

In conclusion, we have presented four familial cases of CU. Our patients do not share a common genetic background: some are Sephardic Jews, and the others are of Ashkenazi extract. The affected individuals are exclusively male with father-to-son transmission and a similar age of onset. In this set of families, the cause may well be a major autosomal dominant gene in a polygenic background with an environmental trigger. Their signs and symptoms are similar to those of patients with classic CU as described in the literature. All our patients have had active disease since adulthood: the older ones, the fathers, for several decades and their sons, for several years since the onset of symptoms. The long duration of symptoms might be an exclusive feature of the familial types of urticaria.

We thank Ceryl Legum, MD, Head of the Department of Genetics, Tel-Aviv Sourasky Medical Center, for his suggestions and guidance in the preparation of this article.

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Cefazolin specific side chain hypersensitivity

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At our adverse drug reaction clinic in the past 9 years, over 1000 patients have been skin tested for possible penicillin allergy with benzylpenicillin, penicilloyl-polylysine, minor determinant mix, ampicillin (1 mg/ml), and cefazolin (1 mg/ml). Our overall skin test positivity rate is 4%, which is in keeping with that reported in the world literature.¹ Our cefazolin skin test positivity rate is 0.9%. Of our nine patients with positive cefazolin skin test results, only one had positive responses exclusively to cefazolin, whereas the rest had positive responses to other penicillin determinants in addition to cefazolin.

CASE REPORT

The patient with the isolated cefazolin positive skin test result was a 33-year-old woman who experienced anaphylaxis (severe hypotension, bronchospasm, urticaria, abdominal pain, nausea, and vomiting) within 15 minutes of intravenous administration of 1 gm of cefazolin before surgery. She had no history of β -lactam allergy and had received ampicillin in the past without experienc-

ing an adverse reaction. She may have been exposed to cefazolin previously because she had undergone other orthopedic procedures, but this has not been confirmed.

Skin testing 4 months after the acute event revealed an isolated positive intradermal skin test response to cefazolin (1 mg/ml) with negative intradermal skin test responses to benzylpenicillin, penicilloyl-polylysine, and minor determinant mix, as well as to ampicillin, cefotetan, ceftriaxone, cephalothin, cefuroxime, and ceftazidime (all at a concentration of 1 mg/ml). The cefazolin intradermal skin test site showed a 35 mm erythematous flare reaction accompanied by a 5 mm increase in the size of the wheal from an initial 6 mm to a final 11 mm in diameter. All other intradermal sites showed no flare or change in the size of the wheal. Results of subsequent oral challenges with full-dose penicillin VK, amoxicillin, cefaclor, cefuroxime axetil, and cephalexin were also negative, confirming her tolerance to other β -lactams and supporting the hypothesis that this represented a side chain-specific cefazolin allergy.

DISCUSSION

Side chain-specific β -lactam allergy exists when IgE antibody is directed toward the unique side chain of a particular β -lactam antibiotic rather than the common β -lactam ring.² Our patient fits this model with evidence of allergy to cefazolin but tolerance to a wide variety of other β -lactams as determined by skin testing and oral challenges.

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J Allergy Clin Immunol 1996;98:849-50.

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0091-6749/96 \$5.00 + 0 1/54/76113

The bulk of reports of side chain-specific β -lactam allergy have emanated from Spain and involve the aminopenicillins, ampicillin and amoxicillin.^{3, 4} Fewer reports relate to cephalosporins, and a literature search revealed only one such report from North America.⁵ Interestingly, this report was of four cases of anaphylaxis to intravenous cefazolin given before surgery.

A number of conclusions can be drawn from this report: (1) side chain-specific cefazolin allergy appears to be uncommon (0.1% or less); (2) the incidence of false-positive intradermal cefazolin skin test results (1 mg/ml) is low; (3) a positive cefazolin skin test response, especially in conjunction with a history of a clinical reaction to cefazolin, should be considered highly clinically significant; and (4) an isolated positive cefazolin skin test response warrants additional skin testing and oral or parenteral chal-

lenge testing to identify side chain-specific allergy with good tolerance to other β -lactams.

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Oral allergy syndrome after ingestion of salami in a subject with monosensitization to mite allergens

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In the last few years, interest in the etiologic and clinical aspects of oral allergy syndrome (OAS) has increased. Symptoms include oral pruritus and irritation and swelling of the lip, tongue, palate, and throat. This local symptomatology may sometimes be associated with other clinical symptoms (e.g., rhinoconjunctivitis, asthma, urticaria-angioedema, and anaphylactic shock).¹

Symptoms of OAS usually occur a few minutes after consumption of the offending food, particularly fresh fruits and vegetables (e.g., apple, hazel-

Abbreviation used

OAS: Oral allergy syndrome

nut, peach, tomato, carrot).² Moreover, OAS has been reported to be common in patients with birch, ragweed, or grass pollinosis, because in most cases there are cross-reacting allergens (e.g., profilins).

Rarely is OAS induced by the ingestion of other foods in subjects without pollen sensitization.³ Even if the wide consumption of pork, systemic and cutaneous manifestations after the ingestion of this food are uncommon in comparison with other foods such as milk, eggs, and fish.

In this report we describe an unusual case of OAS (without systemic manifestations) after the ingestion of salami, which was made by a local sausage maker, in a subject with exclusive nasal sensitization to *Dermatophagoides* allergens.

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J Allergy Clin Immunol 1996;98:850-2.

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