

and AX, suggested the existence in this case of a selective response to PV. Analysis of the specificity of IgE antibodies by RAST inhibition studies showed that the whole PV structure was required for the optimal antibody binding and that the PV side-chain contributes in an important way to determination of the specificity. These findings are similar to those previously reported by our group (2, 8) with IgE antibodies directed against the AXO structure, where, in many cases, although the antibodies are side-chain specific, the whole molecule is required for optimal recognition.

The follow-up study of the RAST values showed that, after an interval of less than 1 year, the serum became negative. Similar data have been reported by other groups for skin test sensitivity, indicating that RAST can become negative within periods that vary from case to case (5). Although the skin test has been reported to be more sensitive than RAST in evaluating IgE antibodies to penicillins, there are instances where RAST can be positive and the skin test negative (9). Since the skin test to PV was negative in the case reported but the RAST to PVO-PLL was positive, we emphasize the importance of carrying out not only *in vivo* tests but also *in vitro* tests to identify these cases.

To our knowledge, this is the first reported case of a selective response to PV with IgE antibodies that recognize the side-chain structure as the most relevant part of the epitope.

Key words: allergy; penicillin V; selective reaction; side-chain.

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REFERENCES

1. Levine BB, Ovary Z. Studies on the mechanism of the formation of the penicillin antigen. III. The N(D-benzyl penicilloyl) group as an antigenic determinant responsible for hypersensitivity to penicillin. *J Exp Med* 1961;114:875.
2. Blanca M, Pérez E, García J, et al. Anaphylaxis to amoxicillin with good tolerance to benzylpenicillin. *Allergy* 1988;43:812-14.
3. Blanca M, Vega JM, García J, et al. Allergy to amoxicillin with good tolerance to other penicillins. Study of the incidence in patients allergic to betalactams. *Clin Exp Allergy* 1991;20:475-81.
4. Blanca M, Vega JM, García J, et al. New aspects of allergic reactions to betalactams: cross-reactions and unique specificities. *Clin Exp Allergy* 1994;24:407-15.
5. Torres MJ, Blanca M, Fernández J, et al. Selective allergic reaction to oral cloxacillin. *Clin Exp Allergy* 1995;26:108-11.
6. Juhlén L, Wide L. Detection of penicillin allergy by the radioallergo-sorbent test. *Lancet* 1979;2:261.

7. Nishida K, Kinoshita Y, Atsumi T, Shibata K, Horiuchi Y. The analysis of combining site of rabbit antibenzylpenicilloyl antibodies. *Immunochemistry* 1972;9:1195-1202.
8. Moreno F, Blanca M, Mayorga C, et al. Studies of the specificities of IgE antibodies found in sera from subjects with allergic reactions to penicillins. *Int Arch Allergy Appl Immunol* 1995;108:74-81.
9. Vega JM, Blanca M, García JJ, et al. Immediate allergic reactions to amoxicillin. *Allergy* 1994;49:317-22.

Intradermal testing of fixed drug eruption

TOPICAL testing, by lesional patch tests, has given conflicting results in the diagnosis of fixed drug eruption (FDE). A final diagnosis is usually established by an oral provocation test with the suspected drug, a not entirely risk-free procedure. We present two FDE cases in which intradermal tests provided a useful and safe approach to diagnosis.

■ *Case 1.* A 53-year-old man was referred because of four outbreaks of erythematous, burning, and itchy circular lesions on exactly the same sites of his back and right ankle. Hyperpigmentation was observed at these sites 6 months after the last outbreak. All episodes occurred when he was taking Septrin® (cotrimoxazole) and Optalidón® (propiphenazone, a pyrazolone derivative).

■ *Case 2.* A 29-year-old woman presented with circular, erythematous, brownish patches affecting her face and trunk; blisters developed on her thighs. She also complained of dysuria and burning of the oral mucosa, where erythematous lesions were observed. She had previously suffered two similar outbreaks but with no mucosal involvement. All episodes occurred when she was taking Septrin and Inyesprin® (lysine acetylsalicylate). One month after the second outbreak, she took cotrimoxazole without reaction.

■ Patch tests with the suspected drugs (10% pet.) were applied on normal and unaffected skin. No reaction was elicited at 48 h. They remained negative at 96 h.

