children during the first 2 years of life, although it was modestly effective at 2 years. Follow-up is necessary to confirm whether the intervention can actually prevent the development of asthma.

REVIEWER COMMENTS. This is a well-designed study in a primary care environment to investigate the clinical effectiveness of a multifaceted approach to prevent the development of asthma in high-risk children. It seemed that the intervention was moderately able to reduce exposure to dust mite, pet, and food allergens, but no significant effect was observed on parentally observed symptoms or allergen-specific immunoglobulin E in the first 2 years of life. Perhaps a more focused intervention or longer follow-up period would have proven more useful. The effectiveness of a variety of multifaceted randomized intervention trials on asthma prevention has yet to be determined. Although a host of epidemiologic studies have helped identify risk factors, we will all be interested in determining whether any practical interventions may be promising in preventing asthma development.

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Asthma in Remission: Can Relapse in Early Adulthood Be Predicted at 18 Years of Age?

PURPOSE OF THE STUDY. To determine the frequency of asthma relapse in young adults in remission at 18 years over an 8-year follow-up period and to determine possible prognostic indicators of relapse.

STUDY POPULATION. A subset of 68 subjects in asthma remission at 18 years of age from of a cohort of 1037 subjects born in New Zealand from 1972 to 1973 followed from 8-year-old through the Dunedin Multidisciplinary Health and Development Study.

METHODS. The cohort was enrolled at 3 years old and followed every 2 years until age 15 and again at ages 18, 21, and 26. Subjects were given respiratory questionnaires and lung-function assessment by spirometry. Methacholine testing for bronchial hyperreactivity was performed at 9, 11, 13, 15, and 21 years of age in some. Atopy was assessed by skin tests at ages 13 and 21 years. Remission of asthma at 18 years was defined as no current symptoms with previous reported symptoms at ≥2 previous assessments.

RESULTS. At 18 years of age, there were 108 subjects with current asthma and 68 subjects with previous asthma in remission. Those in remission at age 18 had a later age of onset of asthma (6.4 ± 4.5 vs 4.7 ± 4 years for current asthma) and had better lung function. Those with current asthma at age 18 were more atopic at age 18, with higher skin-test reactivity for house dust mite and cat. They had higher bronchial hyperreactivity by methacholine at all age points between 9 and 18 than their counterparts in remission. Of the 68 subjects in remission at age 18, 44 remained in remission and 24 relapsed by age 26. Multiple logistic-regression analysis identified dust mite sensitization at age 13 (odds ratio [OR]: 2.63; 95% confidence interval [CI]: 1.23–5.61) and decreased forced expiratory volume in 1 second/forced vital capacity ratio at age 18 (OR: 0.9 per 1% higher ratio; 95% CI: 0.81–0.99). Those with better lung function had lower likelihood of asthma relapse by 16 years of age. Variables such as methacholine reactivity and tobacco smoking were not significant predictors.

CONCLUSIONS. Approximately one third of young adults with a history of asthma in childhood in remission at 18 years of age will relapse by 26 years of age. Most will have mild disease at relapse. There were weak associations with atopy and lower lung function at a young age as predictors of asthma relapse.

REVIEWER COMMENTS. Families often ask if their child will “outgrow” asthma. This study was consistent with other studies in finding that approximately one third of those in remission may have relapse, but the factors found by other groups as potential predictors such as atopy, lower lung function, and tobacco smoking were not as strong.

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Adult Asthma Severity in Individuals With a History of Childhood Asthma

PURPOSE OF THE STUDY. Childhood asthma has a range of outcomes in adulthood. This study sought to identify clinical features and exposures associated with persistence and severity of childhood asthma in adulthood.

STUDY POPULATION. Subjects had been previously enrolled in the Childhood Asthma Study, a double-blind, randomized, placebo-controlled trial designed to study the role of immunotherapy as an adjunct treatment. The 121 original study members, aged 5 to 12 years at the time of randomization, had moderate-to-severe asthma and had been followed for at least 1 year before enrollment. Evaluations performed during the original study included daily medication-symptom diaries, home allergen analysis, allergy skin testing, and methacholine challenges. The cohort had varied socioeconomic status, genders, and ethnicities. For this study an attempt was made to enroll all original participants.
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Mary Beth Bollinger
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