GORD, HIATUS HERNIA

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GORD

- Covers an array of symptoms – heartburn, regurgitation, chest pain , aspiration

1. Need to confirm diagnosis
2. Define anatomy
3. Outrule a motility disorder

1. Need to confirm diagnosis

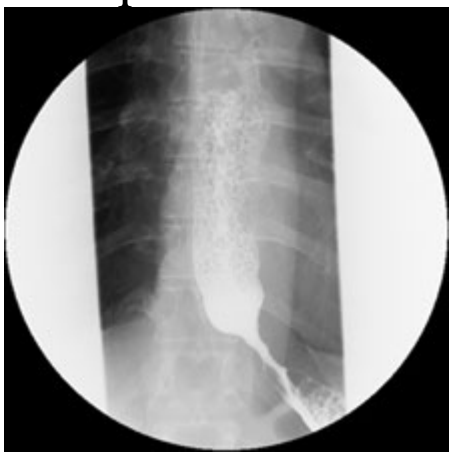
- Gastroscopy
- Look for z line / complications – strictures/ Barretts/hiatus hernia
- Outrule carcinoma
- Symptoms improvement with PPI

2.Define anatomy

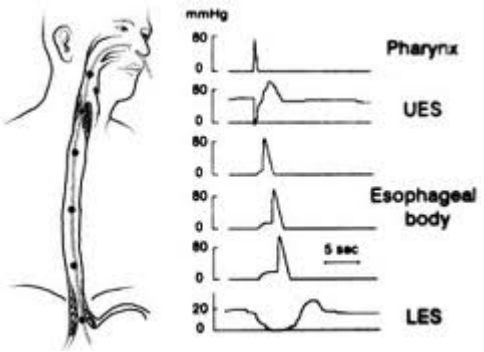
- Gastroscopy
- SCJ define
- Barretts
- Hiatus hernia
- Shortened oesohagus
- Strictures
- Outrule malignancy

3.Outrule a motility disorder – if you do fundo for HH repair in pt with motility disorder big problem w swallowing/reflux

- Barium swallow
- Achalasia- birds beak (degeneration myenteric plexus primary or secondary Chagas disease)



- Manometry

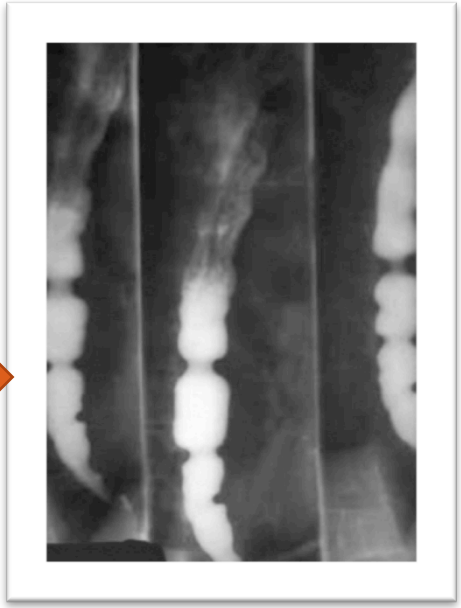


Motility disorder Management

- Achalasia – loss peristalsis and LES unable to relax
- DOS – *uncoordinated* constractions oesophagus
- Hypertensive LES – norm peristalsis , LES > 26mmHg
- Nutcracker – strong *coordinated* contractions peristalsis

