Heartburn (reflux) often affects people mostly at night: nearly 80% of those who have heartburn experience nocturnal symptoms and most lose sleep due to them.

A survey by the American Gastroenterological Association (AGA) found that 75% of those who experience nighttime heartburn say that the symptoms either wake them or prevent them falling asleep: 40% felt the impact was sufficient to affect their ability to work the next day.

Nighttime reflux may result in prolonged exposure of the lining of the oesophagus to stomach acid as 2 key clearance mechanisms are impaired (peristalsis: propulsive movements of the gut wall; and gravity).

Gastroparesis (impaired gastric emptying), seen in some neurological conditions, (see below) may be associated with a predilection for reflux.

SYMPTOMS:

- Heartburn: 30-60 minutes after meals, on reclining after eating and in certain body positions. It causes burning pain under the breastbone (sternum) travelling up towards the throat.
- Acid regurgitation: occurs without effort and is often associated with change in posture (e.g. bending over)
- Increased salivation: ?waterbrash' : this may be a protective mechanism
- Sensitivity to hot liquids and alcohol
- Non-obstructive difficulty in swallowing: reported in up to 45% of reflux patients.

- ATYPICAL SYMPTOMS:

- Chest pain : may be confused with angina
- Respiratory symptoms: pulmonary problems particularly common in older patients
- Hoarseness

ASSOCIATED SYMPTOMS: Sore throat

Bad breath Full sensation in the neck (globus)

GENERAL MEASURES:

Similar to those in simple dyspepsia. Raising the head of the bed on blocks is especially helpful for nocturnal symptoms.

H.Pylori does not appear to have a role in oesophagitis.

TREATMENT:

Lifestyle modification (see under dyspepsia)
Withdrawal of medication which adversely affects the lower oesophageal sphincter

- Antacids and alginate-antacids are useful in providing rapid symptomatic relief
- H2-receptor antagonists: Cimetidine is the drug of choice (provided it does not interact with other medication such as warfarin, theophylline or phenytoin) can be effective in relieving mild to moderate symptoms. However, H2-antagonists are less effective in promoting healing,

their ability to heal depending on the severity of the oesophagitis and the degree of acid suppression level achieved.

- Prokinetic agents, metoclopramide and domperidone, promote both oesophageal and gastric emptying. They are useful in some patients with reflux disease, and help to relieve symptoms of bloating, belching and early satiety (feeling full).
- Again note that Cisapride was licensed for the treatment of adults with gastro-oesophageal reflux but the license has been suspended on the advice of the Committee of Safety on Medicines (CSM). Cisapride can prolong the QT interval, which may lead to rare but life threatening arrythmias. Certain underlying medical conditions, and/or concomitant use of some other medications increase the risk of arrythmias with cisapride.
- The CSM has advised that all treatment with cisapride should be stopped and patients should be changed to alternative treatment as necessary [Department of Health, 2000]
- Proton pump inhibitors (PPIs) are the most potent acid suppressing therapy currently available. They are more effective than H2-antagonists as regards symptom relief and healing rates and they are more suitable for patients with severe or complicated disease or those whose treatment with other agents fails to provide adequate relief. There *remain safety concerns regarding long term use.*
- The "step up approach" involves working up the spectrum of acid suppressants, from antacids up to PPIs, reserving them only for the more complex and severe cases.
- The "step down approach" involves commencing with a PPI and reducing to a less potent agent, thereby limiting the course length of the PPI.

LONGER-TERM THERAPIES:

- Lifestyle changes may help to control symptoms and should be encouraged.
- Intermittent courses of medication as required: usually can be given by GP.
- If maintenance treatment is required, H2-antagonists may be sufficient, but PPIs might be required (note again that there are concerns as to long term safety.) Maintenance treatment with PPIs is necessary in patients with severe erosive oesophagitis or stricture formation.

Surgery

- Surgery to prevent reflux (e.g. Nissan fundoplication), often by laparoscopic technique (at specialist centres) improves oesophagitis and can control symptoms in around 90% of patients.

This may be most appropriate for young patients with severe disease who might otherwise require high doses of PPIs long-term in order to achieve symptomatic control.