

## SYNOPSIS

- 795 infants (aged 1–2 years) with atopic dermatitis (AD) received placebo or cetirizine for 18 months.
- 566 of these children were followed for a further 18 months.
- Infants sensitive to house dust mite, grass pollen or both were significantly less likely to develop asthma during the treatment period if they received cetirizine.
- This difference was sustained in the grass pollen-sensitized group during the 36 months of the study.
- Early sensitization (egg, grass pollen, house dust mite or cat) was associated with an increased risk of asthma in the placebo group.

*Citation: Warner JO. A double-blinded, randomized, placebo-controlled trial of cetirizine in preventing the onset of asthma in children with atopic dermatitis: 18 months' treatment and 18 months' posttreatment follow-up. J Allergy Clin Immunol 2001; 108: 929–37.*

## Specific-IgE tests may indicate asthma risk and the possibility of prevention

This report from the ETAC study group shows that specific-IgE screening of infants with AD indicates those who are at risk of developing asthma. Notably, this is the first study to show that early sensitization to grass pollen in these children is a risk factor for asthma (relative risk: 1.7, confidence interval: 1.4–2.1).

The study also shows that preventative treatment with the antihistamine, cetirizine, may protect children with certain sensitizations (particularly grass pollen) against the development of asthma. If supported by further studies, specific IgE screening of infants with AD may identify those who are likely to benefit from preventative treatment.

## SYNOPSIS

- 498 children (aged 8–10 years at baseline) were surveyed every 2 years over a period of 10 years and then after a further 5 years.
- Atopy at the age of 8–10 years was associated with an increased risk (odds ratio: 2.8, confidence interval: 1.5–5.1) of developing wheeze later in life.
- Only 3.2% of the population showed remission of atopy, whereas 13.7% developed atopy later on.

*Citation: Xuan W et al. Risk factors for onset and remission of atopy, wheeze, and airway hyperresponsiveness. Thorax 2002; 57: 104–9.*

## Atopy in childhood predicts the risk of wheeze in adolescence

The findings of this study add further support to the claim that atopy in childhood increases the risk of asthma. However, the data also suggest that there can be a delay of several years before the presence of atopy manifests itself as atopic disease. Indeed, atopy in childhood was a risk factor for the onset of wheeze in adolescence or even early adulthood.

The prevalence of atopy and wheeze increased in the cohort during the course of the study. The authors suggest that this may reflect to some extent a general increase in atopy that has occurred over the last 10–20 years.

## SYNOPSIS

- Children born to at least one atopic parent were followed annually for 5 years and then at the ages of 11 and 22 years. In total, 63 individuals remained at the 22-year follow-up.
- Annual prevalence of wheeze and atopy increased with age.
- 60% of those who had asthma in adulthood were sensitive to common allergens by the age of 2 years.
- Sensitization to dietary allergens waned in infancy, but predicted early sensitization to aeroallergens.

*Citation: Rhodes HL et al. A birth cohort study of subjects at risk of atopy: twenty-two-year follow-up of wheeze and atopic status. Am J Respir Crit Care Med 2002; 165: 176–180.*

## Sensitization to food allergens in infancy predicts aeroallergen sensitization

Atopy in infancy is a clear risk factor for asthma in later life. The study indicates that up to 25% of children born to atopic parents may develop asthma in later life. Importantly, almost half of those who had a food allergen (milk or egg) in infancy had wheeze after the age of 5 years.

A striking result in this study is that all the children who were sensitive to a food allergen when younger than 2 years also developed sensitivity to aeroallergens, 92% by the age of 5 years. Early sensitization was a risk factor for asthma.

None of the children with positive food sensitizations at the age of 2 years or younger showed this allergy in subsequent years. Thus, the authors stress that a single set of sensitization tests cannot safely predict the life-long atopic status of an individual. Regular testing is justified to chart the allergy march.