Food protein induced enterocolitis syndrome (FPIES)

Food protein induced enterocolitis syndrome (FPIES) is a rare allergic disorder affecting the gastrointestinal tract in children. Most affected children have their first reaction before they turn one year of age. The main symptom of FPIES is vomiting, which is often very severe, and can lead to dehydration. Symptoms usually start two to four hours after eating a food to which the child is sensitive – usually a newly introduced food. Some children have more severe reactions, and become pale, and floppy, requiring intravenous fluids in hospital.

FPIES reactions may be triggered by a variety of food(s) and some children will react to more than one food. Common foods responsible for FPIES include cow’s milk, soy, and rice, but other food(s) can also trigger a reaction.

Vomiting can have many causes so a thorough medical history is required to diagnose FPIES. There are no laboratory tests to diagnose or exclude FPIES. In some cases children have multiple reactions and hospital presentations before a diagnosis of FPIES is made.

It is not known exactly how or why some children develop FPIES. It is not caused by IgE antibodies which are responsible for more commonly recognised allergic reactions such as hives and anaphylaxis. Because a different part of the immune system causes FPIES, skin prick and blood tests are usually not helpful in making a diagnosis. Sometimes when FPIES is suspected but the diagnosis remains unclear, a hospital based food challenge may be arranged. A child will be given portions of the suspected causative food to eat and be observed to see if a reaction occurs. A food challenge may also be used to see if an older child has ‘outgrown’ their allergy. Fortunately most children outgrow their FPIES by four years of age. Until then avoidance of causative food/s is the mainstay of treatment. It is also helpful for children to have an emergency management plan in case of accidental ingestion. There are no medicines to treat FPIES but some children will require intravenous fluids in hospital to treat severe episodes.

Adrenaline auto-injectors (e.g. EpiPen, Anapen) are not required for patients with FPIES reactions.

We are conducting a national surveillance study through the Australian Paediatric Surveillance Unit (APSU) to learn more about FPIES in children. Our study will be the first to collect national data on FPIES and will help us determine the number of newly diagnosed children with FPIES in Australia. We also hope to learn more about causative foods, the features of reactions, and the way children with FPIES are currently diagnosed and managed. The information we collect will help health professionals better understand FPIES and develop treatment guidelines.

For more information of FPIES, you can visit:

Australasian Society of Clinical Immunology and Allergy (http://www.allergy.org.au/content/view/401/368/)

The FPIES foundation (http://thefpiesfoundation.org)

This fact sheet was prepared by Dr Sam Mehr January 2012