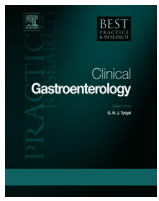
Best Practice & Research Clinical Gastroenterology 27 (2013) 387–400

Contents lists available at SciVerse ScienceDirect

Best Practice & Research Clinical Gastroenterology



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Management of reflux-related symptoms

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Keywords:
Gastro-oesophageal reflux
Heartburn
Symptoms
Proton pump inhibitors
Therapy

A B S T R A C T

Gastro-oesophageal reflux disease develops when the reflux of gastric contents into the oesophagus results in troublesome symptoms and/or complications [1]. Refluxate contains predominantly acid which causes tissue injury at oesophageal and extra-oesophageal sites. It is one of the commonest gastrointestinal diagnosis worlds over. It is associated with chronic symptoms, reduced QOL, significant cost and serious complications. Goals of therapy are to provide symptom relief, heal oesophagitis and prevent long-term complications. Therapeutic measures are directed at reducing the noxiousness of the refluxate; reducing the gastro-oesophageal reflux; enhancing clearance; protecting the mucosa; reducing the mucosal sensitivity and improving healing. Acid suppression with proton pump inhibitors remains the cornerstone of therapy. Recent studies have resulted in better understanding of disease and relative efficacies of various strategies. This has paved way for a better evidence based approach. The therapy however needs to be individualized depending upon the clinical profile, disease severity, the dominant pathophysiological mechanism, cost, availability and individual preferences.

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http://dx.doi.org/10.1016/j.bpg.2013.06.004

Introduction

GERD develops when the reflux of gastric contents into the oesophagus results in troublesome symptoms and/or complications [1]. The refluxate contains predominantly acid, and varying quantities of pepsin, bile salts, and trypsin. The injury caused by these noxious agents at oesophageal and extra-oesophageal sites results in tissue injury manifesting as a wide range of symptoms depending on the nature, site, and severity of the injury.

GERD is one of the most common medical conditions with an estimated prevalence of 10%–20% in the Western world [2,3]. It is the most frequent outpatient diagnosis in the United States and the most common indication for upper endoscopy [3]. On an annual basis, GERD accounts for nine million hospital visits and $10 billion expenditure towards direct as well as indirect costs for management [3]. GERD is associated with reduced quality of life, decreased productivity and places a huge financial burden on society related not only to the typical reflux syndrome but also to other extra-oesophageal syndromes such as asthma, reflux laryngitis, and dental erosions [1]. GERD is, also, the leading risk factor for Barrett's oesophagus and oesophageal adenocarcinoma, resulting in significant mortality, morbidity, and health care costs. Over the last three decades the understanding and management of GERD has evolved resulting in better evidence based informed decision making for patients with GERD.

What are the reflux related symptoms?

The classical symptoms of GERD are heartburn and regurgitation. Heartburn is described by patients as a burning sensation that radiates from the epigastrium towards the chest. It usually increases after meals, on bending forwards and in supine position. It may be relieved transiently by measures for acid neutralization such as ingestion of antacids. However, its frequency and severity is a poor predictor of degree of oesophageal injury. Regurgitation is described as spontaneous appearance of bitter or acidic tasting material in the mouth. The other symptoms encountered in patients with GERD are chest pain, water brash, and dysphagia. Chest pain is non-specific symptom and needs to be differentiated from other common causes of chest pain such as those of cardiac or musculoskeletal origin. Water brash is characterized by sudden appearance of salty or tasteless fluid in the mouth. It occurs due to enhanced reflex salivary hypersecretion in response to oesophageal acidification. Dysphagia of a transient nature may occur secondary to motility disturbances in patients with oesophagitis. However, persistent dysphagia should alert the clinician regarding the possibility of complications such as peptic stricture or oesophageal adenocarcinoma.

The nature and severity of symptoms help in establishing the diagnosis, tailor therapy and evaluate response to therapy. Symptoms are considered to be troublesome if they occur at least twice a week or if they reduce the quality of life or affect daily functioning [1]. Detailed account of nature, underlying pathophysiology and analysis of symptoms is beyond the scope of this chapter.

Establishing the diagnosis of GERD

In patients with typical symptoms of heartburn and regurgitation, a presumptive diagnosis of GERD can be made without any further investigations although recent studies have called into question the accuracy of the clinical history in diagnosis [4–6]. The more upper gastrointestinal symptoms the patient reports the less likely they are to respond to acid suppressive therapy [7]. In those presenting with chest pain, a cardiac cause should be excluded and a diagnostic evaluation should be performed prior to institution of therapy. In those presenting with alarm symptoms or in those requiring screening for complications, an upper gastrointestinal endoscopy is required. Routine biopsy of distal oesophagus is not recommended. Barium esophagogram is not recommended for diagnosis of GERD. Oesophageal manometry is indicated in those who need preoperative evaluation but not for diagnosis of GERD. Ambulatory pH monitoring is indicated in those with oesophagitis, in those undergoing endoscopic or surgical therapy or as a part of evaluation of refractory symptoms.