SUMMARY

Gastro-esophageal reflux disease is a chronic foregut disorder whose incidence is often underestimated. It affects significant proportion of the population and may lead to complications such as esophagitis, ulceration and Barrett's esophagus in about 50% of the affected patients.

Although heart burn and regurgitation are considered the typical symptoms, clinical presentations of GERD can be associated with unexplained chest pain, chronic hoarseness, chronic cough, or asthma. Untreated, GERD can be associated with considerable morbidity, including complications such as esophagitis, stricture, haemorrhage and Barrett's esophagus which has an associated increased risk of malignant transformation.

Pathophysiology of GERD has been extensively investigated. Nevertheless the precise nature of the continence mechanism of the cardia is still a matter of debate. At present, the pressure and intra-abdominal length of lower esophageal sphincter are through to be important factors that prevent the gastro-esophageal reflux. Transient lower esophageal sphincter relaxation has been suggested as the only mechanism of physiological acid reflux in normal subjects and are said to account to 72-83% of reflux episodes. In patients with gastro-esophageal reflux the history is important in evaluating the patient and the therapeutic effect of empiric antacids may contribute to diagnosis. The use of diagnostic testing to determine the presence and quantity of reflux is helpful in establishing the diagnosis in atypical setting.

Ambulatory pH monitoring has a reproducibility of approximately 90%. Monitoring of pH is of particular benefit in establishing the diagnosis in patients with atypical symptoms. It can also be used when patients with atypical history are unresponsive to drug therapy. Modern endoscopic techniques and ambulatory pH monitoring enable an accurate diagnosis of GERD even in patients who present with atypical symptoms.

Endoscopic evaluation is most important in evaluating patients with complicaitons such as peptic strictures, haemorrhagic esophagitis, or Barrett's metaplasia. In this situations, important diagnostic and prognostic information as well as therapeutic intervention can be gained through endoscopy.

Life style modification should be the starting point for all strategies of GERD management. It was demonstrated that elevation of the head of the bed, decreased dietary fat, decreased smoking and no recumbence for least 3 hours after eating will reduce esophageal acid exposure.

Variable and often unresponsive results have been associated with use of H_2- receptor antagonist therapy, in conventional dosage in this disorder. Standard doses produce symptomatic relief in 32-82% of patients and resolution of endoscopically confirmed esophagitis has been demonstrated in about half of the cases.

Omeprazole is much more effective in high proportion of patients with erosive esophagitis which is resistant to even high dose H_2 receptor antagonists.

Despite significant advances in the medical treatment of gastro-esophageal reflux disease, a number of patients require antireflux surgery. Such as Nissen fundoplicaiton, Belsey mark IV and angel chick prosthesis.

The Nissen fundoplication has been shown to be an effective means of attaining mucosal healing usually accompained by symptomatic relief. The use of " loose wrap " performed over a large bore dilator avoids the post- operative complications such s dysphagia and gas bloat.

Laparoscopic Nissen fundoplication combines the efficacy of the well established Nissen procedure with advantages of minimally invasive technique in the treatment of patients with severe gastro-esophageal reflux disease when this procedure is performed by an experienced hand the technique is extremely safe and associated with a high success rate and may justly considered as a possible alterative to long term omeprazole therapy.