

Anti-Reflux Surgery. *What is gastroesophageal reflux?* Gastroesophageal reflux (GER) occurs when food or stomach acid travels backwards up the esophagus after it has been in the stomach. In adults, this usually causes heartburn. In infants, it usually causes spitting up. If the reflux is severe, and has associated complications, the term is gastroesophageal reflux disease (GERD).

What causes reflux? There is a muscular valve at the bottom of the esophagus that normally closes after swallowing and keeps food or liquids in the stomach. In most infants this muscle is weak at the time of birth. Most babies will have spit up during the first several months of life, but as this muscle strengthens the spitting up goes away. Sometimes however, there are anatomical abnormalities that change the shape or the function of the muscular valve, which results in severe or persistent reflux that does not go away. A hiatal hernia is an example of this, and is a common cause of GERD in adults.

Who needs treatment for GERD? Any baby who has reflux so severe that he does not gain weight, or loses weight, needs treatment. If the acid reflux causes damage to the esophagus, your child will need treatment. If your child has lung problems such as recurrent wheezing, pneumonia, chronic cough, or has ever turned blue and choked after feeding, he will need treatment. Several diagnostic tests may be done to determine the severity of reflux. These may include pH probes, nuclear medicine scans, or direct visualization of the stomach and esophagus with a camera (endoscopy). A GI doctor may assist in diagnosing and treating your child's reflux.

What are the treatment options? The first step in treatment is usually medicine. An antacid or a medicine to help the stomach empty may relieve symptoms and even heal damage to the esophagus. If your child has tried multiple medical options without success, cannot maintain body weight because of excessive vomiting, or if the reflux is causing lung problems, he or she is a candidate for an anti-reflux surgery. If your infant has ever choked and turned blue because of reflux material getting into the lungs, he or she will require surgery because it can be life saving.

What is the surgical procedure? A fundoplication involves wrapping the top portion of the stomach around the bottom of the esophagus and sewing it to itself. This creates an artificial valve at the bottom of the esophagus to assist the weaker natural valve in keeping contents down in the stomach. Some children can be treated with a partial (180°) wrap called a Thal fundoplication. This allows the child to belch normally and occasionally vomit while still preventing acid reflux. If your child's reflux is severe, life or lung-threatening, or your child has neurological problems, he will likely require a full (360°) wrap called a Nissen fundoplication. These procedures are done with a traditional open technique (through an incision in the abdomen) in very small infants. The Nissen fundoplication can be done laparoscopically in older children and leaves minimal scarring.

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What happens after surgery? The improvement in symptoms is often dramatic, and sometimes reflux medications can be stopped. But, almost all surgical patients will have to follow a special diet for up to 2 months after surgery. Some people will have difficulty swallowing immediately after surgery because of swelling of the esophagus, and can occasionally require a repeat trip to the OR to remove a piece of food from the esophagus. This is why it is important to follow the post-fundoplication diet strictly. After 2 months your child can eat and drink normally. Some children may receive food through a special feeding tube placed at the same time of fundoplication. This topic is discussed further in the section on Gastrostomy Tubes.

What are the possible complications? As with any surgery, there is the risk of bleeding and infection related to the operation itself. With fundoplication there is the risk of food or other foreign body becoming stuck in the esophagus. This occurs most often in the first few weeks after surgery and can be avoided by following the post-fundoplication diet. Some patients will have frequent hiccups or retching because of the way the stomach is attached to the diaphragm. Most children will not be able to belch or vomit for the first few months after surgery, but this will usually improve once the wrap loosens a little. If a patient has forceful seizures, or prolonged and forceful attempts at vomiting, the wrap can come apart and the reflux symptoms can come back. This may require repeat operation to repair the fundoplication (rare).

To make an appointment to discuss this topic, please call or email at the information listed below.

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