  >180mmHG ,LES relaxes normally but > 40mmHG

  normal barium swallow

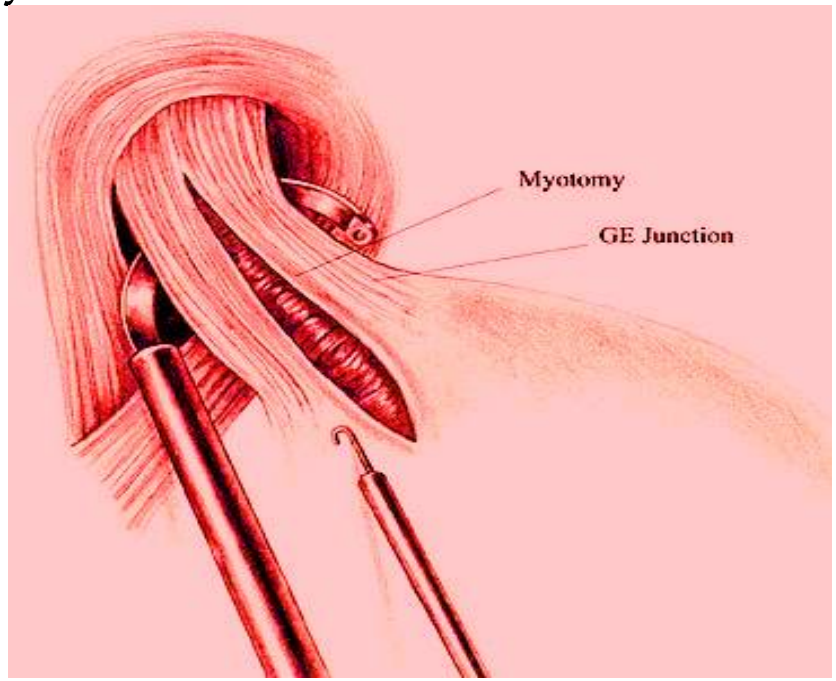


- Surgery works in dysphagia as a symptom rather than chest pain
- Better results for achalasia rather than hypertensive LES or DOS
- So trial medical and endoscopic (Botox only as balloon dilatataion not effective in those without achalasia) approach rather than sx for disorders other than achalasia initially

- Need to do a partial fundoplication with Hellers myotomy

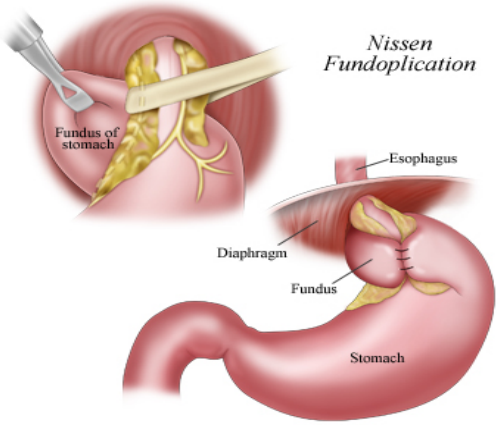
Motility disorders
Treatment – patient factors and disease factors

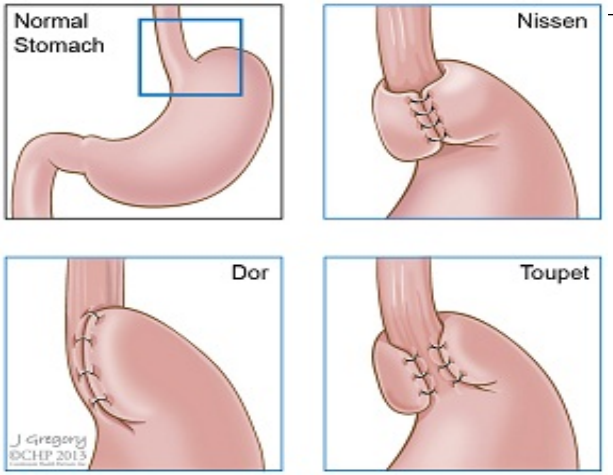
- Medical – calcium channel blockers, BOTOX
- Endoscopic – balloon dilatation
- Surgical – Hellers myotomy



Indictions for surgery

- 1. Regurgitation main symptom
- 2. Patient preference – not want long term meds
- 3. Hiatus hernia
- 4. Improvement with PPI good response to surgery
- 5. Complicated GORD - Barretts





- In a Nissen fundoplication the fundus is wrapped all the way 360 degrees around the esophagus.
- In contrast, surgery for achalasia is generally accompanied by either a *Dor* or *Toupet* partial
- In a Dor (anterior) fundoplication, the fundus is laid over the top of the esophagus; while in a Toupet (posterior) fundoplication, the fundus is wrapped around the back of the esophagus.

