

they studied the possible effects of the treatment on oral symptoms, and provided controversial results (3–5). As far as SLIT is concerned, no data are available, but the sublingual administration of purified allergens (vaccines) could be expected to elicit oral symptoms in patients with OAS. Indeed, in none of our patients did the SLIT treatment provoke oral symptoms; therefore, we can hypothesize that no cross-reacting allergen is contained in the commercial vaccine used, and that fresh food has probably a different immunologic behavior with respect to purified allergens. We conclude that the presence of OAS should not be considered a contraindication or a risk factor for SLIT, at least with pollen extracts, in patients suffering from respiratory allergy.

*Allergy and Respiratory Diseases – DIMI
Pad. Maragliano, L.go R.Benzi 10
16132 Genoa
Italy
Tel. +390103538908
Fax: +390103538904
E-mail: gcanonica@qubisoft.it

Accepted for publication 16 March 2000
Allergy 2000; 55:677–678
Copyright © Munksgaard 2000
ISSN 0105-4538

References

1. ORTOLANI C, ISPANO M, PASTORELLO E, BIGI A, ANSALONI R. The oral allergy syndrome. *Ann Allergy* 1988;**61**:47–52.
2. SANCHEZ-MONGE R, LOMBARDERO M, GARCIA-SELLES FJ, BARBER D, SALCEDO G. Lipid transfer proteins are relevant in fruit allergy. *J Allergy Clin Immunol* 1999;**103**:514–519.
3. HERRMANN D, HENZGEN M, FRANK E, RUDESCHKO O, JAGER L. Effect of hyposensitization for tree pollinosis on associated apple allergy. *J Invest Allergol Clin Immunol* 1995;**5**:259–267.
4. ASERO R. Effects of birch-pollen specific immunotherapy on apple allergy in birch pollen hypersensitive patients. *Clin Exp Allergy* 1998;**28**:1368–1373.
5. MOLLER C. Effect of pollen immunotherapy on food hypersensitivity in children with birch pollinosis. *Ann Allergy* 1989;**62**:343–345.

Nitrate intolerance

R. Asero

Key words: food additives; food allergy; oral challenges; pruritus; sodium nitrate.

● A PATIENT with chronic generalized pruritus caused by nitrate intolerance was recently described (1). Another, nearly identical case induced by the same food additive is reported here.

A 40-year-old woman presented because of a 9-month history of severe, unremitting pruritus of her back and arms. She had a long history of perennial rhinitis, but had never experienced urticaria, eczema, or any visible rash. The daily use of cetirizine in 10-mg tablets produced little relief. The pruritus was continuous, was

not enhanced by contact with cold water or by exercise, and was not associated with the use of drugs or with specific food intake. Physical examination revealed severe scratching lesions at both shoulders and arms but no skin abnormality. Several dermatologists had excluded infestations such as scabies or pediculosis during the previous months.

Laboratory analyses (blood cell counts; ESR; glucose levels; urinalysis; liver, renal, and thyroid function tests; thyroid autoantibodies; and stool tests for ova and parasites) were normal, as was the chest roentgenogram. By contrast, total IgE levels were high (1250 IU/ml).

SPT with a large panel of commercial food extracts (Dome-Hollister/Stier,

Spokane, WA, USA 1:20 w/v) were negative, whereas SPT with airborne allergens (Allergopharma, Reinbek, Germany) revealed hypersensitivity to house-dust mite. The intradermal injection of autologous serum did not elicit any wheal and flare reaction (2), and patch tests with a standard panel of 29 common haptens (GIRDCA) were negative at the 72-h reading. An additive-free diet was started; on day 10 of the elimination diet, the pruritus completely disappeared. After 1 month of additive-free regimen, during which the woman remained symptom-free, an open challenge (unrestricted diet) was carried out. Pruritus relapsed 3 days after the reintroduction of foods containing additives and, again, totally disappeared some days after the additive-free diet was resumed. After 1 month without symptoms, double-blind, placebo-controlled peroral challenges with food additives were carried out. The patient continued the elimination diet throughout the whole challenge period. Additives (tartrazine 10 mg, erythrosin 10 mg, sodium metabisulfite 25 mg, sodium benzoate 100 mg, sodium glutamate 100 mg, sorbic acid 100 mg, sodium nitrate 10 mg, and butylated hydroxyanisole 10 mg) were given in opaque capsules in a randomized sequence. Multiple placebos (talc capsules) were used in order to minimize possible bias (3). Consecutive substances were challenged 1 week apart, and the patient remained under controlled conditions for at least 2 h after each challenge.

About 3 h after the ingestion of sodium nitrate 10 mg, generalized pruritus appeared and lasted for 4 days. None of the other substances or the placebos induced pruritus. Nitrate intolerance was diagnosed.

This case of nitrate intolerance, characterized by chronic unremitting pruritus in the absence of any cutaneous rash, was virtually identical to the one we recently reported (1). This suggests that:

A case of chronic pruritus caused by nitrate intolerance that confirms a previous report.

