

with negative SPT at age 2 had a prevalence of asthma at age 11 of 14% (4/28), compared to 60% (29/49) for the early atopic ones ($P < 0.0003$).

AD is a common illness that develops early in childhood (4). iAD is a condition different from eAD, because allergy seems not to play a major role in its pathogenesis (1, 7). However, a strict distinction cannot be made because of the possibility that iAD may develop into eAD during the course of time. In fact, we have found in this study that more than half of patients SPT negative at the onset of AD, became SPT positive by the age of 11. Therefore, in many cases, the so-called iAD is not a true entity but only a transition stage in the natural history of AD. However, subjects with negative SPT at the onset of AD have a much lower risk of developing asthma much lower than the early atopics. On the other hand, the atopic status seems not to be important for AD persistence. In conclusion, children with SPT-negative AD by the age of 2 years have a significantly lower risk of developing asthma than SPT-positive ones. This feature might be useful to select children with AD who need prevention or early treatment of asthma.

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SIT in Croatia

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Key words: hypersensitivity; immediate diagnosis; immunologic tests; immunotherapy.

● SPECIFIC immunotherapy (SIT) (hyposensitization) is the practice of administering gradually increasing quantities of a specific allergen to allergic patients (insect sting-induced reactions – anaphylaxis, rhinoconjunctivitis, bronchitis, asthma, and atopic dermatitis caused by inhalatory allergens) until a maintenance dose is reached or the symptoms disappear.

A 15-year evaluation of immunotherapy.

The principle of preparing modified vaccines is to reduce or remove allergenicity and to preserve or increase immunogenicity. In this way, the capacity to modulate the immune system and to maintain clinical efficacy is preserved (1). Physical modification includes absorption and inclusion of allergens as depot vaccines, as with aluminum (2), calcium phosphate, tyrosine, and liposomes (3). Chemical modification refers to the so-called allergoids. Combinations of chemically and physically modified vaccines include tyrosine-adsorbed, glutaraldehyde-modified vaccines and aluminum hydroxide-adsorbed formaldehyde vaccines.

Contraindications for SIT include immunodeficiency diseases, malignancies, severe uncontrolled asthma, cardiovascular disorders, age under 5 years, advanced age, and pregnancy. Hypersensitivity to Hymenoptera venom is an exception.

During a 15-year period (1985–99) at the Department of Dermatology and Venereology (Allergy Unit), Zagreb University Hospital Center, Croatia, allergen SIT was used in 185 allergic patients with the following diagnoses: allergic rhinitis, allergic conjunctivitis, pollinosis, bronchial asthma, atopic dermatitis with sensitization to inhalatory allergens, and urticaria with Quincke's edema.

Allergen mixtures of tree and grass pollen and weeds, and single allergens (house dust and dust mite) were used (Table 1).

Therapy was administered twice weekly with increasing doses of allergen vaccines in concentrations I to IV, followed by the maintenance dose, with due consideration of contraindications as recommended by WHO. Pretreatment examinations included the prick test and serologic analyses (total and specific IgE). During allergen SIT, the following clinical and laboratory examinations were regularly performed:

Table 1. Specific (classical) immunotherapy during 15-year period (1985–99)

Allergen	No. of patients
Grass-pollen mixture	77
Cocksfoot (<i>Dactylis glomerata</i>)	5
Tree-pollen mixture	6
Birch (<i>Betula verrucosa</i>)	2
Ragweed (<i>Ambrosia elatior</i>)	23
House dust	38
House-dust mite (<i>Dermatophagoides pteronyssinus</i>)	31
Animal fur	2
Feather	1
Total	185

CBC (eo), nasal swab (eo), liver-function tests, RIST, RAST, CAST-ELISA, IgG, CIC, ECP and tryptase, CD4, CD8, CD23, and CD28. A decrease in specific IgE (total IgE was unaltered), CD4, CD23, and CD28 and an increase in IgG (IgG1, IgG4) and CD8 were recorded as early as at 6 months of therapy.

During the course of treatment, there was a diminution of IgE in favor of IgG, and a reduction in eosinophil count induced by specific provocation. These effects may be related to a decrease in the production of IL-4 and IL-5, as shown in some recent studies (4). Allergen SIT requires high motivation and collaboration from the patient.

In our study, as shown in Table 1, the best results by SIT were achieved in patients with the diagnosis of allergic rhinitis treated with grass-pollen allergen mixture. The number of patients who were subjected to SIT (in the analyzed period) was significantly increased, due to the introduction of various allergens such as ragweed, tree-pollen mixture, birch, and house-dust mite. In a limited number of patients who suffered from allergic rhinitis, atopic bronchitis, and atopic dermatitis, SIT was also successfully applied. During the SIT, no case of anaphylactic reaction was recorded.

In conclusion, a better understanding of the mechanisms of allergic reactions will

offer new ways of treatment based on the use of antigenic peptides, cytokines, and cytokine inhibitors, with remarkable reduction of side-effects (5, 6).

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Spontaneous allergy to ampicillin and local anesthetics

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Key words: ampicillin; delayed reaction; local anesthetics.

● It is widely reported that adverse reaction to local anesthetics (LA) might be the result of vasovagal, anxiety, or panic reaction (1). Furthermore, pharmacologic toxicity due to both epinephrine side-effects and local anesthetics might occur.

In fact, allergic reaction to LA is extremely rare, although some cases of immediate (2) or delayed reaction to LA have been described (3).

We report the case of a 60-year-old woman who presented itchy dermatitis over her forearm 36 h after an injection of lidocaine hydrochloride, which had been given for the removal of a melanoma.

Selective delayed reaction to lidocaine and mepivacaine in a patient with delayed hypersensitivity to ampicillin.