Effect of Oral Immunotherapy to Peanut on Food-Specific Quality of Life

PURPOSE OF THE STUDY. The purpose of this study was to evaluate the effect of peanut oral immunotherapy on food-specific quality of life.

STUDY POPULATION. The study enrolled 100 children, 5 to 18 years of age, with suspected or known peanut allergy based on history, elevated specific immunoglobulin E to peanut, and skin testing. If a subject did not meet inclusion criteria (eg, skin-prick wheal ≤7 mm, no anaphylaxis, reaction more than 1 year ago, or peanut immunoglobulin E <15), a single blind food challenge was performed to confirm allergy before enrollment.

METHODS. A desensitization protocol was performed starting with 0.1 mg of peanut protein and doubling in the amount given every 30 minutes to a maximum of 6 mg on day 1 (maximum cumulative dose of 12 mg). On day 2, subjects returned and were given the maximum tolerated dose from the previous day. If tolerated, subjects were discharged with instructions to continue this daily dosing at home. Subjects returned every 2 weeks for increases in daily dosing to a maximum of 450 mg per day. Food allergy quality of life questionnaires were given to the parents of the youngest subjects, as well as subjects 8 to 12 years old, and adolescents 13 to 18 years old on entry to the study, and again when maintenance dosing was achieved.

RESULTS. A total of 90 subjects reached a maintenance dose of 450 mg peanut protein per day (equal to 3 peanut M&Ms) and completed pre- and postdesensitization quality of life questionnaires. Excluded were 3 subjects still advancing to maintenance at the time of publication, and 7 who dropped out during the buildup phase (4 of them had gastrointestinal symptoms). There was significant improvement in the following areas of the quality of life by questionnaire: allergen avoidance, dietary restriction, risk of accidental exposure, food-related anxiety, and social and dietary limitations. Emotional impact was not noted to have a significant difference in the adolescents’ survey, but was significant in the other age groups. Furthermore, quality of life was significantly improved for the youngest group (with parents filling out the questionnaire), as well as for the early teen (8–12) and adolescent groups filling out their own questionnaires.

CONCLUSIONS. The results of this study showed that there is an improvement in the quality of life in children and adolescents with peanut allergy after desensitization.

REVIEWER COMMENTS. This study shows the psychosocial impact that peanut desensitization can make in the lives of children with peanut allergy. The authors are forthcoming in pointing out that the desensitized population was not compared with a matched, nondesensitized group and further research is warranted.
Formula Selection for Management of Children With Cow Milk Allergy Influences the Rate of Acquisition of Tolerance: A Prospective Multicenter Study


PURPOSE OF THE STUDY. To examine whether formula selection in children with cow’s milk allergy (CMA) will affect development of tolerance to cow’s milk protein.

STUDY POPULATION. A total of 260 CMA infants, ages 1 to 12 months. CMA was confirmed at the initial visit through clinical evaluation, skin prick testing (SPT) (immunoglobulin E [IgE]-mediated CMA), atopy patch testing (APT) (non–IgE-mediated CMA), and double-blind, placebo-controlled oral food challenges (DBPCFC).

METHODS. This open-label, nonrandomized study evaluated the acquisition of tolerance in infants with CMA fed 5 different formulas: extensively hydrolyzed casein formula (EHCF) (group 1), extensively hydrolyzed casein formula plus the probiotic Lactobacillus rhamnosus GG (EHCF + LGG) (group 2), hydrolyzed rice formula (group 3), soy formula (group 4), and amino acid–based formula (group 5). Development of tolerance was assessed after a 12-month period with repeat SPT, APT, and DBPCFC.

RESULTS. At the 12-month follow up, a significant difference in SPT wheal diameter was seen in only group 2 (EHCF + LGG) infants with IgE-mediated CMA. Of the non-IgE-mediated CMA infants, only group 1 (EHCF) and group 2 (EHCF + LGG) exhibited a significant decline in positive APT results. Based on DBPCFC, group 1 (EHCF) and group 2 (EHCF + LGG) also demonstrated higher rates of cow’s milk tolerance at 12 months compared with the other groups; group 2 (EHCF + LGG) had the greatest influence. Binary logistic regression analysis revealed that the rate of attaining logistic regression was influenced by an IgE-mediated mechanism and the choice of formula.

CONCLUSIONS. Compared with other commonly used formulas, EHCF + LGG is effective in promoting cow’s milk protein tolerance in IgE-mediated and non–IgE-mediated CMA infants. Of note, EHCF alone also led to significantly higher rates of cow’s milk tolerance only when compared with soy and amino acid–based formula but not with EHCF + LGG or hydrolyzed rice formulas.

A Brief Intervention to Improve Food Allergy Knowledge Among US Pediatricians: Lessons Learned


PURPOSE OF THE STUDY. To determine if a brief educational tool developed for pediatricians would be effective in addressing gaps in food allergy knowledge.

STUDY POPULATION. US pediatricians (N = 61), including practicing pediatricians recruited from 4 Chicago-area practices, graduates from the Children’s Memorial Hospital residency program, and current members of the Illinois chapter of the American Academy of Pediatrics.

METHODS. A Food Allergy Comprehension Tool (FACT) was developed by pediatricians, pediatric allergists, and health services researchers with support of an expert panel of leaders in the field. This educational tool focused on addressing common food allergy misconceptions among primary care physicians. Pre- and postassessments were administered to pediatricians who completed
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