- 1) chronic pruritus may be induced by food additives
- 2) this kind of food-additive intolerance seems to be associated specifically with sodium nitrate
- 3) chronic generalized pruritus caused by food-additive intolerance might be more common than generally believed.

Acknowledgments: I thank the nurses of the allergy center – Stefania Arienti, Ombretta Dolcino, and Aurelio Tirloni – for their cooperation in carrying out double-blind challenges.

Ambulatorio di Allergologia
Ospedale Caduti Bollatesi
Via Piave 20
20021 Bollate (MI)
Italy

Accepted for publication 17 March 2000
Allergy 2000; 55:678–679
Copyright © Munksgaard 2000
ISSN 0105-4538

References

1. ASERO R. Chronic generalized pruritus caused by nitrate intolerance. *J Allergy Clin Immunol* 1999;**104**:1110–1111.
2. GREAVES MW. Chronic urticaria. *N Eng J Med* 1995;**332**:1767–1772.
3. SIMON RA, STEVENSON DD. Adverse reactions to food and drug additives. In: MIDDLETON E, REED CE, ELLIS EF, ADKINSON NF, YUNGINGER JW, BUSSE WW, editors. *Allergy: principles and practice*. 4th ed. St Louis, MO: Mosby, 1993:1687–1704.

Hypersensitivity to H₁-antihistamines

P. Demoly*, D. Messaad, S. Benahmed, H. Sahla, J. Bousquet

Key words: drug hypersensitivity; H₁-antihistamines.

- H₁-ANTIHISTAMINES are widely used antiallergic drugs. Hypersensitivity

reactions to H₁-antihistamines have been rare since the 1940s (1–5). We report the case of a patient with skin reactions to some, but not all, antihistamines, as demonstrated by oral challenges.

A 57-year-old woman consulted her general practitioner for scalp itching and erythematous eruption the day after she her hair dyed. She was first given dexchlorpheniramine 2 mg. Hydroxyzine 50 mg and betamethasone 0.25 mg were added 2 days later because of the persistence of the symptoms. Four hours after the first tablets, she experienced generalized urticaria, which persisted for 5 days on methylprednisolone 60 mg and hydroxyzine 100 mg daily, and disappeared after another 3 days on methylprednisolone alone (hydroxyzine having been stopped because of sleepiness). No etiology was looked at. A vague and mild itching sensation had persisted since that time. A month later, she took cetirizine 10 mg for an exacerbation of her itching and developed generalized urticaria after 2 h. She recalled a similar episode 7 or 8 years before with an composite medication for influenza containing triprolidine. She had no other medical history apart from persistent rhinosinusitis.

Four months after the initial symptoms, the patient underwent skin prick tests to codeine phosphate 9%, histamine phosphate 10 mg/ml (positive controls), dexchlorpheniramine 5 mg/ml, hydroxyzine 50 mg/ml, and the most common aeroallergens of our area. She also underwent patch tests with dexchlorpheniramine, hydroxyzine (5% in petrolatum), and the European standard series. The patient refused challenges to dexchlorpheniramine and hydroxyzine, which produced the most awkward reaction.

A rare case of skin reactions to dexchlorpheniramine and hydroxyzine.

Single-blind, placebo-controlled challenges with cetirizine, loratadine, mequitazine, fexofenadine, mizolastine, and cimetidine were performed. Increasing doses (starting with 0.1 mg) were administered under strict hospital surveillance at half-hour intervals, until the cumulative daily therapeutic dose was reached.

The patient had negative skin tests except for the two controls, toluene diamine and basalm of Peru patch tests. Skin tests to the H₁-antihistamines were negative. Challenges were positive for all drugs but mizolastine and cimetidine with a pruritic maculopapular exanthema 2 (cetirizine 10 mg, loratadine 10 mg, and fexofenadine 120 mg) to 8 (mequitazine 10 mg) h after ingestion of the last dose. The symptoms rapidly disappeared after 60 mg of prednisolone.

A few skin reactions to H₁-antihistamines have been described in the literature (1–5), usually demonstrated by oral provocation tests. Some mechanisms have been suggested, including a type I IgE-mediated reaction (because of a suggestive clinical history and of positive intradermal tests to diphenhydramine and cetirizine in two cases) (2, 4), photosensitivity with phenothiazines and terfenadine (5), and paradoxical nonspecific histamine release (3). The delayed diagnosis in our patient was due to a true type IV hypersensitive reaction to hairdressing products. The allergy testing to H₁-antihistamines could not distinguish any precise mechanism, but could clearly demonstrate their responsibility and could find a well-tolerated drug of the same class.

*Maladies Respiratoires
INSERM U454
Hôpital Arnaud de Villeneuve
CHU de Montpellier
34295 Montpellier Cedex 5
France
Tel. (33) 4 67 33 61 27
Fax: (33) 4 67 04 27 08
E-mail: demoly@montp.inserm.fr