FACT SHEET

Gastroesophageal Reflux Disease (GERD)

Basic Information
- Gastroesophageal reflux disease (GERD) is a chronic disorder caused by the esophagus’ prolonged exposure to gastric contents. This occurs when the lower esophageal sphincter (LES) is weakened and does not function properly, allowing gastric contents to flow from the stomach back into the esophagus. Gastric contents can irritate the esophagus, causing pain in the form of heartburn and non-cardiac chest pain.
- pH testing is the gold standard for accurately evaluating GERD so appropriate treatment can begin.

Key Statistics
- GERD is a common disorder that affects an estimated 21 million Americans.¹
- While symptoms of GERD vary among individuals, chronic heartburn is the symptom most frequently cited.
- Although GERD affects 5 to 7 percent of the world’s population, its symptoms are often misunderstood and it is often left untreated.²
- It is estimated that only half of the patients with chronic heartburn are identified, only half of those receive treatment, and only half of those treated are treated adequately, meaning only 12 percent are being optimally managed.³

Impact on Quality of Life
- Depending on the severity of GERD symptoms, a person may avoid many routine activities for fear of suffering an unexpected and severe episode of GERD. Productivity at work, enjoyment of hobbies, participating in sports and a restful night’s sleep may also be negatively affected due to the potentially debilitating symptoms.
- In studies that measure emotional well being, people with unresolved GERD report worse scores than those with high blood pressure, peptic ulcers or angina; yet nearly half of GERD sufferers do not recognize GERD as a disease.⁴
Diagnosing GERD
Monitoring pH levels in patients who are suspected of having GERD identifies the presence of the condition. The Bravo™ pH System from Medtronic allows the patient to maintain a normal routine while pH levels are being tested over a 24- or 48-hour period. Bravo is a catheter-free device, making it more patient-friendly than trans-nasal pH catheters, which need to go down the nose and throat, causing greater patient discomfort. With the Bravo pH System, patients can eat and drink normally as well as engage in their usual activities, while having their pH levels tested nearly effortlessly — leading to increased patient compliance and acceptance of pH testing.

Treatment Options

- While there is currently no cure for GERD, there are treatment options available, including:
  
  ⇒ **Lifestyle Modifications**
  - Smoking cessation (nicotine weakens the LES and slows the rate at which food is emptied from the stomach and should be avoided).
  - Dietary changes (onions, garlic, chocolate, peppermint, caffeine, alcohol and fatty foods can weaken the LES and should be avoided).
  - Loss of excess weight (extra weight increases pressure in the stomach area).
  - Avoiding snacks or meals before going to bed (no food for at least three to four hours prior to bedtime).

  ⇒ **Medications**
  - **Promotility agents**, such as metoclopramide (Reglan®), which work by accelerating gastric emptying.
  - **$H_2$ blockers** such as cimetidine (Tagamet HB®), famotidine (Pepcid AC®) and ranitidine (Zantac 75®) reduce the amount of acid produced in the stomach and are available over the counter. Long-term use should be monitored by the patient’s physician.
  - **Proton pump inhibitors** (PPIs) are prescription medications that work by blocking acid secretion in the stomach and include omeprazole (Prilosec®), lansoprazole (Prevacid®) and esomeprazole magnesium (Nexium®).

  ⇒ **Surgery**
  - **Nissen Fundoplication**: For patients who do not respond to medications the most common surgical procedure is the Nissen fundoplication. The procedure is usually performed laparoscopically and involves wrapping the upper part of the stomach (fundus) around the esophagus and securing it in place, thereby strengthening the LES and restoring its function to serve as a barrier for stomach contents.

  ⇒ **Endoscopic Interventions**
  - Non-surgical techniques to enhance LES function are emerging as viable treatment options for GERD. All are in early stages of market introduction and none has yet been adopted as the benchmark treatment of choice by the medical community.
• Techniques include radiofrequency ablation of the sphincter (burning cells), injecting bulking agents into the sphincter, cinching the sphincter, or placing a biocompatible prothesis around the sphincter.
• Medtronic currently has an endoscopic treatment under clinical investigation in Europe and the US.

References

1 International Foundation for Functional Gastrointestinal Disorders (IFFGD).
3 Editorial “Managing Chronic Disease.” British Medical Journal; April 1999.

Reglan is a registered trademark of Wyeth Pharmaceuticals/A.H. Robbins Company
Tagament HB is a registered trademark of GlaxoSmithKline
Pepcid AC is a registered trademark of Merck
Zantac 75 is a registered trademark of Pfizer
Prilosec is registered trademark of AstraZeneca
Prevacid is a registered trademark of TAP Pharmaceutical Products
Nexium is a registered trademark of AstraZeneca