



SPECIAL NEWSLETTER

GERD

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Gastroesophageal Reflux Disease

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Gastroesophageal reflux disease (GERD) is the term used to identify conditions associated with the exposure of the esophagus to the reflux of gastric contents (acid and possibly bile). The typical symptoms of GERD are heartburn, frequent burping, regurgitation, indigestion and difficulty swallowing, but an unusual form of reflux disease affects the throat resulting in cough, sore throat and hoarseness, with or without the usual symptom of heartburn. GERD is common in industrialized countries with 15-20% of the adult population having an episode of heartburn at least weekly and an additional 20% reporting less frequent episodes. GERD affects up to 40% of the adult population in the United States, but a smaller proportion experiences symptoms severe enough to cause decreased productivity, and reduce their quality of life.

Causes

GERD is felt to be caused by a disorder of the lower esophageal sphincter (LES), the muscular valve that separates the esophagus from the stomach. It is believed that some people suffer from GERD due to a weakening of the LES associated with the presence of a hiatal hernia, a widening of the passage in the diaphragm, allowing the upper part of the stomach to slide up into the chest. (See Figure 1) Another potential cause of GERD is excess stomach acid, or a disorder of stomach emptying. These conditions result in the inappropriate backflow of stomach contents up into the esophagus causing symptoms, erosions and potentially ulcerations of the esophageal lining. The severity of the condition is determined by the frequency of reflux events, and influenced the volume of food and fluid in the stomach, the pressure on the abdomen, the degree of functioning of the LES, and the ability of swallowed saliva to clear out and neutralize the contents present in the esophagus. A person's body habitus (obesity), and position (upright or supine) also plays a role in the frequency of episodes of reflux. Efforts to reduce the pressure on the abdomen, reduce the volume of contents in the stomach and expedite the transit of contents through the stomach all aid in reducing episodes of reflux. This is the foundation of the treatment of GERD.

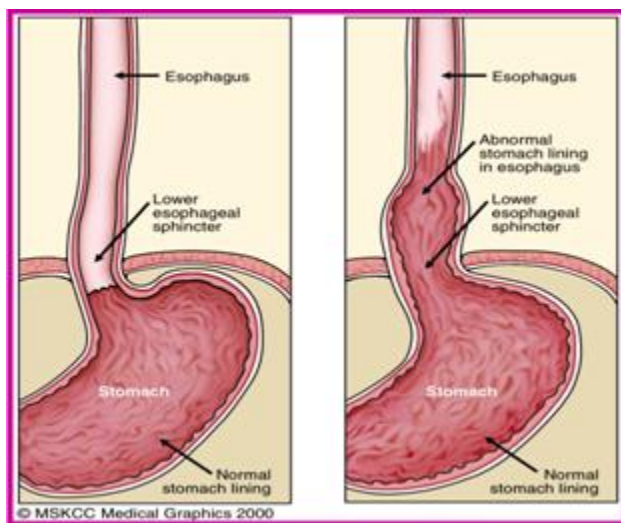


Figure 1
Schematic drawings of the normal esophagus and stomach on left, and hiatal hernia with Barrett's esophagus on right.

Diagnosis

Most patients are given a diagnosis of GERD by their physician based on a clinical evaluation of their history of the typical symptoms of heartburn, indigestion, or regurgitation. Many doctors will refer patients to a gastroenterologist for treatment or for an endoscopy to confirm the diagnosis, and to look for the complications of GERD, such as ulcers, strictures (scar-like narrowing), Barrett's esophagus (a precancerous condition), or to rule out cancer. Other procedures which may be recommended by a gastroenterologist include a 24 hour pH monitoring test to actually prove that there is acid reflux, esophageal manometry to measure the strength of the LES, and the rest of the esophagus, and/or a gastric emptying test to be sure that the stomach is emptying normally. All of these procedures are important to confirm the actual presence of reflux of acid or bile, determine if the esophagus, stomach and valves are functioning normally, and assess the best approaches to treatment.

Treatment

The aims of treatment for GERD are to decrease symptoms by reducing the frequency and duration of reflux events. This is mostly done by changing the acidity of the material present in the stomach. Certain foods and beverages are thought to contribute to reflux, including coffee, chocolate, peppermint, alcohol, fatty foods and should be avoided. Citrus fruits and juices, tomato products, peppers and spices may also contribute to symptoms and should also be avoided. Tobacco products and alcohol also contribute greatly to reflux, so all patients are encouraged to discontinue their use. Some medicines can also contribute so patients should review their medications with their doctor to determine if changes can be made.

In addition to specific food items, intra abdominal pressure contributes greatly to the occurrence of reflux and symptoms. Doctors therefore recommend weight reduction, and reducing portion sizes of all meals. Pregnancy commonly causes reflux, but the symptoms usually resolve after the child is born. Tight fitting clothes also increase intra abdominal pressure and should be avoided.

Positioning contributes greatly to the reflux events, so people affected with GERD should avoid bending over with a full stomach, and are encouraged to raise the head of their bed by at least 6 inches to take advantage of the effect of gravity on reducing reflux episodes during sleep. It is also recommended to avoid lying down for at least 3-4 hours after meals. Taking a walk after meals can help digestion and reduce reflux events.

Medicinal treatment for reflux consists of agents that reduce the amount of acid in the stomach (antacids like Maalox, H2 blockers like Zantac and proton pump inhibitors like Nexium), or speed up the emptying of the stomach (metachlopramide and erythromycin). Unfortunately, at present, there are no effective agents that improve the function of the LES, although some doctors have tried to use the drug baclofen for this effect.

