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Management of paediatric respiratory allergy

Longitudinal birth cohort studies have provided evidence that the highest annual incidence of allergic rhinitis as well as allergic asthma is observed in childhood and adolescence. As a result of an atopy associated systemic immune deviation, IgE mediated sensitisations to indoor or outdoor allergens are detectable in infancy and early childhood.

Frequently, children with allergic airway disease have a history of atopic dermatitis in infancy with or without sensitisation to food proteins. The aim of a – holistic – disease management is to provide a maximum quality of life in spite of the chronic nature of the disease. This is achieved by:

a) Symptomatic pharmacotherapy including non-sedating antihistamines, topical corticosteroids, monteleukast, short and long acting beta-agonists as well as anti-IgE
b) Allergen specific immunotherapy via the subcutaneous or sublingual route in order to modify disease progression (so far the only disease modifying intervention)
c) Preventative approaches including allergen elimination as well as attempts to induce tolerance to allergens

A variety of studies on early intervention in infancy and early childhood are currently being performed utilising pro- and pre-biotic additives to infant formulae, bacterial lysates as well as specific allergens. It appears that strategies like Th-2 blocking drugs or IL4/IL13 receptor antagonists might be able to offer new options for a disease modifying intervention in the future.

In addition to pharmacotherapeutic long-term treatment for children, it is essential to offer appropriate educational programmes in order to enable long-term self-management and maximum compliance.