

# **Gastroesophageal Reflux**

## **Pre-operative Investigations – For whom & why?**

Gastroesophageal reflux disease is a common medical condition affecting approximately 35 – 40 per cent of the adult population in the western world, defined as failure of antireflux barrier, allowing the reflux of excessive amounts of gastric juice into the esophagus. It is a mechanical disorder which is caused by defective lower esophageal sphincter, a gastric emptying disorder, or failed esophageal peristalsis. These abnormalities result in a spectrum of disease ranging from “heartburn” to esophageal tissue damage with subsequent complications (reference 6). Gastroesophageal reflux disease may be manifested by symptoms, by endoscopic or histologic esophagitis or by measurement of increased esophageal acid exposure on 24-hour pH monitoring.

Medical therapy is the first line of management for gastroesophageal reflux disease. Esophagitis will heal in approximately 90 per cent of cases with intensive medical therapy. However, medical treatment does not address the condition’s mechanical etiology, thus symptoms recur in more than 80 per cent within one year of drug withdrawal (12, 6/1). In addition, while medical therapy may effectively treat the acid induced symptoms, esophageal mucosal injury continue due to ongoing alkaline reflux (12, 6/14). Since gastroesophageal reflux disease is a chronic condition, medical therapy involving acid suppression and/or promotility agents may be required for the rest of the patient’s life. The expenses and the psychological burden of a life time medication dependence, undesirable life style changes, uncertainty as to the long effects of some newer medications, and the potential for persistent mucosal changes despite symptomatic control, all make surgical treatment of gastroesophageal reflux disease an effective option. Surgical therapy, which addresses the mechanical nature of this condition, is curative in 85 – 93 per cent of patients (6/6, 7, 9, 10). The primary goal of surgical intervention for gastroesophageal reflux disease is to re-establish the antireflux barrier without creation of undue side effects (reference 6). However, before considering surgical treatment of gastroesophageal reflux disease, it is mandatory that patients undergo investigations not only to confirm the diagnosis, but also to be appropriately selected for surgical repair. Investigations help to determine the underlying mechanical etiology of reflux and to identify those who have conditions associated with gastroesophageal reflux disease, such as esophageal motor disorders, a shortened esophagus, or associated delayed gastric emptying, that may require tailored approach (12)