■ Intradermal tests with cotrimoxazole (1.6 mg/ml of sulfamethoxazole [SMX] and 0.32 mg/ml of trimethoprim [TMP]) were performed on lesional skin and on a normal area. In the first case, itching and burning began 6 h later at the lesional test area (the right ankle), and a 3-cm, circular, brownish, erythematous lesion developed. No reaction was apparent on the normal skin test site. The patient declined

further testing with TMP and SMX separately. Patient 2 exhibited a positive reaction to cotrimoxazole in lesional skin of the right flank, and to SMX, but not to TMP, in residual lesions of the left flank. The tests became positive 2 h after they were performed, and they were negative in the control areas.

■ Provocation tests showed good tolerance of Optalidón in patient 1 and of lysine acetylsalicylate in patient 2.

■ Patch testing on previously affected skin has given variable results in FDE (1), especially with

Lesional skin testing seems to be an improved approach to the diagnosis of trimethoprim-sulfamethoxazole-induced fixed drug eruption.

trimethoprim and sulfonamides (2); this may be related to the fact that the best concentration and vehicle for each drug have yet to be found (3). The diagnosis of FDE can be established by oral challenge, an approach that may involve risk (4). Improvement in diagnostic accuracy has

been reported with intradermal tests in some cases of drug-induced allergic contact dermatitis (5, 6), but these tests have only occasionally been used for FDE diagnosis. Positive intradermal results have been reported in FDE caused by antipyrine and alurate, although negative results were obtained with phenolphthalein (7). We have found no reports of intradermal tests in the diagnosis of FDE due to cotrimoxazole. The positive results of the intradermal tests with negative lesional patch tests may be explained by better absorption. This procedure causes minimum discomfort, and, in our patients, no generalized reactions have developed. In fact, the only apparent drawbacks of this test are 1) the lack of soluble preparations of the drug, and 2) mucosal FDE, without cutaneous involvement.

Patient 2 reported good tolerance of cotrimoxazole between the two last episodes. This seems to correspond to the refractory period described by some authors (8), which has not previously been reported for cotrimoxazole. A refractory state could explain, in some cases, the negative results of lesional patch tests. In our cases, the tests were performed 6 (patient 1) and 3 months (patient 2) after the last episode. Patch and intradermal tests were simultaneously performed in patient 1 and after a 48-h interval in patient 2; therefore, a

hypothetic refractory state does not explain our results.

In case 1, two of the most frequently reported FDE-eliciting agents (9) were involved. In case 2, the severity of the eruption was increasing. If we had performed only patch tests, an oral challenge would have been necessary to establish a diagnosis. In our cases, the lesional intradermal test has been safe, easy to perform, and useful.

Key words: cotrimoxazole; drug reactions; fixed drug eruption; lesional intradermal tests; sulfamethoxazole; trimethoprim.

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REFERENCES

1. Gómez B, Sastre J, Azofra J, Sastre A. Fixed drug eruption. *Allergol Immunopathol (Madr)* 1985;13:87-91.
2. Alanko K. Topical provocation of fixed drug eruption. A study of 30 patients. *Contact Dermatitis* 1994;31:25-7.
3. Bruynzeel D, van Ketel W. Patch testing in drug eruptions. *Semin Dermatol* 1989;8:196-203.
4. Alanko K, Stubb S, Reitamo S. Topical provocation of fixed drug eruption. *Br J Dermatol* 1987;116:561-7.
5. Audicana M, Echechipia S, Fernández E, Bernaola G, Muñoz D, Fernández de Corres L. Contact dermatitis from phenylephrine. *Am J Contact Dermatitis* 1993;4:225-8.
6. Herbst RA, Lauerma AI, Maibach HI. Intradermal testing in the diagnosis of allergic contact dermatitis. *Contact Dermatitis* 1993;29:1-5.
7. Wyatt E, Greaves M, Søndergaard J. Fixed drug eruption (phenolphthalein). Evidence for a blood-borne mediator. *Arch Dermatol* 1972;106:671-3.
8. Ballester A. Erupción fija por fármacos. *Piel* 1989;4:471-80.
9. Stubb S, Alanko K, Reitamo S. Fixed drug eruptions: 77 cases from 1981 to 1985. *Br J Dermatol* 1989;120:583.

Copro-eosinophil cationic protein (ECP) in food allergy

THE EUROPEAN Academy of Allergology and Clinical Immunology subcommittee has concluded that diagnosis of food allergy must be based on the demonstration of clinical intolerance of a given food by a double-blind, placebo-controlled food challenge (DBPCFC) (1). We earlier reported good results from the measurement of copro-IgE (2). In the present study, we have investigated the correlation between the serum and copro-ECP levels. The serum and copro-ECP levels were examined before the start of an allergen-free diet, during

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