

Gastro- 23 esophageal Reflux Disease

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UNDERSTAND the problem

Gastroesophageal reflux disease (GERD) is recognized as a complex clinical entity, primarily a motility disorder with impaired lower esophageal sphincter (LES) structure and function playing a central role. The diverse underlying pathology of GERD presentation requires proper diagnosis to effectively target with therapy.

Symptoms suggestive of GERD affect an estimated 30% of Western populations, and the prevalence continues to increase.¹ A comparison of GERD prevalence in different continents showed the highest rates in North America.¹ Among various ethnicities, the incidence of GERD is higher in white individuals, likely related to lifestyle rather than genetic factors.² GERD incidence increases with age, especially after 40 years.³

GERD is a chronic disease. Approximately 70% of patients with GERD experience chronic or relapsing symptoms and require long-term intermittent, on-demand, or continuous acid suppressant therapy or antireflux surgery.⁴ In patients who meet the criteria for GERD, symptoms can impose a serious negative burden on quality of life. Disruptive GERD (more than once weekly symptoms) increases patient time off from work and decreases work productivity. These patients often have sleep impairment and decreases in physical functioning. GERD accounts for 8.9 million outpatient visits each year, with an estimated annual cost of \$24 billion.⁵

Ask Your Patients...

"Do you frequently experience heartburn?"

If Your Patient Asks...

"Why do I keep getting heartburn?"

WHO is at risk

Predisposing factors for GERD include conditions that weaken the LES (e.g., hiatal hernia, pregnancy), increase pressure on the stomach (e.g., obesity, pregnancy, asthma), or affect transit of food from the stomach to the small intestine (e.g., diabetes, peptic ulcer disease, connective tissue disorders).^{6, 8}

GERD occurs in up to 70% of obese patients, and symptoms increase with weight gain.⁷ Higher BMI and larger waist circumference are associated with the development of GERD complications, including Barrett esophagus.²

GERD symptoms, particularly heartburn, are common during pregnancy. Symptoms can begin in any trimester, with severity increasing throughout the pregnancy. Predictors of heartburn are advanced gestational age, heartburn before pregnancy, and parity.

High dietary fat intake is linked to a greater risk of GERD and erosive esophagitis. Carbonated drinks are also a risk factor for heartburn during sleep in patients with GERD. The role of coffee and alcohol as risk factors is unclear; they may increase heartburn in some patients, but the mechanism is unknown.

A variety of medications have also been linked to an increased risk for GERD. These include NSAIDs, beta-adrenergic agonists, anticholinergics, nitrates, phosphodiesterase type 5 (PDE5) inhibitors, theophylline, calcium channel blockers, and benzodiazepines.⁹

WHAT are the signs and symptoms

The typical symptoms of GERD are heartburn and regurgitation.¹⁰ Heartburn is defined as a burning, retrosternal, rising sensation associated with meals. Regurgitation is the effortless appearance of gastric contents in the throat or mouth without associated nausea or retching.

In addition to these cardinal symptoms, patients may display atypical symptoms and/or extraesophageal manifestations of GERD, including:^{2, 10}

- Gastric (e.g., nausea, belching, slow digestion, early satiety, epigastric pain, bloating)
- Respiratory (e.g., non-cardiac chest pain, chronic cough, asthma)
- Ear/nose/throat (e.g., laryngopharyngeal reflux, hoarseness, sore throat, otitis media, pharyngeal pain, globus, chronic rhinosinusitis, repetitive throat clearing)
- Dental (e.g., enamel erosion)

HOW it is treated

The objective of GERD treatment is to control symptoms, heal the esophagus, and prevent recurrent esophagitis or other complications by reducing gastric acidity and decreasing esophageal reflux.^{8, 10} A patient-centered, individualized approach can optimize patient outcomes across the GERD spectrum.

Before making pharmacologic recommendations to patients, consider lifestyle modifications. Most commonly, patients are recommended to avoid foods that decrease LES pressure and to minimize behaviors that predispose to increased esophageal acid exposure.¹⁰ Lifestyle modifications with the strongest evidence support are weight loss and head-of-bed elevation.¹⁰

Proper treatment of GERD should be preventive in nature instead of reactive. PPIs are the standard of care, but less potent interventions (e.g., antacids) may be suitable for some patients.¹⁰ In patients without alarm features, management of GERD usually begins with an empiric PPI trial.¹¹

Antireflux surgery is an option in refractory cases. Refinements in antireflux surgery and the introduction of minimally invasive options may eliminate or markedly reduce GERD symptoms by structurally restoring anatomic failure of the LES antireflux barrier—the primary underlying pathology.¹²

WHERE to find resources

American College of Gastroenterology

<https://gi.org>

American Gastroenterological Association

<https://www.gastro.org>

American Society for Gastrointestinal Endoscopy

<https://www.asge.org>

International Foundation for Gastrointestinal Disorders, Inc.

<https://www.aboutgerd.org>

National Institute of Diabetes and Digestive and Kidney Diseases

<https://www.niddk.nih.gov>

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