
GASTROESOPHAGIAL REFLUX DISEASE (GERD)

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Abstract:

The article presents data from epidemiological studies on the prevalence of symptoms of gastroesophageal reflux disease (GERD), risk factors and manifestations of GERD. Special attention is paid to the individual therapeutic approach and the choice of a modern effective remedy for treatment.

Gastroesophageal reflux disease, heartburn, digestive illness, lower esophageal sphincter relaxations

Millions of people worldwide are affected by the prevalent clinical issue known as gastroesophageal reflux disease (GERD). Patients can be identified by both conventional and unusual symptoms. Many people with GERD benefit from symptomatic relief and are shielded from consequences by acid suppression medication. Our aim is to recognize and treat disease consequences has improved as a result of developments in diagnostic and therapeutic technologies. In this article, we go through the etiology of GERD, its impact, and the clinical strategy to treating this widespread condition.

In North America, the prevalence of gastroesophageal reflux disease (GERD), a highly prevalent digestive illness, is estimated to be 18.1-27.8% [1,c.871-880].

At some point, around half of all individuals will report having reflux symptoms. [2,c.1148-1456]

The Montreal definition of GERD describes it as a condition with bothersome symptoms and side effects brought on by the reflux of stomach contents into the esophagus.

After an empiric trial, GERD is often diagnosed based on the presence of the characteristic symptoms and the patient's reaction to acid suppression.

Due to its link to a worse quality of life and severe morbidity, GERD is a serious health problem. [3,c.254-272]

Significant improvements in quality of life, such as reduce physical discomfort, greater vigor, physical and social function, and mental well being, have been linked to effective treatment of GERD symptoms.

Although GERD medicines

Risk factors for GERD include older age, excessive body mass index (BMI), smoking, anxiety/depression, and less physical activity at work.

Eating habits, such as the acidity of food and the amount and timing of meals, particularly in relation to sleep, may also cause GERD. Recreational exercise appears to be protective, with the exception of when done post-prandially. [4,c.1354-1359]

Lower esophageal sphincter (LES) dysfunction is the main cause of gastroesophageal reflux, however other variables may also play a role in its onset. Physiologic and pathologic variables both have a role in the development of GERD. Transient lower esophageal sphincter relaxations are the most frequent cause (TLESRs). TLESRs are short-lived, swallow-independent episodes of lower esophageal sphincter tone inhibition. While these are physiologic in nature, there is an increase in frequency in the postprandial phase and they contribute greatly to acid reflux in patients with GERD.[5,c,1148-1456] Other factors include reduced lower esophageal sphincter (LES) pressure, hiatal hernias, impaired esophageal clearance, and delayed gastric emptying

Heartburn is the traditional and most typical symptom of GERD. Acid reflux into the esophagus causes heartburn, a burning feeling in the chest that spreads to the mouth. Only a tiny portion of reflux occurrences, nevertheless, are symptomatic. Along with regurgitation of the refluxate, a sour taste in the back of the mouth is another common symptom of heartburn.[6,c,1127-113]

Extraesophageal manifestations of GERD are widespread but less frequently diagnosed, despite the fact that basic GERD symptoms are simple to identify.[7,c.1900-1920] Extraesophageal symptoms like hoarseness and throat clearing are more frequently caused by reflux into the larynx. The globus sensation, often known as a sense of fullness or a lump at the back of the throat, is a typical complaint among GERD sufferers. Although the exact etiology of globus is unknown, it is believed that exposure to acid in the hypopharynx increases the tonicity of the upper esophageal sphincter (UES). Acid reflux may also cause bronchospasm, which can aggravate underlying asthma and cause coughing, dyspnea, and wheezing. Additionally, some GERD sufferers may have persistent nauseous and vomiting issues.[8,c.252-258]

