Laparoscopic AntiReflux Surgery

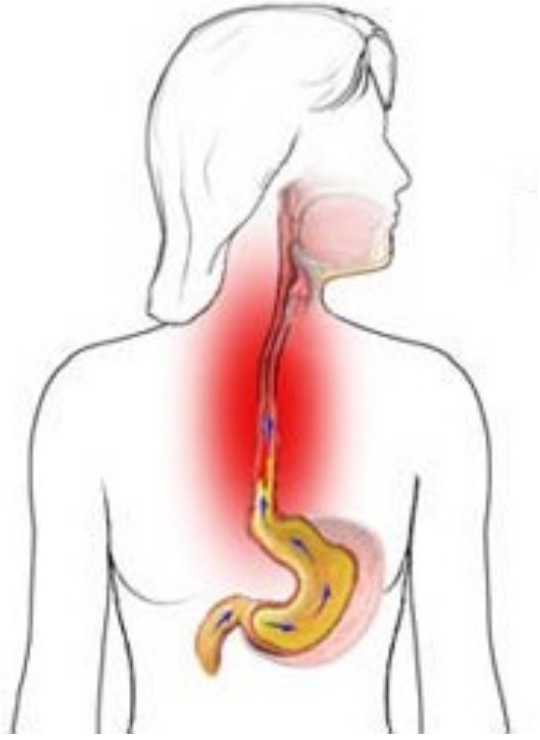
Gastro-oesophageal Reflux Disease

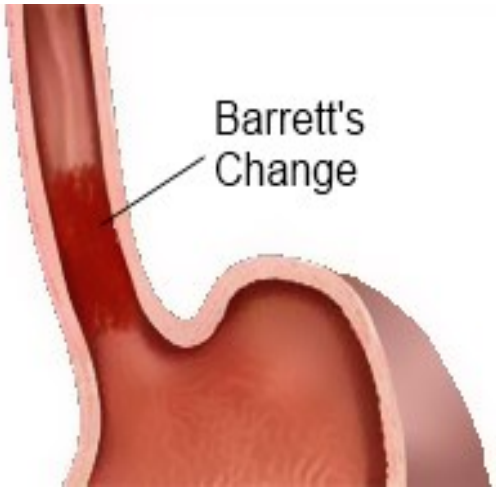
Description

- Gastro-oesophageal reflux occurs when acid contents from the stomach appear in the gullet or oesophagus in migh higher columes than normal causing unpleasan t symptoms and potentially damaging the oesophagus

Chronic Reflux Can Predispose to:

- Marked inflammation of the oesophagus (oesophagitis)
- Impaired sleep and quality of life
- Barrett's metaplasia (can turn into cancer)
- Pulmonary and laryngeal inflammation and dysfunction
- In rare cases, oesophageal cancer may result





Laparoscopic AntiReflux Surgery

Non-Surgical Approaches

Non-Surgical Approaches to Reflux

- Sleep on an angle: wedge, pillows, adjustable bed
- Sit upright for a period after meals
- Antacids
- H2 Antagonists
- Proton Pump Inhibitors
- Pro-motility agents

Key indications for surgery

- Severe, intractable reflux, poorly controlled by medication, impacting adversely on quality of life
- Young patients with reflux who do not wish to take PPIs for the rest of their lives

Laparoscopic AntiReflux Surgery

Surgery for Reflux

Anti-reflux Surgery

- The floppy fundus of the stomach can be wrapped around the oesophagus to create a kind of pressure valve to prevent reflux
- The oesophagus can be wrapped in full, the “Nissen” operation or partially.
- The posterior 270° or “Toupet” wrap is a well-studied partial wrap
- Any hiatus hernia or weak area of the diaphragm is repaired

Laparoscopic AntiReflux Surgery

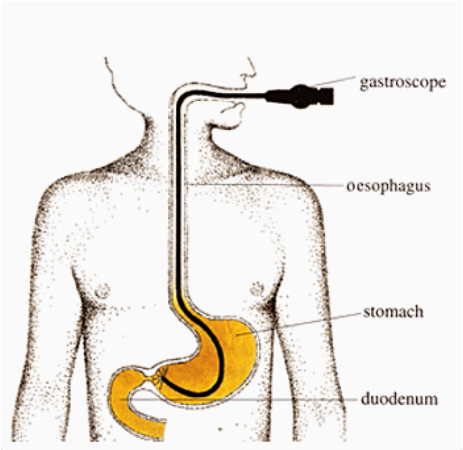
Prior to Surgery

Investigations prior to surgery

- Gastroscopy, Manometry, pH study

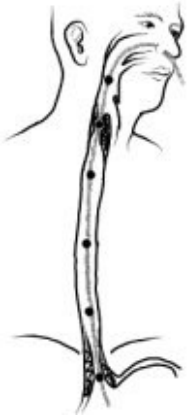
Gastroscopy

- To look for objective evidence of oesophagitis, Barrett's oesophagus, or other pathologies such as tumours as well as the presence and nature of hiatus hernia



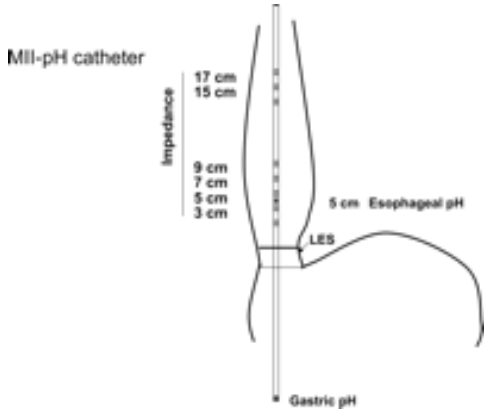
Manometry

- Documents the muscular function of the oesophagus to rule of severe motility disorders which may impact on the results from antireflux surgery



pH study

- Directly measures acid patterns in the oesophagus confirming the presence of pathological reflux and its relationship to symptoms experienced



Laparoscopic AntiReflux Surgery

Surgery for Reflux

Outcomes of Surgery

- Excellent control of reflux or regurgitation in >90% of cases
- Troubling dysphagia & bloat symptoms in 10%

Predictors of Success

- Symptom improvement with PPIs
- Good symptom correlation with reflux episodes on pH testingGood symptom correlation with reflux episodes on pH testing

Full or Partial Wrap?

- A partial wrap such as a Toupet posterior 270º wrap may reduce the incidence of dysphagia symptoms and gas bloat after surgery
- However long term reflux control may be slightly less efficient
- Overall there is little compelling evidence to support one approach over another at this stage
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Laparoscopic Fundoplication

Complications

Complication	Incidence
Around the time of the operation...	
Leak from Stomach/Oesophagus	~1%
Acute Complete Oesophageal Obstruction	~1-2%
Splenectomy	1%
Major Haemorrhage	2-3%
Major Medical Complication	3-5%
Wound Infection	1%
Conversion to Open	3%
Mortality	~0.5%
Longer Term...	
Significant Dysphagia	5-10%
Significant Gas Bloat Symptoms	5-15%
Significant Reflux Recurrence	6-7%
Still Need PPIs	10%+
Oesophageal Ulceration	<1%
Reoperation—revision of Fundo	2-4%
If future oesophagectomy required, difficult reconstruction as stomach compromised	