

SurgeryNews

SPOTLIGHT ON ESOPHAGEAL AND GENERAL SURGERY

Minimally Invasive ANATOMICAL REPAIR Provides Relief for Patients with PERSISTENT GERD

ELLIOT R. GOODMAN, MD

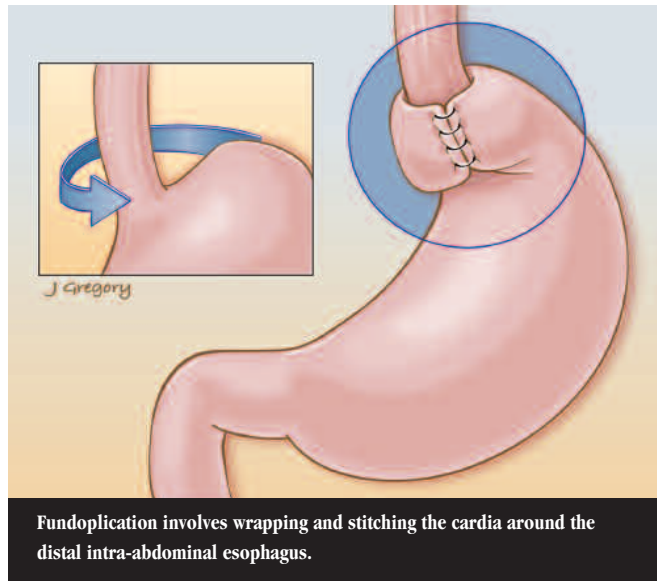
Chief of Bariatric Surgery

Specialties: General Surgery, Bariatric Surgery

Gastroesophageal reflux disease, or GERD, affects millions. More than 15 million experience daily symptoms, reports The American College of Gastroenterology, and approximately \$8 billion is spent on prescription and over-the-counter drugs annually. Unfortunately, even when coupled with lifestyle changes, these prescribed medications—including the newest proton pump inhibitors (PPI)—do not always relieve symptoms.

Fortunately, surgery offers a viable alternative for many of these patients. The surgeons in the Department of Surgery at Beth Israel Medical Center have been performing laparoscopic fundoplication, the standard GERD surgery, since 1995.

Patients considered have persistent symptoms ranging from a burning sensation mid-abdomen, commonly referred to as heartburn, to more atypical complaints including sore throat, swallowing difficulties and dry cough. **Unlike medications that relieve heartburn by reducing acid production, surgery corrects anatomical problems causing**



Fundoplication involves wrapping and stitching the cardia around the distal intra-abdominal esophagus.

other structural abnormalities, such as a hiatal hernia, which often complicates, but does not cause, GERD.

Fundoplication, for more than 50 years, was first performed as an open operation by Dr. Rudolph Nissen. The procedure tightens and repairs the LES by dissecting, wrapping and stitching the cardia of the stomach around the distal intra-abdominal esophagus, providing

additional pressure to recreate a functioning sphincter. Laparoscopic intervention over the past two decades has produced the same results as open procedures, alleviating heartburn in up to 90 percent of cases, while replacing the six- to ten-inch incision with a few small incisions and reducing LOS from eight days to a single overnight stay.

While time-proven benefits of minimally invasive techniques include less pain, medication and scarring, pursuit of further improvements continues. **One recent advance currently being explored at Beth Israel is transoral incisionless fundoplication (TIF),** an incisionless, natural orifice approach done in the OR under general anesthesia. Through the mouth, the endoscope carries a sterile, single-use EsophyX™ device, which deploys multiple
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GERD is not typically a life-threatening illness, but left untreated, it can have serious complications.

the reflux—a weakened lower esophageal sphincter (LES) or poorly functioning gastroesophageal valve (GEV)—both of which have been found to contribute to the reflux of gastric contents back into the esophagus causing inflammation and burning. **Surgery will also correct**

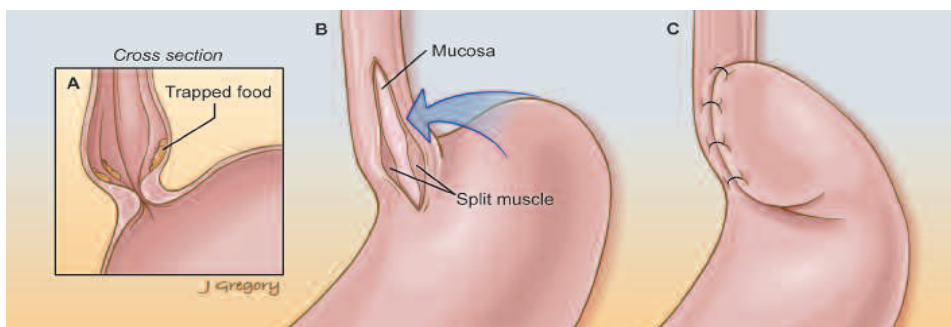
BI Surgeons TREAT RARE ESOPHAGEAL DISORDER

BURTON G. SURICK, MD

Attending, Department of Surgery

Specialties: General Surgery, Minimally Invasive Laparoscopic Surgery, Bariatric Surgery

In direct contrast to GERD, achalasia is a rare esophageal disorder resulting from an overly tight lower esophageal sphincter (LES), which keeps food from passing through. Only 2,000 people develop this condition annually in the US, according to The Society of Thoracic Surgeons, but untreated it has unpleasant consequences. Fortunately, surgeons like Beth Israel Medical Center's Burton Surick, MD, and Richard Friedman, MD, are performing a minimally invasive surgery with great success.



A: Failure of the valve at the lower esophageal sphincter (LES) results in food entrapment and distension of the esophagus. **B:** Myotomy requires splitting the LES muscle to release the valve and allow food passage into the stomach. **C:** A portion of the cardia is repositioned and reattached over the site of the incision.

