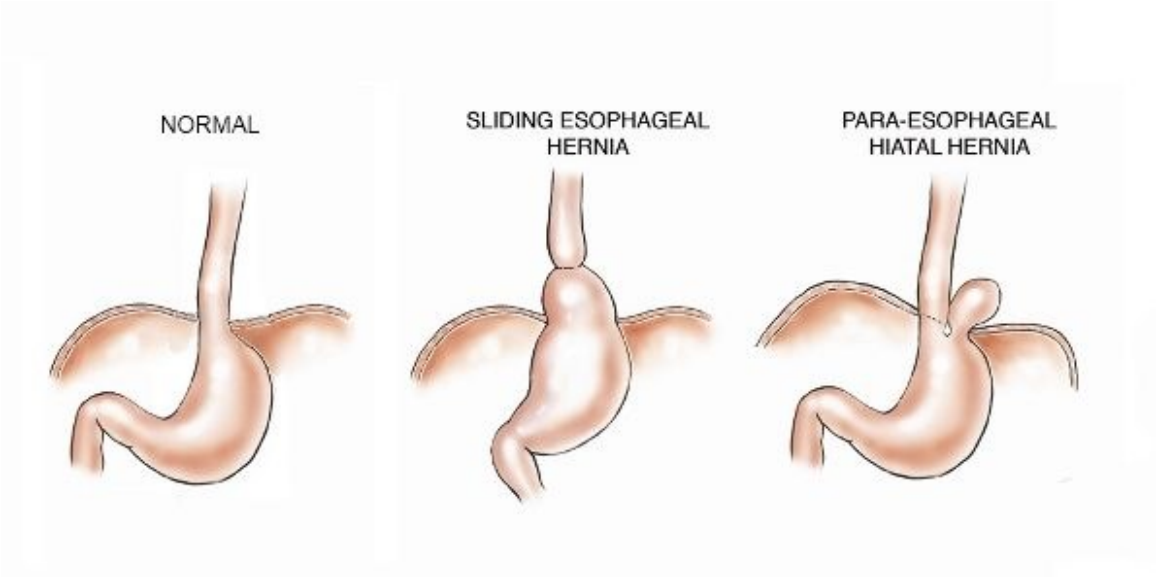
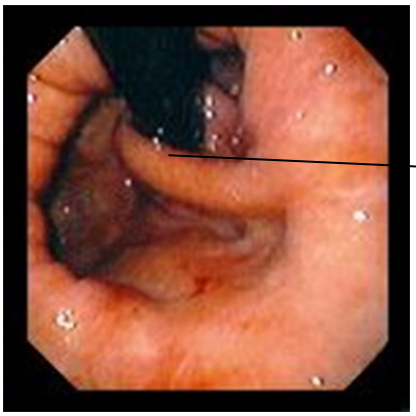
Laparoscopic Hiatus Hernia Repair

Hiatus Hernia

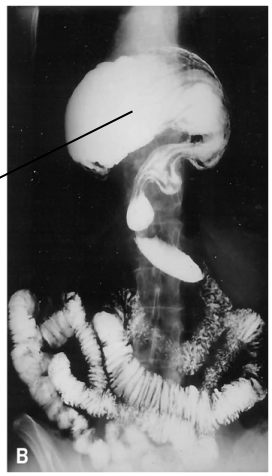
Types of Hiatus Hernia

- Type I: "Sliding"
- Type II: "Para-oesophageal"
- Type III: "Mixed"
- Type IV: Stomach & Other Organs

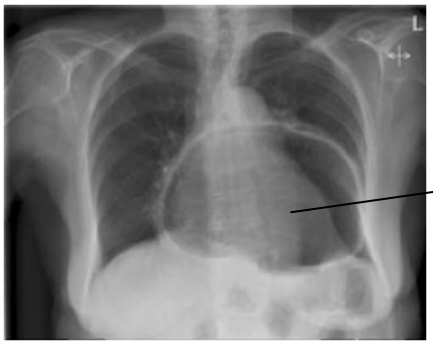




Para-oesophageal hernia on endoscopy



Para-oesophageal hernia on barium swallow



Para-oesophageal hernia on plain Xray

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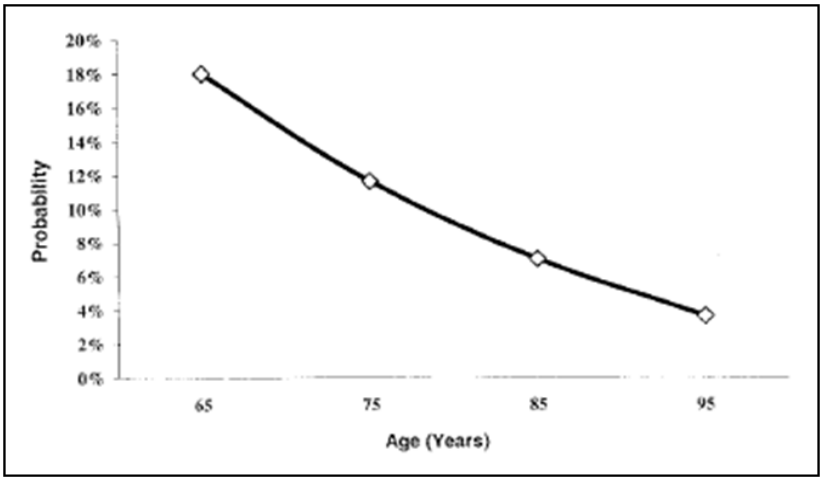
Indications for Surgery

