

SYNOPSIS

- In 1993, Stockholm experienced abnormally high levels of birch pollen.
- Birch pollen allergy was assessed in 583 children with atopic heredity born between February and April 1992–1994 using skin prick tests (SPT) and IgE quantification (RAST and recombinant allergen [rBet v 1], Pharmacia CAP system™).
- Children born in 1993 or exposed to high birch pollen levels at 1 year (born 1992) were more likely to be sensitized to birch pollen than those born in 1994 (SPT: odds ratio [OR] vs. 1994 [95% confidence interval]: 2.4 [1.2–4.6] and 1.7 [0.9–3.2]); rBet v 1: OR vs. 1994: 1.9 [1.0–3.6] and 1.5 [0.8–2.9], respectively).
- At 4.5–5.0 years of age, children born in 1993 were more likely to have allergic asthma than those born in 1994 (OR vs. 1994 [95% confidence interval]: 2.6 [1.2–5.6]).

Citation: Kihlstrom A et al. Exposure to birch pollen in infancy and development of atopic disease in childhood. *J Allergy Clin Immunol* 2002; **110**: 78–84.

Early exposure to inhalant allergens increases risk of allergic asthma

The role of early exposure to inhalant allergens in the subsequent development of atopic disease is controversial. This study provides good evidence that, at least in children with atopic heredity, exposure to high levels of birch pollen during infancy increases risk of sensitization to birch pollen in childhood and increases risk of allergic asthma (i.e. pollen- or animal dander-induced). The cumulative incidence of bronchial asthma, allergic rhinoconjunctivitis and atopic dermatitis was, however, not increased in high-exposure children. Specific IgE tests can be used to identify early sensitization to inhalant allergens, thereby allowing appropriate intervention.

SYNOPSIS

- Up to 10% of healthcare workers are sensitized to natural rubber latex (NRL). Researchers in the USA screened new hospital employees for NRL sensitization using Pharmacia CAP system™ RAST and skin prick tests.
- Of 1795 employees assessed, 8% were positive for NRL-specific IgE, 57.3% of whom reported symptoms upon NRL exposure.
- 17.9% of employees with a positive history of NRL allergic symptoms were IgE positive and 4.4% of those with a negative history were IgE positive.
- 5.9% of non-patient care employees were NRL IgE positive as were 8.6% of direct patient care employees.

Citation: Bollinger ME et al. A hospital-based screening program for natural rubber latex allergy. *Ann Allergy Asthma Immunol* 2002; **88**: 560–7.

Specific IgE tests are a useful screening tool for latex allergy

This study demonstrates how specific IgE tests can be used in conjunction with skin prick testing to screen for latex allergy on a large scale. Employees who were positive for NRL-specific IgE were issued with synthetic gloves. Those who were negative for NRL-specific IgE, but had latex-associated symptoms, were skin prick tested for further differentiation. Interestingly, direct patient contact was not a good indicator of sensitization, and it may be that non-patient care workers had previously worked with NRL gloves or that they had worked around people wearing powdered NRL gloves. The specific IgE screening system was a cost-effective method of providing a safe environment for healthcare workers. Reductions in working time lost offset the costs of the scheme.

SYNOPSIS

- Atopic eczema/dermatitis affects about 1 in 10 children in developed countries and the incidence is increasing.
- Atopic eczema/dermatitis is usually the first manifestation of atopy. It frequently coincides with food allergy and can be followed by allergic wheezing/asthma and rhinitis.
- Four out of five children with atopic eczema/dermatitis have IgE-mediated allergy to inhalants or foods. House dust mite allergy is a major cause of exacerbation, while food allergy exacerbates eczema in up to 1 in 10 children.
- Management includes emollient preparations, wet dressings, topical corticosteroids, antibacterials, antihistamines and immunosuppressants. Avoidance of precipitating allergens (e.g. foods, house dust, house dust mite etc.) is also an important management strategy.

Citation: Barnetson R and Rogers M. Childhood atopic eczema. *BMJ* 2002; **324**: 1376–9.

Childhood atopic eczema

This paper reviews the clinical features, precipitating factors and management of atopic eczema. Most children with atopic eczema are allergic to food or inhaled allergens and the condition is highlighted as a first step in the 'allergy march'. It is noted that food allergy is age dependent with sensitization to some foods (e.g. milk and eggs) being transient, whereas for others it is permanent (e.g. peanut). While skin prick tests, food patch tests and food provocation tests are mentioned as methods of diagnosis, the role of specific IgE tests is not addressed. Nevertheless, such tests are clearly of use for identifying which patients with eczema are allergic and to what, thus directing allergen avoidance strategy and, possibly, some forms of drug treatment.