Called a myotomy, the procedure involves splitting the LES to disrupt the muscle fibers, allowing food to pass more easily into the stomach. As an open surgery, myotomy has been performed for decades. The laparoscopic approach, initially used in the 1990s, has proved highly successful—nearly 95 percent of patients experience years of symptom relief afterwards. Other treatments include application of an endoscopic balloon within the LES that expands and tears the valve muscles, and a Botox injection administered under endoscopic guidance that paralyzes the valve. But neither provides relief for as long, or for as many patients as does myotomy. Currently, no oral medications are available either.

Symptoms of achalasia may include progressive difficulty in swallowing, eating and drinking, the need to wash food down with liquids, regurgitation of food, heartburn, chronic cough, weight loss, and chest pain or pressure that may increase after eating, or radiate to the back, neck and arms. Patients with these complaints, which can appear similar to GERD, undergo complete evaluations that include esophageal endoscopy and manometry.

For further information about achalasia or to refer a patient to Burton Surick, MD, or Richard Friedman, MD, please call (212) 420-4520.

GERD

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polypropylene fasteners, transfixing and achieving serosa-to-serosa fusion, creating a functional gastroesophageal valve. Most patients who opt for GERD surgery are suitable candidates for traditional laparoscopic fundoplication. The **EsophyX™ procedure** is appropriate for those without large hiatal hernias (over 2 cm), esophageal strictures, or significant scarring from prior abdominal surgery.

All patients undergo careful evaluation and screening. Good motility in the esophagus, determined by manometry testing, is required, as is eliminating a cardiac diagnosis, which can sometimes mimic GERD symptoms. Endoscopic evaluation and an upper GI series is standard to view the esophagus surface and check for abnormalities. Additional tests performed include 24-hour pH monitoring, done on an outpatient basis to record acid levels while a patient goes about normal activities.

GERD is not typically a life-threatening illness but, left untreated, it can have serious complications, including bleeding, ulcers, strictures, and Barrett's esophagus, a pre-cancerous condition that can eventually lead to a fatal outcome. **Palliative medical management does not correct the problem**, and lifelong treatment and monitoring is necessary to prevent deterioration. **Anatomical repair offers cure, and incisionless advances reduce OR risks**, potentially prompting physicians and their patients to opt for surgical intervention earlier.

For further information or to refer a patient for surgical GERD intervention, please contact Elliot Goodman, MD, at (212) 844-8838.

Beth Israel's GENERAL SURGERY SPECIALISTS

Provide ADVANCED CARE FROM A TO Z

MICHAEL LEITMAN, MD

Chief of General Surgery

Specialties: Oncologic Surgery, Bariatric Surgery

General surgery specialists at Beth Israel Medical Center treat thousands of patients each year. Providing interventions for a wide range of conditions from appendicitis to obesity, these physicians treat diseases affecting the abdomen and its organs. Individualized treatment plans, increasingly with minimally invasive surgery (MIS), a multidisciplinary team approach, and collaboration with referring physicians, are all hallmarks of the division.

What is general surgery?

In spite of its name, general surgery is a surgical specialty that focuses on the diagnosis and treatment of diseases and disorders affecting the abdomen, digestive tract and endocrine system. The most common conditions treated by Beth Israel surgeons include gallstones and other gall bladder disease, a variety of hernias (inguinal, recurrent, bilateral, ventral, and incisional), obesity, pancreatitis, appendicitis, bowel obstructions, colon inflammation and cancer, and trauma.

The broad perspective of these specialists enhances comprehensive and thorough diagnosis, and allows for the most skillful surgical solutions possible.

Minimally invasive treatment is preferred

Over the last 15 years, these solutions have increasingly involved minimally invasive surgery (MIS). Well-established benefits for both physician and patient hone in on **one central principle—reducing surgical risk.** Smaller incisions and reduced trauma translate to fewer wound complications, less post-op pain, less pain medication, shorter LOS, faster recovery and fewer scars. MIS techniques are now standard care for many procedures including cholecystectomy, Nissen fundoplication and hernia repair.

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A Vast Array of Treatments

The General Surgery Division provides laparoscopic as well as open treatments for patients with:

- Hernia
- Gallbladder disease and gallstones
- Gastro-esophageal reflux disorder (GERD)
- Pancreatitis
- Appendicitis
- Diverticulitis disease
- Inflammatory bowel disease
- Biliary (liver) diseases
- Trauma

Additionally, within the Division of General Surgery, is the following specialized program:

- Bariatric Surgery Program

www.BISurgery.org

Recent laparoscopic advances

Further refinements to MIS include **single incision laparoscopic surgery (SILS)**, involving the application of a special device at the navel that accommodates the three necessary instruments for cholecystectomy, a technique in use at Beth Israel for the past six months. Another advance, **natural orifice endoscopic surgery**, performed with an endoscope through one of the body's natural orifices, includes the EsophyX™ and StomaphX™ procedures, which treat gastroesophageal reflux and revise gastric bypasses, respectively. Over the past year, Beth Israel has established itself as a leader in the metropolitan area, performing more than 70 StomaphX™ procedures with good results.

In addition to improving care through technical advances, the collegial environment of Beth Israel Medical Center, and the Division of General Surgery in particular, provides **superior patient care** via collaboration between different specialties. Treating obesity, for example, necessitates partnerships among endocrinologists, behavioral specialists and general surgeons.

For further information on general surgery services or to schedule a consultation with a general surgeon, please call (212) 844-8203.

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Beth Israel surgeons provide first-rate, state-of-the-art quality care to all patients and collaborate with referring physicians to create an individualized treatment plan. For more information about surgical services at Beth Israel Medical Center, call (212) 420-4044 or visit our Website at www.BISurgery.org.