It is important to screen patients for alarm symptoms associated with GERD as these should prompt endoscopic evaluation. Alarm symptoms may suggest a possible underlying malignancy. Upper endoscopy is not required in the presence of typical GERD symptoms. However, endoscopy is recommended in the presence of alarm symptoms and for screening of patients at high risk for complications (i.e. Barrett's esophagus, including those with chronic and/or frequent symptoms, age > 50 years, Caucasian race, and central obesity).[9,c.2128-2138] Alarm symptoms include dysphagia (difficulty swallowing) and odynophagia (painful swallowing), which may represent presence of complications such as strictures, ulceration, and/or malignancy. Other alarm signs and symptoms include, but are not limited to, anemia, bleeding, and weight loss.[10,c.142-146]

GERD is usually diagnosed clinically with classic symptoms and response to acid suppression. Heartburn with or without regurgitation is typically sufficient to suspect GERD, particularly when these symptoms are worse postprandially or when recumbent.[11,c.1078-1084]The initiation of treatment with histamine type 2 (H2) receptor blockers or proton pump inhibitors (PPIs) with subsequent cessation of symptoms is considered diagnostic. In patients who respond to empiric treatment, in the absence of alarm features or symptoms, no further workup is required.

Long-Term Wireless Esophageal pH Monitoring (Bravo Capsule)

The benefits of this approach include higher patient comfort, prolonged esophageal pH monitoring (up to 96 hours), and the additional use of preventing catheter shift, which can happen with conventional pH metres. Azzar et al., in 2012, concluded that both the standard and the esophageal pH-metre (wireless) techniques could diagnose pathological gastroesophageal reflux[12,c.72-102]

Long-term Esophageal pH Monitoring

This exam determines the diagnosis and severity of GERD in addition to its pattern, such as whether it is prone, positional, or orthostatic. A number of circumstances call for this examination. To diagnose GERD and laryngopharyngeal reflux disease, it is recommended to use a catheter which should at least have two sensorial, one at the far end esophagus and the other at the esophageal detrusor, the upper one or higher. Other recommended procedures are a) GERD prognosis in typical further up endoscopy; b) character of the pattern of gastroesophageal reflux; and c) acid benefaction .[13,c.613-620] The identification of reflux disease, which is non-erosive, is found in individuals with standard pH levels and reacts favourably to proton pump inhibitors (PPIs). A patient with regular pH readings, a low symptom score, and an inability to respond to PPI is another common scenario that points to the diagnosis of functional heartburn

The goal of GERD medical therapy is to lessen symptoms and prevent mucosal damage from acid reflux.

With the exception of ZollingerEllison syndrome, there does not seem to be a clear correlation between the severity of GERD and high gastric acid levels, even though acid suppression is effective in the treatment of GERD.[14.c,80-87]

Proton pump inhibitors are the most potent class of antacid medications. They are dosed once or twice daily and are most effective if taken 30 to 60 minutes prior to meals. Many patients will have relapse of symptoms after the cessation of PPI, therefore lifelong therapy is often required. Recently, there has been a rise in concern of PPIs contributing to the development of bone fractures, electrolyte deficiencies, infections (e.g., Clostridium difficile, pneumonia), and renal insufficiency. Given the theoretical risk of side effect from PPI therapy, the lowest dose required for maintenance should be used and periodic trials of weaning should be attempted[15.c,149-154]

There is some data that suggests adding a nightly H2 blocker may be helpful for GERD patients who are resistant to twice-daily PPI treatment.[16.c,605-612] 16, 35 Other illnesses, such as eosinophilic esophagitis, pill esophagitis, delayed stomach emptying, duodenogastric/bile reflux, irritable bowel syndrome, psychiatric problems, achalasia, and Zollinger-Ellison syndrome, should be taken into account in refractory cases.[17.c,149-154]

GERD is a common clinical problem with significant morbidity and potentially decreased quality of life.[18.c,605-612] Early recognition of symptoms is integral to preventing complications of GERD. Behavioral changes and advances in acid suppression remain integral to its treatment.[19.c,661-669]

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