Improved prospects for food allergy prevention

Associate Professor Rohan Ameratunga Adult and Paediatric Immunologist



Food allergy, defined as an adverse immunological reaction to food proteins, has become increasingly common. Currently there is no specific treatment for food allergy apart from strict avoidance in New Zealand. Food desensitization is promising but still viewed as an experimental procedure

by leading world experts. The ability to prevent food allergy would obviously be of great benefit to infants at risk of food allergy.

Three recent studies from Professor Gideon Lack and his team have suggested prevention of food allergy may be possible in most but not all infants. The Learning Early about Peanut allergy (LEAP) study enrolled 640 high-risk children aged 4-11 months with eczema and/or egg allergy. They were randomized either to avoid peanuts or to introduce peanuts early after testing. There was a highly significant difference showing early introduction of peanuts reduced the risk of long-term peanut allergy in high-risk patients.

The second study, the LEAP-ON study showed the majority of children who had early introduction of peanuts were able to temporarily stop peanuts without relapsing. This confirmed long-term prevention of peanut allergy. The third and perhaps the most important EAT study, showed there was a significant reduction in egg and peanut allergy with early introduction in low risk infants.

Implications of these studies

These three studies offer strong evidence that prolonged food avoidance can lead to sensitization and allergy, at least for peanuts and eggs. The US National Institutes of Allergy and Infectious Diseases (NIAID) recommends specialist assessment and testing of infants for peanuts if they have severe eczema or definite egg allergy. Families of low risk infants are advised to introduce peanut at around 6 months without prior testing. The

NIAID has also stated food challenges can be offered in cases of parental anxiety.

It is essential for children to continue eating foods, which they are tolerating, regardless of any test results, as there is a risk of breaking tolerance and potentially creating a life-long food allergy. There are some situations, where infants with severe eczema have strongly positive allergy tests but are continuing to eat these foods. A careful discussion needs to take place where the benefits of a short-term improvement in the skin are balanced against the risk of long-term morbidity from breaking tolerance to that food leading to food allergy. There is also an argument, these foods should not be tested if they are being consumed regularly, without any clinical evidence of other adverse reactions.

This is analogous to pet allergy where children born to families with pets, particularly cats, have a lower risk of pet allergy. Similarly, if the child is not reacting clinically to a pet, a positive test is irrelevant. Removal of a pet may result in severe pet allergy as a result of breaking tolerance.

In my practise, the goal is normalisation of the diet as soon as safely possible, given the new evidence this may prevent food allergy. Depending on their history and test results, I make a decision whether children should continue to avoid each food or undergo a food challenge if safe to do so.

I offer a full range of adult and paediatric immunology and allergy services including clinical consultation, testing, food challenges and dietician services. My team has safely undertaken over 2000 food challenges over last two decades. Milk allergy in an infant is a paediatric emergency and patients can be seen within 1-2 days. I am not affiliated with Southern Cross Health Care (SX) but SX Ultracare 400 patients are covered to attend my practice. All other medical insurance companies are covered.

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