



---

## **Gastro Esophageal Reflux Disease (GERD): A Review on its Diagnosis and Treatment.**

***M. SURYAKUMAR<sup>1</sup>, DR. K.DIVYA<sup>2</sup>***

<sup>1</sup> B.PHARM

<sup>2</sup> PHARM.D

DEPARTMENT OF PHARMACOLOGY

PALLAVAN PHARMACY COLLEGE

---

### **ABSTRACT:**

The most specific symptoms for GERD are heartburn and acid regurgitation, which can be used to make a presumptive diagnosis and start empirical treatment if there are no alarm signs. Additional diagnostic testing may be necessary in certain situations to confirm the diagnosis and evaluate for complications or other possible causes of the symptoms, such as pulmonary illness, Barrett's oesophagus, esophageal cancer, erosive oesophagitis, and peptic stricture. GERD can be treated with medication, surgery, and lifestyle modifications such as elevating the head of the bed or losing weight.

**Keywords:** Gastro Esophagus Reflux Diagnosis (GERD),Symptoms, Endoscopy, Treatment.

---

### **Symptoms:**

The symptoms of GERD can be further divided into extraesophageal, atypical, and usual symptoms. In general, symptoms are more common after meals, are often exacerbated by recumbency, and are lessened by medications that reduce acidity. Heartburn and acid regurgitation are typical GERD symptoms with high specificity and low sensitivity. Achalasia, gastritis, peptic ulcer disease, dyspepsia, and gastroparesis are among the various conditions in the differential diagnosis that can coexist with GERD, even if unusual symptoms such epigastric discomfort, dyspepsia, nausea, bloating, and belching may be indicative of the condition. Lastly, there are some extraesophageal symptoms, including prolonged coughing, asthma, laryngitis, and dental erosions. .

---

### **Diagnosis:**

A medical professional may be able to diagnose GERD based on a history of symptoms and a physical examination.

To confirm a diagnosis of GERD or to check for complications, a medical professional might recommend the following:

---

### **Upper endoscopy:**

An upper endoscopy uses a small camera on the end of a flexible tube to visually examine the upper digestive tract. The camera helps provide a view of the inside of the stomach and oesophagus. Test results may not show reflux, but an endoscopy may show esophageal inflammation or other problems.

To screen for conditions like Barrett's oesophagus, a biopsy—a sample of tissue removed during an endoscopy—can also be done. If a constriction is noticed during this treatment, the oesophagus may occasionally be stretched or dilated. This is done to assist those who have difficulty swallowing.

---

### **Ambulatory acid (pH) probe test:**

A sensor is placed in the oesophagus to measure the duration and timing of stomach acid regurgitation. A small computer that is worn around the waist or strapped over the shoulder is linked to the display.

The monitor can be a catheter, a thin, flexible tube that is passed via the nose and into the oesophagus. An alternative is to introduce a capsule into the oesophagus during an endoscopy. The capsule enters the stool after around two days.

---

### **X-ray of the upper digestive system:**

X-rays are taken after ingesting a grainy material that covers and fills the intestinal lining. Because of the covering, a doctor may be able to view the outline of the stomach and oesophagus. This is particularly beneficial for people who have trouble swallowing.

On occasion, an X-ray may be taken after taking a barium pill. When swallowing becomes problematic, this can help diagnose esophageal narrowing.

---

### **Esophageal manometry:**

This examination measures the regular contractions of the oesophagus muscles while swallowing. The force and synchronisation of the esophageal muscles are also evaluated by esophageal manometry. This is typically performed on people who have trouble swallowing.

---

### **Transnasal esophagoscopy:**

This test looks for signs of esophageal damage. A small, flexible tube with a built-in video camera is inserted via the nose, down the neck, and into the oesophagus. The camera sends images to a video screen.

---

### **TREATMENT:**

Since GERD is a chronic condition, it typically requires long-term management by medication, lifestyle modifications, and, in a small number of cases, surgery.

---

### **Lifestyle changes:**

Conventional dietary and lifestyle modifications have included skipping meals at night, increasing the head of the bed, reducing body weight, and avoiding trigger foods including chocolate, caffeine, and alcohol.

---

### **Medical therapy:**

The mainstay of treating GERD is acid suppression, which can be achieved with a number of medication classes, including antacids, proton-pump inhibitors (PPIs), and histamine-receptor antagonists (H2RAs). Studies have shown that PPIs, as opposed to H2RA, have an effect nearly twice as soon and offer more comprehensive relief from heartburn and erosive oesophagitis. Additionally, studies show that ERD is more difficult to treat with H2RA than PPIs, and that ERD patients generally have stronger symptom responses to PPIs than NERD patients.

---

### **Surgical therapy:**

Acid suppression is the cornerstone of GERD treatment, and this can be accomplished with a variety of drug classes, such as antacids, proton-pump inhibitors (PPIs), and histamine-receptor antagonists (H2RAs). According to studies, PPIs provide more thorough relief from erosive oesophagitis and heartburn than H2RAs and act almost twice as quickly. Furthermore, research indicates that ERD patients typically respond more strongly to PPIs in terms of symptoms than NERD patients, and that ERD is more challenging to treat with H2RA than PPIs.

---

### **CONCLUSION:**

The chronic condition known as gastro-oesophageal reflux disease (GERD) can cause mild to severe symptoms. A diagnosis of GERD can be made using a physical examination, medical history, and diagnostic tests. GERD can be treated with medication, surgery, and lifestyle changes to improve quality of life, prevent issues, and lessen symptoms. By understanding the diagnosis, symptoms, and current treatments for GERD, healthcare providers can work with patients to develop an effective management plan and improve outcomes for this common and often incapacitating condition.

---

### **REFERENCE:**

1. Clarrett, D. M., & Hachem, C. (2018). Gastroesophageal reflux disease (GERD). *Missouri medicine*, 115(3), 214.
2. Badillo, R., & Francis, D. (2014). Diagnosis and treatment of gastroesophageal reflux disease. *World journal of gastrointestinal pharmacology and therapeutics*, 5(3), 105.
3. Jung, H. K., Tae, C. H., Song, K. H., Kang, S. J., Park, J. K., Gong, E. J., ... & Lee, K. J. (2021). 2020 Seoul consensus on the diagnosis and management of gastroesophageal reflux disease. *Journal of neurogastroenterology and motility*, 27(4), 453.
4. Loganathan, P., Gajendran, M., Perisetti, A., Goyal, H., Mann, R., Wright, R., ... & Umopathy, C. (2024). Endoscopic Advances in the Diagnosis and Management of Gastroesophageal Reflux Disease. *Medicina*, 60(7), 1120.
5. Badillo, R., & Francis, D. (2014). Diagnosis and treatment of gastroesophageal reflux disease. *World journal of gastrointestinal pharmacology and therapeutics*, 5(3), 105.