diagnosed with AR before the age of 50 (n = 2279). The control group consisted of 2 people without AR matched to each patient according to age, gender, socioeconomic status, and the practice to which they were assigned (n = 4558). The mean age in both groups was 25 years, and the mean length of follow-up was 8.4 years.

METHODS. This is a historic cohort study. Cox proportional hazard analyses were used to assess the relative risk of asthma in patients with AR relative to controls.

RESULTS. In the AR group, 356 patients were also diagnosed with asthma: 198 before the AR diagnosis was made and 158 after it was made. Of those not yet diagnosed with asthma, the hazard ratio for developing asthma relative to controls was 4.86 (95% confidence interval: 3.50–6.73; P < .001). Atopic eczema and socioeconomic status were not found to significantly affect the risk of asthma.

CONCLUSIONS. Physician-diagnosed AR is an independent risk factor for a future diagnosis of asthma. A significant number of patients developed asthma before the diagnosis of AR, which suggests that, although there is a link between AR and asthma, the risk is not necessarily prospective. The assessment of which came first is limited by the fact that AR is often self-treated and might not be diagnosed by a physician.

REVIEWER COMMENTS. Data were not broken down according to age group, but the calculated hazard ratio is comparable to that of previous studies that only evaluated adults. Most AR cases were diagnosed by subjective symptoms, so this group undoubtedly contained many people with nonallergic rhinitis. In addition, the control group might have included some with AR who self-treated without being diagnosed by a physician. Because of these factors, the derived hazard ratio might be an underestimate. According to the authors, this is the largest prospective investigation of the association between AR and asthma in a primary care population with such a wide age range and length of follow-up. If so, this study provides the best definition to date of the risk of asthma for patients with AR in the primary pediatric population.

Allergic Rhinitis as a Predictor for Wheezing Onset in School-aged Children

URL: www.pediatrics.org/cgi/doi/10.1542/peds.2011–210700

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*Pediatrics* 2011;128;S116

DOI: 10.1542/peds.2011-210700

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