

# INTRODUCTION

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From a historical perspective gastroesophageal reflux disease (GERD) was not recognized as a significant clinical problem until the mid 1930s, and was not identified as a precipitating cause for esophagitis until after World War II (*Peters & DeMeester, 1997*).

There are three known causes of increased esophageal exposure to gastric juice in patients with gastroesophageal reflux disease. The first is a mechanically incompetent lower esophageal sphincter which accounts for about 60% to 70% of gastroesophageal reflux disease and its identification is important, since it is the one etiology that antireflux surgery is designed to correct. The other two causes are inefficient esophageal clearance of refluxed gastric juice and abnormalities of the gastric reservoir that augment physiologic reflux (*Zanionotto et al., 1988*).

Gastroesophageal reflux disease (GERD) is a common disease with many typical-which are more frequent-and atypical forms of presentation. The typical presentation includes heart burn and regurgitation while chest pain, asthma, ear, nose and throat manifestations are the atypical presentation (*Richter, 1996*).

Certain guidelines for diagnosis and treatment of gastroesophageal reflux disease were developed under the auspices of the American College of Gastroenterology which

includes the following (1) general approach to GERD, including empiric therapy, (2) appropriate mucosal evaluation (i.e., endoscopy and radiology), (3) use of pH and provocative testing, and (4) indications for manometric evaluation. Therapeutic recommendations includes the following; (1) general approach to therapy including lifestyle changes, (2) use of acid suppression, (3) use of promotility drugs, (4) maintenance treatment of GERD and (5) indications for antireflux surgery (*DeBault & Castell, 1995*).

It is now generally recognized that modern medical therapy allows the physician to both heal the esophagitis and relieve the patients from troublesome symptoms such as heartburn, acid regurgitation and disabling chest pain. In addition, long-term therapy with potent acid inhibitory drugs can maintain these patients in clinical remission. The indication for antireflux surgery and long-term medical therapy have developed and changed with time but are today essentially similar, and infact, it can be hypothesized that outcome of a short-term "therapeutic trials" with the proton pump inhibitor would be a useful clinical tool, not only as a diagnostic test for the disease but also in the selection process before referring the patient to anti reflux surgery (*Lundell, 1994*).

Before proceeding with an antireflux procedure in a patient suspected of having (GERD), it is necessary to

confirm that the patient's symptoms are caused by esophageal exposure to gastric juice secondary to a mechanically defective lower esophageal sphincter. Also, the primary goal of antireflux surgery is to safely reestablish the competency of the cardia by mechanically improving its function while preserving the ability of the patient to swallow normally, to belch to relieve gaseous distention, and to vomit when necessary. The surgical treatment of (GERD) involves the following main lines; (1) primary antireflux repairs, (2) surgical therapy of complicated reflux disease and (3) remedial surgery for failed antireflux repairs (*Peters & DeMeester, 1997*).

Minimally invasive surgery for (GERD) gives good-to-excellent results even in patients with abnormal esophageal body function, provided that the operation is tailored to the individual patient based on the results of the preoperative assessment (*Patti et al, 1995*).

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