examine long-term effects and to compare results with a control group.

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FOOD ALLERGY AND ANAPHYLAXIS

A Randomized, Double-Blind, Placebo-Controlled Study of Milk Oral Immunotherapy for Cow’s Milk Allergy

PURPOSE OF THE STUDY. To determine the safety and efficacy of milk oral immunotherapy (OIT) in desensitizing children with cow’s milk allergy.

STUDY POPULATION. Twenty children, 6 and 21 years of age, with an immunoglobulin E (IgE)-mediated cow’s milk allergy.

METHODS. This study was a randomized, placebo-controlled trial with subjects randomly assigned to milk or placebo OIT. OIT was administered in 3 phases: (1) initial build-up day; (2) daily home dosing with 8 weekly, in-office, dose increases; and (3) continued home daily maintenance dosing (500 mg) for 13 weeks. Before and after OIT, subjects had double-blind, placebo-controlled, food challenges, end point-titration skin-prick tests, and milk-specific serological studies performed. Symptom diaries and adverse reactions were recorded.

RESULTS. Subjects were randomly assigned to milk (N = 12) or placebo (N = 7) OIT. Food challenges after OIT showed a significant difference in the cumulative dose that induced a reaction between the 2 groups. The active treatment group had a median milk threshold of 40 mg before OIT and 5140 mg after OIT, whereas the placebo group showed no change from their median pre-OIT level of 40 mg (P = .002). There were no significant differences between groups in the change from baseline to end of OIT for end point-titration skin-prick test results and levels of milk-specific IgE; however, milk-specific IgG4 showed a significant increase in the active group (P = .002). Six of 7 subjects on placebo underwent open-label active treatment after the study, and all demonstrated a significant change in the milk dose threshold after OIT (median dose: 8140 mg). Adverse events (typically mild-to-moderate severity) were seen in 35% of subjects who received active treatment and in 1% of those who received placebo treatments, with 90% of adverse reactions being transient and requiring no treatment. Four epinephrine doses were used in 4 different subjects who received active treatment.

CONCLUSIONS. Milk OIT is effective in the treatment of cow’s milk allergy, with anticipated and acceptable adverse effects noted.

REVIEWERS COMMENTS. Oral and sublingual administration of allergen-specific immunotherapy has become increasingly important in the field of food allergies. These therapies have the potential not only to protect patients from serious reactions (clinical desensitization) but also possibly to allow for development of tolerance to the food allergen. This study demonstrated an increased threshold for reactions to milk in children treated with OIT, indicating clinical desensitization to the allergen. Of the reactions noted, most were not serious and did not require any treatment, which illustrates the relative safety of OIT. However, dosing protocols and length of therapy need to be further investigated (including long-term tolerance assessments), to provide improved efficacy with the lowest adverse effects.

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Early Consumption of Peanuts in Infancy Is Associated With a Low Prevalence of Peanut Allergy

PURPOSE OF THE STUDY. To determine the prevalence of peanut allergy (PA) among Israeli and United Kingdom Jewish children and to evaluate the relationship of PA to peanut consumption by infants and mothers.

STUDY POPULATION. The study included Jewish children between the ages of 4 and 19 years who attended targeted primary and high schools. Eligible Jewish schools in greater London, United Kingdom, and Israeli schools in the Mehoz Merkaz region of Tel Aviv were selected because they were thought to represent comparable residential environments. The mothers of Jewish infants 4 to 24 months of age in general practitioner clinics in the United Kingdom and Tipat Halav clinics in Israel were also surveyed about the timing of ingestion of peanut.

METHODS. Two validated questionnaires were used. The Food Allergy Questionnaire was completed by high school pupils and by parents on behalf of primary school pupils; it asked about allergies to cow’s milk, hen’s egg, sesame, peanut, tree nuts, asthma, hay fever, and eczema and parental occupation. The Food Frequency Questionnaire, a validated consumption questionnaire given to mothers in the waiting room, made a detailed determination of peanut, sesame, and other solid-food consumption during the child’s first year and by the
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