regard to foods (peanut, 53%) without clinical correlation, may result in improper allergy diagnosis and possible unnecessary food or nutritional restriction.

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Predicting the Atopic March: Results From the Canadian Healthy Infant Longitudinal Development Study

PURPOSE OF THE STUDY. To evaluate if allergic sensitization enhances associations between atopic dermatitis (AD) in infancy and subsequent allergic diseases, including asthma, allergic rhinitis, food allergy, and persistent AD.

STUDY POPULATION. The study included 2311 children from the Canadian Healthy Infant Longitudinal Developmental study, a multicenter longitudinal cohort of infants who were managed from birth to age 5 years. The current analysis includes children with complete data at ages 1 and 3 years.

METHODS. Skin prick testing for sensitization to inhalant and food allergens was performed at age 1 year. Child health questionnaires and clinical assessments were conducted at ages 1 and 3 years, during which study physicians determined if the children had AD (ages 1 and 3 years) and asthma, allergic rhinitis, or food allergy (age 3 years). A multivariable modified Poisson regression was used to evaluate the relationship between AD and allergic sensitization at age 1 year with the outcomes of allergic disease at age 3 years. Relative risks and adjusted relative risks were calculated. The interaction between AD and allergic sensitization was also assessed.

RESULTS. When assessed independently, AD and sensitization at age 1 year increased the risk of asthma, allergic rhinitis, food allergy, and AD at age 3 years. AD without sensitization was not associated with an increased risk of asthma at age 3 years. AD and sensitization had a positive interaction for association with asthma and food allergy at age 3 years, but there was no evidence of an interactive effect of AD and sensitization at age 1 year with AD or allergic rhinitis at age 3 years.

CONCLUSIONS. This study revealed that AD with allergic sensitization at age 1 year has a combined effect on the risk of food allergy and asthma, but not AD or allergic rhinitis, at the age of 3 years. AD and sensitization at age 1 year independently increased the risk of AD and allergic sensitization at age 3 years, but there was no evidence of an interactive effect. On the basis of these results, we report that AD with allergic sensitization at age 1 year can be used to predict the likelihood of asthma and food allergy in children.

REVIEWER COMMENTS. With this study, we add additional information to the field regarding possible predictors of the atopic march. For asthma and food allergy, the combined effect of AD and allergic sensitization was greater than the sum of their individual effects. These findings are consistent with previous findings. Limitations of the study were that food allergy was not confirmed by using oral challenges, and AD and asthma were diagnosed by using clinical assessments with a potential for misdiagnosis.

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Early-Life Sensitization to Hen’s Egg Predicts Asthma and Rhinoconjunctivitis at 14 Years of Age

PURPOSE OF THE STUDY. To investigate the association between transient and persistent sensitization in early life and the development of asthma and allergic rhinoconjunctivitis at 6 and 14 years of age in a Danish birth cohort.

STUDY POPULATION. This was a population-based birth cohort of 562 children born in Denmark between November 1998 and November 1999. A total of 366 (65%) children who had specific immunoglobulin E (IgE) measured at least 3 of 4 follow-up visits between 3 and 18 months of age were included in the analysis. A total of 308 (84%) children at age 6 and 284 (78%) children at age 14 participated in their follow-up visits.

METHODS. Questionnaire-based interviews, clinical examination, and specific IgE measurements were performed at ages 3, 6, 12, and 18 months and 3, 6, and 14 years. Asthma was defined as follows: asthma symptoms not triggered only by an infection occurring within previous 12 months, a previous doctor’s diagnosis plus ongoing treatment, or asthma symptoms plus bronchodilator reversibility. To be considered positive for rhinoconjunctivitis, children had to have symptoms in the previous 12 months apart from upper-respiratory infections. Specific IgE was measured by the Magic Lite system, an immunochemiluminometric assay, to grass,
## Predicting the Atopic March: Results From the Canadian Healthy Infant Longitudinal Development Study

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