

Editorial

The changing face of paediatric allergy

Over the last 30 yr as a clinician, I have observed a remarkably dramatic change in the patterns of allergic disease as well as, of course, witnessing the enormous increase in prevalences. The latter has been extensively reported and recognized by health services worldwide (1, 2). However, I do not think that services have quite appreciated the diversification of allergic sensitization and their manifestation.

Thirty years ago allergy clinics were predominantly populated by patients with reactions to house dust mite, pollens and animal danders associated with allergic rhinitis and asthma. Clearly, within the paediatric service there were also patients with eczema and food allergy though often with a rather restricted range of sensitizations associated with the so-called 'Big 8' headed by egg, milk and peanuts. These days the clinics are filled with patients with food allergies not just to the Big 8 but to an ever increasing diverse range of foods. Whereas in the past I do not recall seeing many children with oral allergy syndrome (fresh fruit/pollen allergy). These days the overwhelming majority of children with tree pollen allergy also have problems with a range of tree fruits and indeed those with combined grass and tree pollen allergy have reactions to additional fruits and vegetables including fresh carrot and pineapple (3). Perhaps the most remarkable patient I've seen is one who had a full blown anaphylactic reaction having taken a bite out of a fresh parsnip. We now see patients reacting to a wide range of seeds which are not just sesame (4) and mustard but pumpkin, melon and poppy. Furthermore, the media preoccupation with the putative adverse effects of artificial food colourings, such as tartrazine, has led to manufacturers using natural colouring one of which, anatto, is extracted from a seed and certainly does occasionally produce reactions. One manufacturer is currently trying to introduce an extract of a seed from South America known as chia which also has significant potential to cause reactions.

Food manufacturers look for opportunities to use an ever wider range of unique foods

particularly to reassure consumers who are becoming ever more preoccupied with the misconceived concept of dangers of genetically modified foods. Thus, we will see problems with new fruits such as noni-fruit which is being incorporated into a wide range of drinks, processed kiwi fruit incorporated into drinks and bakery products, and of course lupin flower to which some peanut allergics react.

Not only we are seeing a wider range of specific allergic sensitizations which are clearly a consequence of our diversified diets, but also a remarkable increase in the range of gastro-intestinal manifestations of food allergy and intolerance (5). I cannot believe that we have missed infants with food protein-induced enterocolitis syndrome (FPIES) in the past. However, perhaps they were misdiagnosed as acute sepsis. The range of foods involved is very different to those in the league table for acute IgE mediated reactions. We have seen many more reactions to cereal crops such as wheat, oats and rice. We also now see many more children with eosinophilic enteropathies resulting in gastro-oesophageal reflux, recurrent abdominal pain, colitis and also motility disorders including chronic constipation. The exact mechanisms involved in these conditions and indeed also the prevalence and natural history is not well described. The duty therefore of all of us in the future will be to investigate these problems in greater detail and to set up appropriate controlled trials of interventions. There are anecdotes of responses to combinations of new generation antihistamines, leukotriene receptor antagonists and topical steroids. I for instance now frequently prescribe the nebulizer solution of budesinide taken orally in the treatment of eosinophilic oesophagitis with some success.

I expect that the pages of *Pediatric Allergy and Immunology* over the next few years will reflect the changing face of allergy and look forward to reading your many submissions on the topics mentioned in this editorial.

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