

GERD (Gastric Reflux Disorder)

In a healthy human esophagus, swallowing induces peristalsis, which are the contractions that move food down the esophagus and through the rest of your digestive system. In turn there is a second wave of muscular contractions that clears the esophagus, pushing food down through the lower esophageal sphincter (LES) and into the stomach. However, in some people, the LES either relaxes or opens spontaneously, allowing stomach contents, including acids, to reenter the esophagus. This is called *gastroesophageal acid reflux disorder* and may lead to symptoms like heartburn.

Lifestyle modifications: First line of management in patients with GERD, including the following:

- Losing weight (if overweight)
- Avoiding alcohol, chocolate, citrus juice, tomato-based products, coffee
- Avoiding large meals -never having a sense of 'feeling full'
- Waiting 3 hours after a meal before lying down
- Elevating the head of the bed by 8 inches

H₂-Receptor Antagonists are the first-line agents for patients with mild to moderate symptoms and grade I-II esophagitis. Options include *cimetidine* (**Tagamet**), *famotidine* (**Pepsid**), *and nizatidine* (**Axid**). **NOTE**: *Ranitidine* (**Zantac**) has been taken off the market.

PPIs (Protein Pump Inhibitors) are the most powerful medications available for treating GERD. Options include Omeprazole (Prilosec), lansoprazole Prevacid), rabeprazole (Aciphex), esomeprazole (Nexium), pantoprazole (Protonix), & dexlansoprazole (Dexilent). These agents should be used only when this condition has been objectively documented. They have few adverse effects. However, data have shown that PPIs can interfere with calcium homeostasis and aggravate cardiac conduction defects. Long-term use of these agents has also been associated with bone fractures due to osteoporosis in postmenopausal women, chronic renal disease, acute renal disease, and Clostridium difficile intestinal infection.

Surgery: The most commonly performed operation today in patients with GERD is the Nissen fundoplication. Indications for fundoplication include the following:

- Patients with symptoms that are not completely controlled by PPI therapy.
- Barrett esophagus (most authorities recommend complete acid suppression in patients with histologically proven Barrett esophagus)
- Extraesophageal symptoms of GERD may indicate the need for surgery, including respiratory manifestations (cough, wheezing, aspiration); (2) ear, nose, and throat manifestations (hoarseness, sore throat, otitis media); and (3) dental enamel erosion)
- Young patients
- Poor patient compliance with regard to medications
- Postmenopausal women with osteoporosis
- Patients with cardiac conduction defects

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