Atlanta Digestive Center L.L.C.

Hiatal Hernia

A hiatal hernia is an anatomical abnormality in which part of the stomach protrudes through the diaphragm and up into the chest. Although hiatal hernias are present in approximately 15% of the population, they are associated with symptoms in only a minority of those afflicted.

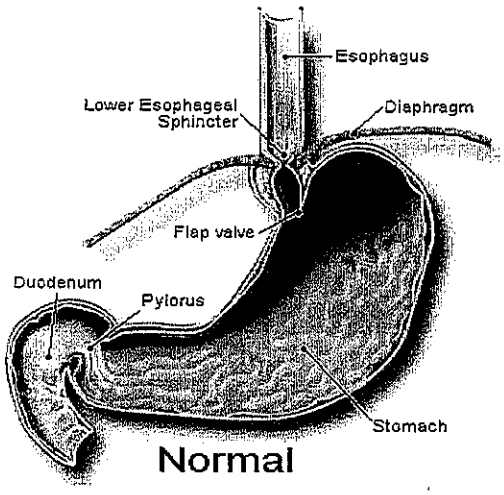
Normally, the esophagus or food tube passes down through the chest, crosses the diaphragm, and enters the abdomen through a hole in the diaphragm called the esophageal hiatus. Just below the diaphragm, the esophagus joins the stomach. In individuals with hiatal hernias, the opening of the esophageal hiatus (hiatal opening) is larger than normal, and a portion of the upper stomach slips up or passes (herniates) through the hiatus and into the chest.

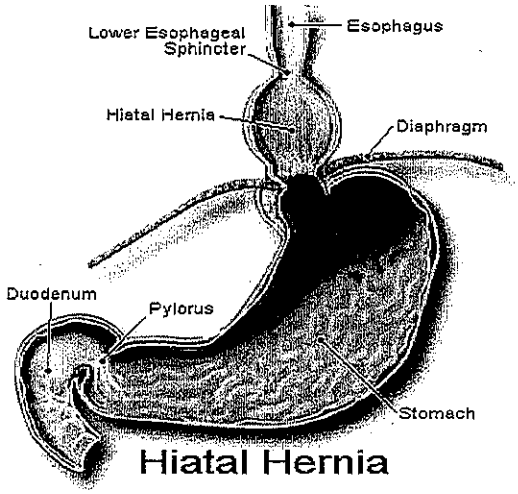
What causes a hiatal hernia?

It is thought that hiatal hernias are caused by a larger-than-normal esophageal hiatus, the opening in the diaphragm through which the esophagus passes from the chest into the abdomen; as a result of the large opening, part of the stomach "slips" into the chest. Other potentially contributing factors include:

1. A permanent shortening of the esophagus (perhaps caused by inflammation and scarring from the reflux or regurgitation of stomach acid) which pulls the stomach up.

2. An abnormally loose attachment of the esophagus to the diaphragm which allows the esophagus and stomach to slip upwards.





Are there different types of hiatal hernias?

Hiatal hernias are categorized as being either sliding or para-esophageal.

Sliding hiatal hernias

Sliding hiatal hernias, the most common type of hernia, are those in which the junction of the esophagus and stomach, referred to as the gastro-esophageal junction, and part of the stomach protrude into the chest. The junction may reside permanently in the chest, but often it juts into the chest only during a swallow. This occurs because with each swallow the muscle of the esophagus contracts causing the esophagus to shorten and to pull up the stomach. When the swallow is finished, the herniated part of the stomach falls back into the abdomen. Para-esophageal

hernias are hernias in which the gastro-esophageal junction stays where it belongs (attached at the level of the diaphragm), but part of the stomach passes or bulges into the chest beside the esophagus. The para- esophageal hernias themselves remain in the chest at all times and are not affected by swallows.

Para-esophageal hiatal hernias

A para-esophageal hiatal hernia that is large, particularly if it compresses the adjacent esophagus, may impede the passage of food into the stomach and cause food to stick in the esophagus after it is swallowed. Ulcers also may form in the herniated stomach due to the trauma caused by food that is stuck or acid from the stomach. Fortunately, large para-esophageal hernias are uncommon.

What are the symptoms of hiatal hernia?

The vast majority of hiatal hernias are of the sliding type, and most of them are not associated with symptoms. The larger the hernia, the more likely it is to cause symptoms. When sliding hiatal hernias produce symptoms, they almost always are those of gastroesophageal reflux disease (GERD) or its complications. This occurs because the formation of the hernia often interferes with the barrier (lower esophageal sphincter) which prevents acid from refluxing from the stomach into the esophagus. Additionally, it is known that patients with GERD are much more likely to have a hiatal hernia than individuals not afflicted by GERD. Thus, it is clear that hiatal hernias contribute to GERD. However, it is not clear if hiatal hernias alone can result in GERD. Since GERD may occur in the absence of a hiatal hernia, factors other than the presence of a hernia can cause GERD.

Symptoms of uncomplicated GERD include:

heartburn
regurgitation
nausea

How is a hiatal hernia diagnosed?

Hiatal hernias are diagnosed incidentally when an upper gastrointestinal barium x-ray or endoscopy is done during testing to determine the cause of upper gastrointestinal symptoms such as upper abdominal pain. On both the x-ray and endoscopy, the hiatal hernia appears as a separate "sac" lying between what is clearly the esophagus and what is clearly the stomach. This sac is delineated by the lower esophageal sphincter above and the diaphragm below. The hernia may only be visible during swallows, however.

How is a hiatal hernia treated?

Since sliding hiatal hernias rarely cause problems themselves but rather contribute to acid reflux, the treatment for patients with hiatal hernias is usually the same as for the associated GERD- mostly treated my medicine. If the GERD is severe, complicated, or unresponsive to reasonable doses of medications, surgery often is performed. At the time of surgery, the hiatal hernia is eliminated in a manner similar to the repair of para-esophageal hernias. However, in addition, part of the upper stomach is wrapped around the lower sphincter to augment the pressure at the sphincter and further prevent acid reflux.

Treatment of large para-esophageal hernias causing symptoms requires surgery. During surgery, the stomach is pulled down into the abdomen, the esophageal hiatus is made smaller, and the esophagus is attached firmly to the diaphragm. This procedure restores the normal anatomy.

Hiatal Hernia At A Glance

A hiatal hernia is an anatomical abnormality of the esophagus. Hiatal hernias contribute to gastro-esophageal reflux disease (GERD). The symptoms in individuals with hiatal hernias parallel the symptoms of the associated GERD. The treatment of most hiatal hernias is the same as for the associated GERD.

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