CONCLUSION. In genetically susceptible adolescents, with specific IL-13 polymorphisms, antibiotic use and mold exposure in infancy have additive effects on the risk of current AR.

REVIEWERS COMMENTS. Certain genetic polymorphisms may increase the risk of different types of atopic disease. Studies such as this aim to identify future risk factors of development of atopy. AR is a common diagnosis in childhood. Unfortunately, as is often noted, AR appears to be a multifactorial condition and, as such, is difficult to isolate single or even combined risk factors. Although recall bias is a potential limitation of the study, the information collected appears important. Limitation of mold exposure and judicious use of antibiotics in children appear to be even more important than previously thought, to prevent the development of allergic rhinitis in some adolescents later in life.

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The Predictive Value of Allergen Skin Prick Tests and IgE Tests at Pre-School Age: The PACT Study

PURPOSE OF STUDY. The authors aim to compare the performance of skin prick test (SPT) and specific immunoglobulin E (sIgE) in 2-year-old children for predicting allergic disease at 6 years of age.

STUDY POPULATION. Participants were part of the Prevention of Allergy among Children in Trondheim (PACT) study, a large birth cohort study of the incidence of allergic disease in children conducted in Norway.

METHODS. Two-year-old children were examined and parents were interviewed regarding the presence of allergic disease. Atopic dermatitis (AD) was assessed by both examination and the UK Working Party’s Criteria; severity of AD was assessed by using the Nottingham Eczema Severity Score. Asthma and allergic rhinitis (AR) were assessed by questions only. SPT and/or sIgE to foods (milk, egg, fish, peanut, hazelnut) and inhalants (dog, cat, birch, timothy) were performed. At 6 years of age, the children were again evaluated and the parents completed an identical questionnaire.

RESULTS. Complete data were available for 199 children, and incomplete data were available for another 469 children. Of the children with allergic disease at age 2, half no longer had allergic disease at age 6 years. The biggest predictor of allergic disease at age 6 years was allergic disease at age 2 years (odds ratio 4.7, 95% confidence interval: 2.4–9.5). In 2-year-old children without allergic disease, a positive SPT or sIgE was associated with increased odds of any allergic disease (AD, AR, asthma), with a positive predictive value of 50% with a positive SPT and 67% with a positive sIgE. There were no significant differences between food and inhalant sensitization as a predictor for allergic disease at age 6. There were no statistically significant differences between SPT and sIgE in terms of their ability to predict any allergy-related disease with the exception of allergic rhinoconjunctivitis, in which sIgE was significantly more predictive of disease at age 6 years than SPT (P = .03).

CONCLUSIONS. The authors conclude that sensitization at age 2 years as determined by SPT or sIgE may predict allergic disease in later childhood and that with the exception of allergic rhinoconjunctivitis, SPT and sIgE were similarly predictive.

REVIEWER COMMENTS. This study demonstrates in a large group of children that evidence of sensitization by means of SPT and sIgE at age 2 years has a positive predictive value of 50% to 67% for the presence of allergic disease at age 6 years, with SPT and sIgE being similarly predictive. sIgE appears to be more predictive of allergic rhinoconjunctivitis at age 6 than SPT. This information could be useful for early identification and intervention to reduce pediatric morbidity from allergic disease.

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Allergen Skin Prick Testing in Early Childhood: Reproducibility and Prediction of Allergic Symptoms Into Adulthood

PURPOSE OF THE STUDY. To evaluate the long-term reproducibility of positive and negative skin prick testing (SPT) performed in young children as well as the predictive value of SPT for allergic symptoms later on in childhood and early adulthood.

STUDY POPULATION. Finnish cohort of 200 unselected healthy newborns in an urban environment followed prospectively from birth to age 20.

METHODS. One hundred sixty-three individuals underwent clinical examination and SPT to 8 Aeroallergens and 3 foods. Numbers of participants evaluated between the ages of 5 and 11, 11 and 20, and 5 and 20 were 128, 136, and 138 respectively. Structured interviews with parents were performed at ages 5 and 11, and with the participants at age 20. Respiratory clinical indices such as allergic rhinoconjunctivitis and recurrent wheezing were evaluated, as well as atopic dermatitis and food hypersensitivity.

RESULTS. Participants with at least 1 positive SPT (aeroallergens and/or foods) at age 5 were also positive at ages 11 and 20. New sensitization occurred in 23% of participants between the ages of 5 and 11 and 19% of
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