Surgical tightening of the LES (fundoplication) and repair of the hiatal hernia has been an alternative to medical therapy. It is a very effective treatment for GERD, but tends to be reserved for carefully selected individuals who are young, generally healthy, and who initially respond well to medicines.

The most common surgical approach is laparoscopic Nissen fundoplication. The procedure is performed through very small incisions in the abdomen, and uses a firm tube-like scope to view the inside of the abdomen, and specialized surgical instruments that permit the surgeon to tighten the LES and repair the hernia. The operation is performed at centers with experts in esophageal diseases, laparoscopy, or bariatric surgery. Studies that have been published demonstrate much success with surgery in reducing symptoms, and reducing the need for medications.

Newer endoscopic approaches to surgical treatment are currently being investigated but are not widely available. These procedures are generally only performed as part of research trials and should be considered with caution as their successes are not fully proven.

GERD, Barrett's esophagus and esophageal cancer

A Swedish study published in 1999 demonstrated that people experiencing chronic reflux symptoms, at least once a week, had a risk for developing esophageal adenocarcinoma 8 times higher than the general population, and those with more frequent and severe reflux for over 20 years had a risk that was 43 times higher.

It is estimated that Barrett's esophagus occurs in 7-15% of patients with chronic GERD. (For more information on Barrett's esophagus, see our newsletter on this topic and suggested readings.) Barrett's esophagus is a precancerous condition believed to be caused by years of reflux. People who have Barrett's esophagus are estimated to have a 5% risk of developing esophageal adenocarcinoma at some time in their lives, so it has been suggested by professional societies to perform regular endoscopy every 3 years to survey for changes leading to cancer.

As many as 40% of patients diagnosed with esophageal adenocarcinoma deny ever having had GERD symptoms, and only about 5% of patients with esophageal adenocarcinoma have a prior diagnosis of Barrett's esophagus, so it remains uncertain how to best protect people from developing esophageal cancer. Screening of patients with GERD has not been shown to be cost effective but some suggest screening those at greatest risk for esophageal adenocarcinoma. Those most likely to benefit from screening are obese white men with chronic, severe reflux symptoms, and any patient with a known diagnosis of Barrett's esophagus.

For more information on Barrett's esophagus, see our [October 2011 newsletter](#) on this subject.

Other GERD Articles of Interest

Symptomatic Gastroesophageal Reflux as a Risk Factor for Esophageal Adenocarcinoma

The causes of adenocarcinomas of the esophagus and gastric cardia are poorly understood. We conducted an epidemiologic investigation of the possible association between gastroesophageal reflux and these tumors. [View Article](#).

Gastroesophageal Reflux, Barrett Esophagus, and Esophageal Cancer

Symptoms of gastroesophageal reflux disease (GERD) are among the most common complaints encountered by the generalist physician. [View Article](#).

Clinical Manifestations and Esophageal Complications of GERD

This report focuses on the manifestations of gastroesophageal reflux disease (GERD) that are caused directly by contact between refluxed gastric juice and the esophageal mucosa. These manifestations include heartburn, peptic esophageal erosion and ulceration, peptic esophageal stricture, and Barrett esophagus. [View Article](#).

Memorial Sloan-Kettering Cancer Center Announces Connections

MSKCC announces [CONNECTIONS](#) an on-line community designed for patients and caregivers to exchange support information and inspiration. The community is open to all patients and caregivers whether you have been treated at MSKCC or not. ECEF has created a group within this site specifically for esophageal cancer patients and caregivers.

Bart Frazzitta, ECEF's President and co-founder, will be the moderator of the esophageal cancer group on this site. Come join us and register which is totally secure and exchange your thoughts and comments in an on-line environment.

To join the group, go the Connections sign-up page at <http://www.mskcc.net/> and create yourself an account. You will need to reference the unique key phrase **mskcc123** when registering. Once you have an account setup, you can join the Esophageal Cancer group by clicking on the Select a Group drop-down under Groups on the right-hand side of your home page. From here, you can click the Join Group button to join the group.



Support Groups

ECEF Patient and Caregivers Support Group

Our Support Group Conference Call Meeting for patients and caregivers is growing in size as we now have 27 people who have signed up for these meetings. The meeting has attracted people from all over the United States and each meeting is held for about an hour. The first 15 minutes is used by a presenter who speaks on a topic that is of interest to patients and caregivers. The remaining 45 minutes of the meeting is used by participants in the conference call to make comments about their journey and to see what advice can be given by patients who have experienced the issues being discussed. The next support group call is scheduled for December 14th at 8:00 p.m. EST. If you would like more information about this unique group meeting please contact bart@fightec.org.



ECEF Lost a Loved One Support Group

Our conference call support group for people who have lost a loved one to this dreaded disease continues to develop. We have a social worker involved in these calls and her direction has been excellent per the people involved in the call. The next call for this group is scheduled for December 19th at 8:00 p.m. EST. If you would like more information about this unique group meeting please contact bart@fightec.org.

Support Groups continued

MSKCC Survivorship and Esophageal Cancer: Finding a New Balance

This informational and discussion group is designed to help survivors adjust to the changes that follow surgery for esophageal cancer. Family members are welcome. The discussion group meets every other month on the second Monday. Please register in advance for this group at 646 888 4740. More information about this group and others can be found on the MSKCC Living Beyond Cancer website:

<http://www.mskcc.org/mskcc/html/58022.cfm> or call Resources for Life After Cancer 646 888 4740.

Beth Israel Gastro / Esophageal Cancer Support Group

This support group meets monthly on the second Monday of the month at 6:30pm at Phillips Ambulatory Care Center 10 Union Square East suite 4a Bogart conference room. If you would like to know more about this support group please contact Margot Lestrangle at 212-420-4041. New attendees must contact Margot Lestrangle before attending meeting.