Early Exposure to Cow’s Milk Protein Is Protective Against Immunoglobulin E (IgE)-Mediated Cow’s Milk Protein Allergy


PURPOSE OF THE STUDY. The investigators determined the prevalence of cow milk allergy, the cross-reactivity with soy, and risk factors for the development of cow milk allergy in a large-scale, population-based prospective study.

STUDY POPULATION. All infants (13 234) born from June 10, 2004, to June 30, 2006, at the Assaf-Harofeh Hospital in Zerifin, Israel, were eligible for enrollment. The feeding history was obtained for 98.4% (13 019) of these infants. The feeding history was retrospective; however, egg-introduction history was retrospective and might have been subject to recall bias. The next step would be a prospective study on egg introduction to confirm these observations and to determine if the protective effect is limited only to egg or affects other solid foods.

CONCLUSIONS. Introduction of cooked egg (boiled, scrambled, fried, or poached) at 4 to 6 months of age might protect against egg allergy irrespective of family or personal history of allergy. Duration of breastfeeding and age of introduction of other solids does not seem to affect development of egg allergy.

REVIEWER COMMENTS. In light of the changing perception that early instead of delayed exposure of commonly allergenic foods might lead to tolerance, this study is an important step in determining how the timing of introduction and form of food introduced (eg, cooked versus baked) might influence the development of food allergy. A large population was studied, and 75% of positive skin-prick-test results were confirmed with oral food challenges; however, egg-introduction history was retrospective and might have been subject to recall bias. The next step would be a prospective study on egg introduction to confirm these observations and to determine if the protective effect is limited only to egg or affects other food allergies such as those to peanut.

RESULTS. The cumulative incidence of IgE-mediated cow milk allergy was 0.5% (66 of 13 019). The mean age of cow milk introduction was significantly different (P < .001) between healthy infants (61.6 ± 92.5 days) and those with IgE-mediated cow milk allergy (116.1 ± 64.9 days). Only 0.05% of the infants who were started on regular cow milk–protein formula within the first 14 days versus 1.75% who were started on formula between the ages of 105 and 194 days had IgE-mediated cow milk allergy (P < .001). None of the patients with IgE-mediated cow milk allergy proved to have an IgE-mediated soy allergy.

CONCLUSIONS. In this patient population, IgE-mediated cow milk allergy is less prevalent than previously reported. Early exposure to cow milk protein seemed to be protective against cow milk allergy.

REVIEWER COMMENTS. The results of this study, as well as those of other recent investigations, go against the previous mantra that prolonged restriction of specific food allergens might be helpful in the prevention of food sensitivity in the early years. Early introduction of specific dietary proteins seems to lead to tolerance, although the exact timing and dose required have not been determined. It is remarkable that none of the subjects with IgE-mediated milk allergy proved to have soy allergy, contrary to a reported co-reactivity of 10% to 14%. The reported rate of IgE-mediated milk allergy is lower in this study population than has been reported previously; additional studies are required to confirm these findings.

Peanut Oil and Peanut Allergy, Foes or Folks?


PURPOSE OF THE STUDY. Peanut allergy seems to be increasing among children in Hong Kong. The authors of this study report suggested that this increase might be a result of changes in edible oils. Crude peanut oil (protein content:
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Pediatrics 2011;128;S106
DOI: 10.1542/peds.2011-2107W

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