RESULTS. At adult follow-up, 36% of all skin tests to treatment allergens among subjects who received immunotherapy (n = 41) had significantly reduced intensity versus 26% of skin tests among placebo recipients (n = 41; P = .03). No significant differences were noted for individual treatment allergens. No significant differences were observed in the long-term changes of serum-specific IgE antibody levels for all or individual treatment allergens between immunotherapy treatment and placebo groups (P = .43). The treatment and placebo groups had a similar acquisition of new skin-test sensitivities from time of randomization in the original childhood trial to debriefing (15% vs 20%; P = .28) and to adult follow-up (30% vs 31%; P = .75).

CONCLUSIONS. Immunotherapy suppresses skin-test sensitivity 8 to 16 years after discontinuation of treatment, but long-term effects on specific IgE levels in serum are not observed. Broad-spectrum immunotherapy does not seem to affect the acquisition of new inhalant sensitivities.

REVIEWER COMMENTS. In this study, allergic-asthmatic children who participated in a double-blind, placebo-controlled immunotherapy trial were reevaluated as adults to determine if immunotherapy had long-lasting effects. This study revealed that asthmatic children who received immunotherapy to multiple allergens for a median of 27 months had limited long-term effects on the results of testing parameters routinely used in allergy practice. The long-term efficacy of immunotherapy and optimal duration of therapy are issues that remain open.

URL: www.pediatrics.org/cgi/doi/10.1542/peds.2007-0846CC

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Usefulness of Specific Immunotherapy in Patients With Atopic Dermatitis and Allergic Sensitization to House Dust Mites: A Multicentre, Randomized, Dose-Response Study

PURPOSE OF THE STUDY. To evaluate whether allergen specific immunotherapy (SIT) improves eczema in patients who are sensitized to house dust mites.

STUDY POPULATION. Adults with chronic atopic dermatitis and a scoring atopic dermatitis (SCORAD) index of ≥40 who were sensitized to house dust mites as verified by CAP-RAST testing.

METHODS. Double-blind placebo-controlled multicenter study in which patients were randomly assigned to receive subcutaneous SIT of a house dust-mite preparation at maintenance doses of 20, 2000, and 20 000 SQ-U (manufacturer’s units) for 1 year. Treatment involved weekly injections and 2 plateau phases during up-dosing in the 2000 and 20 000 SQ-U dosing categories. SCORAD values were assessed by dermatologists who were blinded to the patients’ treatment status. Patients were allowed to also use emollients, topical corticosteroids (up to European class 3), and antihistamines during the study period. House dust-mite–specific and total immunoglobulin E (IgE) levels, as well as eosinophil cationic protein levels, were measured. Patients kept daily records regarding the condition of their skin and use of other medications.

RESULTS. Of 89 patients originally enrolled, 51 completed the study. A dose-dependent decrease in SCORAD index was observed, with the difference being statistically significant in the 2000 and 20 000 SQ-U groups. Patients who received higher doses of SIT also showed decreased use of topical corticosteroids. Levels of allergen-specific IgE, total IgE, and eosinophil cationic protein were unchanged by treatment. Less than 1% of the injections resulted in systemic reactions (mild urticaria and itching).

CONCLUSIONS. One year of treatment with subcutaneous SIT in patients with allergic sensitization to house dust mites can lead to an improvement in eczema severity and a reduction in the need for topical corticosteroids.

REVIEWER COMMENTS. The occurrence of adverse effects, most importantly an exacerbation of atopic dermatitis, observed in this study was remarkably less than that seen in other studies using SIT in patients with atopic dermatitis. Additional studies are warranted to identify which subgroup of patients with atopic dermatitis are most likely to benefit from SIT and least likely to experience adverse effects. It will also be important to determine if patients with multiple sensitizations, and therefore multiple possible triggers for their disease, are less likely to respond to SIT and whether SIT for other aeroallergens is as useful.

URL: www.pediatrics.org/cgi/doi/10.1542/peds.2007-0846DD

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Sublingual Immunotherapy With Once-Daily Grass Allergen Tablets: A Randomized Controlled Trial in Seasonal Allergic Rhinoconjunctivitis

PURPOSE OF THE STUDY. To examine the efficacy and safety of sublingual immunotherapy (SLIT) in seasonal allergic rhinoconjunctivitis using timothy-grass–allergen tablets.
Long-term Immunologic Effects of Broad-Spectrum Aeroallergen Immunotherapy
Jennifer M. Maloney
Pediatrics 2007;120;S150
DOI: 10.1542/peds.2007-0846

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Long-term Immunologic Effects of Broad-Spectrum Aeroallergen Immunotherapy

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*Pediatrics* 2007;120;S150

DOI: 10.1542/peds.2007-0846CCCC

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