

FACT SHEET



PEDIATRIC GASTROESOPHAGEAL REFLUX (GER)

Pennsylvania Chapter

What is Pediatric Gastroesophageal Reflux

Reflux or GER is the backflow of food, liquids, and acids from the stomach into the esophagus. (The esophagus is the tube that leads from the back of the throat to the stomach.) More often than in the past, caregivers are hearing from parents that a child has reflux or had reflux in the past. Reflux is not a new disease, but the diagnosis is more common because improved medical tests for the condition make it easier to detect. Also, more is known today about the potentially serious consequences of untreated reflux in babies. At the lower end of the esophagus, a muscular area called the lower esophageal sphincter (LES) or cardiac sphincter functions as a valve between the esophagus and the stomach. Normally the LES opens to allow swallowing, belching and vomiting and then closes immediately. Reflux may occur because this valve relaxes when it shouldn't or when it closes inadequately.

What are the symptoms of Pediatric GER?

- pain, irritability, constant or sudden crying, "colic"
- frequent spitting-up or vomiting
- not outgrowing the spitting-up stage
- poor sleep habits, frequent awakening
- "wet-burp" or "wet-hiccup" sounds
- "*Sandifer's Syndrome*", an odd arching of the neck

Less common symptoms of pediatric GER include:

- constant eating and drinking
- intolerance of certain foods
- poor weight gain; weight loss
- swallowing problems, gagging, choking
- hoarse voice
- excessive salivation, drooling
- ear infections

What are the possible complications of reflux?

Most infants outgrow reflux between 12 to 18 months. The symptoms may be mild – just spitting up more than is typical for babies. Some of these infants have more severe symptoms that are hard on the babies and on their caregivers. The backflow of stomach acids and contents into the esophagus causes a burning sensation, commonly called "heart burn". The reddening or swelling of the esophagus that can be caused by this backflow is called esophagitis. In turn, the irritation of the esophagus can cause pain and a lack of appetite. Poor growth due to lack of adequate nutrition may result. In severe cases, malnutrition or "failure to thrive" occurs from losing too much food, from frequent vomiting or from lack of appetite due to pain.

Babies with reflux can also develop respiratory problems when the stomach contents enter the nose, windpipe and lungs. When stomach contents enter the lungs, this is called aspiration. Aspiration can be life-threatening if unnoticed and untreated.

How is reflux diagnosed?

Usually, reflux is diagnosed from the child's symptoms. If the symptoms are typical of reflux, a doctor may start treatment without further testing. If the baby responds well, tests may be unnecessary unless the doctor suspects other medical conditions might be present.

Four tests are typically used for diagnosing GER. The first is a Barium Swallow X-ray that can show narrow areas of the esophagus and other abnormalities of the upper digestive tract. The second is a 24-hour pH-Probe Study, the most accurate way to diagnose reflux. This test monitors the acid levels in the esophagus. The third test is the Milk Scan that shows how food moves out of the stomach. Doctors use the Milk Scan when they suspect slow stomach emptying is a problem. The last test is the use of the Endoscope, a tool that is a long thin tube with a tiny camera and light that the doctor inserts through the child's mouth to see inside the upper digestive tract and airway. During this procedure the doctor can watch the esophageal sphincter while it is opening and closing.

How is GER treated?

Many treatment methods are available at this time. Remember that most children will outgrow reflux by 12 to 18 months of age. Only a few babies continue to have reflux after two years of age, but it happens occasionally.

Simple and careful positioning during and after feedings helps many infants. Babies with reflux need to be positioned so gravity helps keep the food from coming back up. Often the head of the bed is raised to help keep the food in the stomach.

Infants should be held in an upright position while feeding and put to bed or held to avoid movement after a feeding. An active play period right after feeding increases the likelihood that the babies with reflux will bring up their food. Formula or breast milk may need to be thickened. Infants with reflux need frequent burping. As they grow older, they may need to avoid spicy, fatty and acidic foods.

Medications used to treat reflux include:

- Antacids
- Motility Medications - Urecholine and Reglan
- Acid Suppressors - Tagamet, Pepcid, and Zantac
- Acid Blockers - Prilosec and Prevacid

Commonly, doctors need to try different drugs to find the best drug for each child. Not all children will react in the same way.

Surgery to tighten the lower esophageal sphincter is a last resort after all other means have failed to help a child. The surgery is called fundoplication. Usually, surgery is unnecessary.

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