

An Incisionless Surgical Solution for Chronic Acid Reflux

No More Pills, No More Heartburn, No Scars



 EndoGastric Solutions®



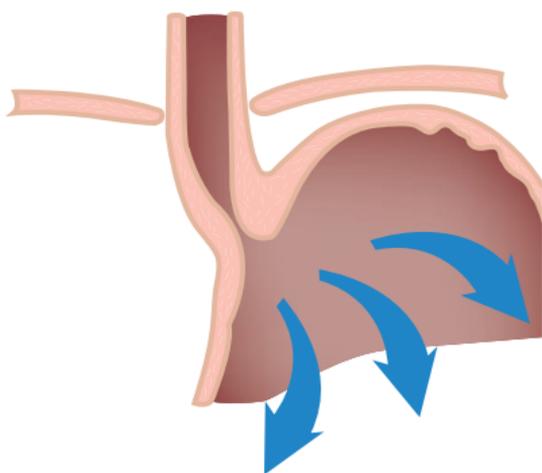
What is GERD?

If you have heartburn more than once a week, you may have chronic acid reflux, or Gastroesophageal Reflux Disease (GERD). Heartburn is the most common symptom, but you may also experience:

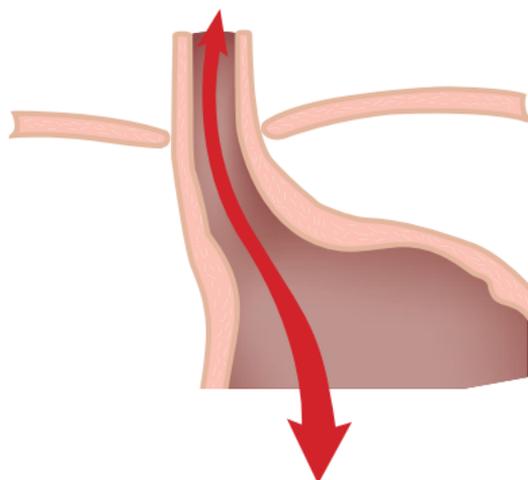
- Regurgitation
- Pain or discomfort in the chest
- Trouble sleeping
- Dysphagia (difficulty swallowing)
- Frequent swallowing
- Persistent cough
- Intolerance of certain foods and liquids
- Gas and bloating
- Excessive clearing of the throat
- Waterbrash (excessive salivation)
- Hoarseness or laryngitis
- Asthma or asthma-like symptoms
- Dental erosions or therapy-resistant gum disease or inflammation

What causes GERD?

GERD is caused by anatomic changes in the body's natural antireflux barrier, the gastroesophageal valve (GEV). Normally, after swallowing, the valve between the esophagus and stomach opens to allow food to pass and then closes to prevent stomach contents from refluxing into the esophagus. Genetics, weight, diet, aging and injuries to the upper chest can disrupt normal function of the GEV and result in abnormal exposure to acid reflux.



Normal, Fully-Functional Antireflux Valve. Valve closes to prevent reflux of stomach fluids.



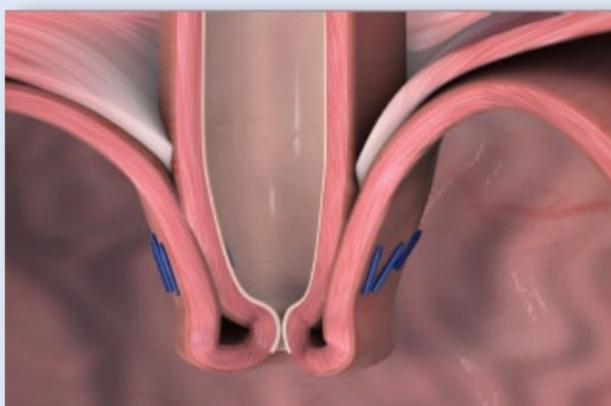
Abnormal, Dysfunctional Antireflux Valve. Valve can no longer close to prevent reflux of stomach fluids, causing GERD.

TIF®: An Incisionless Surgical Solution for GERD

Transoral Incisionless Fundoplication (TIF) treats the underlying cause of GERD without incisions. This innovative procedure uses the EsophyX device to reconstruct the antireflux valve and restore the body's natural protection against reflux.

- **Transoral** – The procedure is performed from within the GI tract with the device inserted through the patient's mouth.
- **Incisionless** – Because the procedure is performed transorally, abdominal incisions and internal dissection of other anatomy are not required, resulting in reduced discomfort, faster recovery, and higher patient satisfaction.
- **Fundoplication** – The EsophyX device enables reconstruction of the antireflux valve according to the established principles of conventional antireflux surgery.

