

# **FOOD PROTEIN-INDUCED ALLERGIC** **PROCTOCOLITIS (FPIAP)** **(Cow's milk protein allergy (CMPA))**

## **Definition**

Food protein induced allergic proctocolitis (FPIAP) is defined as an abnormal reaction by the body's immune system to a protein. The most common offending protein is found in cow's milk (so this is commonly referred to as cow's milk protein allergy or CMPA). The immune system normally protects our bodies from harm caused by bacteria or viruses. In this condition, the immune system reacts unusually to the protein found in breastmilk or formula. The reaction can cause injury in to the intestines.

## **"Non IgE Mediated" Allergy**

Allergies can be divided into *IgE-mediated* (immediate reaction) and *non-IgE-mediated* (delayed reaction) types.

IgE, or immunoglobulin E, is an antibody normally found in humans that causes the symptoms seen with allergies (hives, rashes, wheezing) and anaphylaxis. In *IgE-mediated* CMPA, symptoms usually start within 2 hours of exposure to the allergen.

In *non-IgE-mediated* allergies like FPIAP, symptoms happen later, from 48 hours to 1 week after ingestion.

## **Signs and Symptoms**

Typically, infants present with symptoms of FPIAP in the first few months of life. They most often have bloody stool or mucousy stool. Infants may be well-appearing and happy despite the gastrointestinal symptoms

## **Diagnosis**

Having your doctor take a history and perform a physical examination are the most helpful investigations in diagnosing FPIAP. Letting your physician know if there is a family history of allergies, asthma, or eczema can be helpful. An important step in diagnosis can be seeing how your child responds to eliminating cow's milk protein from the diet. As a "non IgE mediated" reaction, there is no allergy test or blood test to diagnose FPIAP.

## **Treatment**

The treatment of FPIAP includes eliminating cow's milk protein from the infant's diet. If the infant is breastfeeding, this may involve having the mother exclude all dairy (and often soy) products from her diet if she continues to breastfeed\*. If the infant is not breastfeeding, extensively hydrolyzed formulas are recommended. These formulas are made up of broken down proteins. Two commonly available formulas are Nutramigen and Alimentum. Soy formulas are NOT recommended as many infants will have a similar reaction to the proteins in these formulas.



If infants do not respond to dairy/soy elimination, further elimination may be recommended which may include egg and corn.

The prognosis of FPIAP is excellent. Nearly all infants will be able to tolerate cow's milk and soy products by one year of age.

Timing of reintroduction of dairy/soy can be discussed with your pediatrician.

\*For more information on the elimination diet for breastfeeding mothers, see our handout "CMPA & Breastfeeding"