing the treatment. There was no personal or family history of atopy.

Results

Intradermal tests were performed with 0.05 mL benzylpenicilloyl poly L-lysine (0.035 mg/mL; Allergopen®; Allergopharma, Reinbek, Germany), 0.05 mL benzylpenicillin (500 IU) and NaCl solution as a control. A weak positive reaction was seen after 15 min to Allergopen.

Patch tests were performed with benzylpenicillin 100,000 IU/mL, ceftriaxone 20%, amoxicillin 10%, cefuroxime 20% and cefazoline 20%, all in aq., and potassium clavulanate (SmithKline Beecham, West Sussex, UK) 10% and 3% pet. A positive reaction was seen only to potassium clavulanate 10% pet. at the D3 reading. 23 controls did not react to potassium clavulanate 10% pet.

Discussion

Clavulanic acid has a β -lactam structure resembling that of the penicillin nucleus. It has only weak antibacterial activity but is a potent inhibitor of β -lactamases (1). In combination with amoxicillin it has strong antimicrobial activity.

Very few allergic reactions to clavulanic acid have been reported (2–4), which may be explained by a very low allergenic potential of clavulanic acid (4). The reactions described were all due to a Type I immunological mechanism. As far as we know,

no positive patch tests to clavulanic acid have been described before.

The patient's physicians were advised to avoid the use of clavulanic acid.

Acknowledgement

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