The EsophyX device and an endoscope are introduced together through the patient's mouth and into the stomach. With visualization provided by the endoscope, the surgeon uses the EsophyX device to reconstruct the antireflux valve by wrapping the fundus of the stomach around the distal esophagus and securing it with polypropylene fasteners.



TIF uses fasteners to reconstruct the body's natural antireflux valve at the junction of the esophagus and the stomach

Benefits of TIF

- No external skin incisions – no scarring
- No internal cutting or dissecting of the natural anatomy – more rapid recovery
- Fewer adverse events and complications
- Does not limit future treatment options
- Can be revised if required



Eat or drink the foods you want
when you want.



Sleep the way you desire.

Is TIF effective?

In a two-year TIF study, patients reported 80% improvement in quality of life and reduction or elimination of heartburn symptoms. All patients were instructed to stop taking PPIs two weeks following the procedure; 85% were still off daily PPIs at 12 months and 79% at 24 months.

What can I expect?

TIF is performed under general anesthesia and requires patients not to eat or drink for several hours prior to the procedure. The procedure itself generally takes less than an hour.

Typically, patients can go home the following day as well as return to work and most normal activities within a few days. Patients should expect to experience some discomfort in their stomach, chest, nose and throat for 3-7 days after the procedure.

Patient compliance to the surgeon's post-procedure recommendations allows the surgical repair to properly heal. Retching, vomiting or excessive physical activity within approximately 4 weeks post-operation may adversely affect the surgical repair. Similarly, following a modified diet for approximately 4-6 weeks is also recommended.

Is TIF safe?

TIF has been proven as safe in more than ten thousand procedures performed worldwide. Clinical studies demonstrate that TIF patients experience fewer long-term complications commonly associated with conventional antireflux surgery such as chronic dysphagia (trouble swallowing), gas bloat syndrome and increased flatulence.

Am I a Good TIF Candidate?

The TIF procedure is most appropriate for those suffering from GERD who:

- Regularly experience troublesome symptoms of GERD
- No longer respond adequately or are dissatisfied with pharmaceutical therapies
- Are concerned about the adverse long-term effects of taking PPIs
- Are considering surgical intervention but are concerned about the complication rate, mortality and potential side effects (e.g. gas bloat, dysphagia, inability to vomit) of laparoscopic antireflux surgery



Rapid recovery – back to work and a normal life.

Get back to living!

 EndoGastric Solutions.

Treatment Options for GERD

Depending on the severity of GERD-related symptoms, treatment may involve lifestyle modifications, medical therapy or antireflux surgery.

Lifestyle Modifications

For mild GERD sufferers with infrequent symptoms, simple dietary and lifestyle changes may offer symptom relief.

Medical Therapy

For many patients, a daily regimen of medical therapy controls heartburn and reflux symptoms. However, pharmaceuticals do not solve the underlying anatomical problem and generally do not stop disease progression. As the antireflux valve deteriorates, patients may need to increase dosage and, like many GERD sufferers, it may mean taking medication indefinitely.

PPIs, the most effective medical therapy for GERD, are generally approved for 8 weeks of use. While safe and effective for most patients, studies evaluating long-term PPI use demonstrate a series of undesirable side effects including increased risk of hip fracture and osteoporosis.



Conventional Antireflux Surgery

Conventional antireflux surgery has long been considered an effective long-term solution to treating GERD. During surgery, the antireflux valve is reconstructed by wrapping the fundus, the upper portion of the stomach, around the esophagus. While results vary by surgeon, good symptom control is often achieved, and patients are able to stop taking their medications. Side effects following the procedure typically include post-operative dysphagia, bloating and increased flatulence in 2-9% of patients.¹

TIF: Incisionless Antireflux Surgery

TIF is an incisionless procedure based on the established surgical principles of conventional reflux surgery. Because TIF is performed entirely through the patient's mouth (transorally), there are no abdominal incisions or dissection of normal anatomy and subsequently, no scars from the procedure. In a two-year clinical study, TIF was effective in eliminating heartburn in 93% of patients and daily PPI therapy in 79%. Side effects following the procedure are minimal and typically include mild dysphagia, bloating, and flatulence in 1-3% of patients.²

For more information about
your treatment options, visit:

GERDHelp.com

References:

1. Carlson MA, Frantzides CT. Complications and results of primary minimally invasive antireflux procedures: a review of 10,375 reporter cases. J Am Coll Surg. 2001 Oct; 193(4):428-39.
2. For a list of peer-reviewed articles about TIF, visit <http://www.endogastricsolutions.com/clinicalPubs.htm>

