Management of gastro-oesophageal reflux disease

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Gastro-oesophageal reflux disease (GORD) is the most common health problem afflicting modern Western society. Studies have shown that about 40 percent of the population have an episode of reflux once a month, 20 percent once a week and almost 10 percent once a day[1]. Treatment of reflux is the biggest single pharmaceutical expenditure in the NHS and expenditure is rising as the disease becomes more common.

Over the last two decades there has been an epidemic rise in the incidence of lower oesophageal adenocarcinoma. Population and case-control studies have shown a strong relationship between GORD and oesophageal adenocarcinoma. Past history of oesophageal reflux, hiatus hernia and oesophagitis is a risk factor for oesophageal carcinoma with an odds ratio of two to five.

The normal anti-reflux barrier is maintained by the lower oesophageal sphincter and external mechanical factors supporting it. Presentation of GORD can be typical or atypical. The typical presentations are heartburn, regurgitation and dysphasia. The atypical presentations are asthma, chronic cough, frequent chest infections and hoarseness or a lump in the throat. History is key in making a diagnosis, but investigations like endoscopy, 24-hour pH monitoring and manometry studies are useful in confirming it, especially in atypical presentations.

Management of GORD is either medical or surgical. Medical management includes simple measures or lifestyle changes and medications. Simple measures are to avoid alcohol and spicy food, lose weight, stop smoking, modify the timing and quantity of meals, raise the bed head and avoid bending and wearing tight clothes. These lifestyle changes are helpful in patients who experience mild symptoms.

Unfortunately while these measures are appealing in their simplicity, they are rarely effective for patients with moderate to severe symptoms.

The drugs used for symptomatic control of GORD include H2 receptor antagonists, proton pump inhibitors and prokinetic agents. Non-operative therapy treats the effects of reflux but does not correct the underlying mechanical defect. Patients who respond well to medical treatment usually have recurring symptoms once their treatment is stopped. Therefore most patients need their therapy to be continued indefinitely, especially in moderate and severe disease. The principle of surgical management is to prevent gastro-oesophageal reflux by reconstruction of the mechanical anti-reflux barrier, which works independently of the composition of the refluxate and aetiology of the reflux problem.

Indications for surgery

- Failure of medical therapy
- Symptoms are controlled but patient does not wish to take lifelong medication
- Side-effects to medication
- High volume regurgitation
- Reflux with oesophageal stricture
- Reflux with respiratory complications
- Barrett's oesophagus

Randomised trials and systemic reviews have shown that surgery achieves both improved objective and subjective outcomes. The advantages of anti-reflux surgery are:

- the only treatment which cures the problem
- patients can usually eat whatever foods they choose after surgery
- patients can lie down flat
- patients can bend over without reflux occurring
- patients do not need to take any medications

Laparoscopic anti-reflux surgery (LARS) was first reported in 1991 and has rapidly become established as the procedure of choice due to its inherent benefits over open surgery. The overall patient satisfaction with LARS is very high, with 90 percent stating that given the choice again they would have the operation[2]. It also improves the patient's quality of life.