- Surgery is generally not indicated for Type I hernia unless directed primarily at reflux control (fundoplication) or as part of another procedure (e.g. gastric banding for obesity)
- For Types II/(III/IV) (para-oesophageal hernia), surgery is usually indicated for **symptoms** related to the hernia
- The most common symptoms are chest pain, dysphagia, heartburn, regurgitation and shortness of breath
- Surgery for para-oesophageal hernia with no related symptoms is controversial (see below)

Surgery for Asymptomatic Para-Oesophageal Hernia

- This may be indicated for certain younger patients (e.g. <60 years) who are good surgical candidates due to their robust general health
- The goal of surgery in this group is prevent future entrapment and strangulation of the stomach which may be life-threatening
- The patient must be well informed and able to participate heavily in the clinical decision making

- Risk of acute transformation of a PH estimated to be just over 1% per year



*Stylopoulos N, Gazelle G, Rattner D. Paraesophageal Hernias: Operation or Observation. Ann Surg 2002 236(4):492-501

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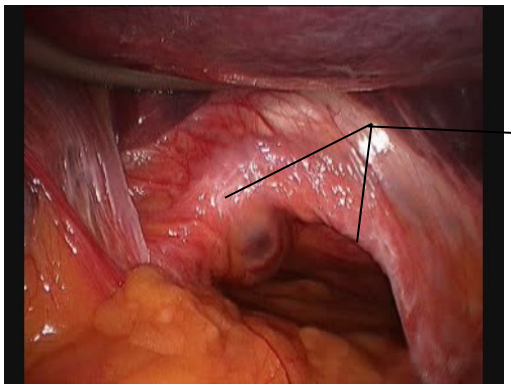
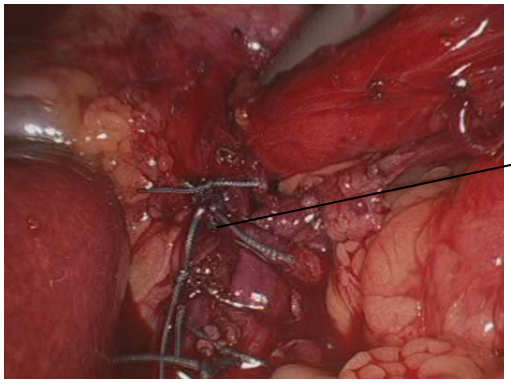
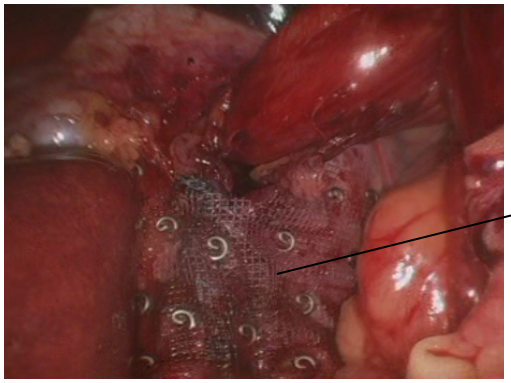
Steps in Hiatus Hernia Repair



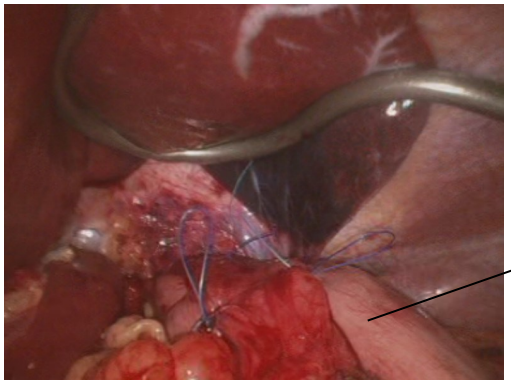
Stretched Diaphragm demonstrating large central defect



The large defect is sutured closed



Mesh is placed over the repair to dissipate tension



The gastric fundus is formed into a wrap around the oesophagus to prevent reflux

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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%
Oesophageal Ulceration	<1%
Reoperation—re-do repair	2-4%
If future oesophagectomy required, difficult reconstruction as stomach compromised	