Barretts Oesophagus

- Acquired metaplastic abnormality (Metaplasia = change from one mature cell type to another – once stimulus removed can resolve)
- Diagnostic :
- Endoscopy

SCJ – visible change squamous to columnar epithelium / visible gastric rugae –z line

- Histology

Intestinal metaplasia and Goblet cells = Barretts

Document length of Barretts and biopsy 4 quadrant every 1-2cm

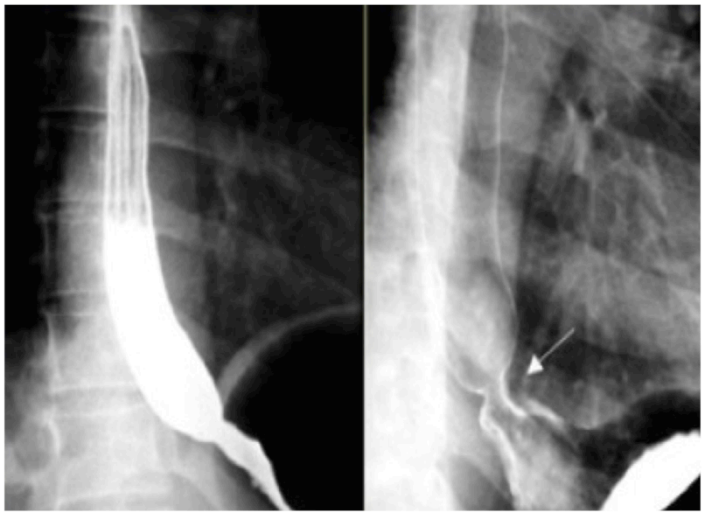
Degrees of dysplasia determines follow up/ management

HIATUS HERNIAS

TYPES

- SLIDING
  - GE junction > 2 cm above hiatus
  - > 95 % of all hernias
- PARAESOPHAGEAL
  - Gastric fundus protrudes through hiatus
  - GE junction remains below diaphragm
  - < 5 % of all hernias
- MIXED
  - Gastric fundus herniates beside distal esophagus
  - GE junction is also above the diaphragm
- SHORT ESOPHAGUS
  - Foreshortening due to esophagitis from gastroesophageal reflux

Sliding

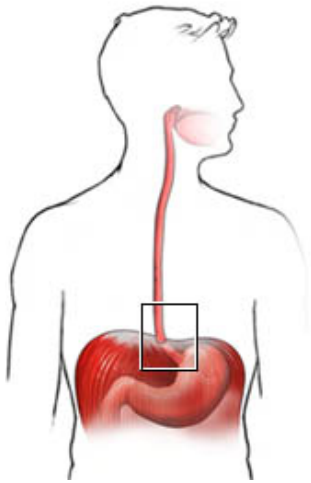


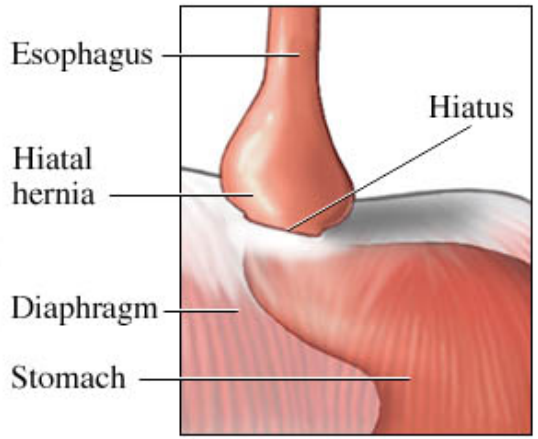
•Part of the stomach moves through the diaphragm so that it is positioned outside of the abdomen and in the chest.

•LES often moves up above its normal location in the opening of the diaphragm.

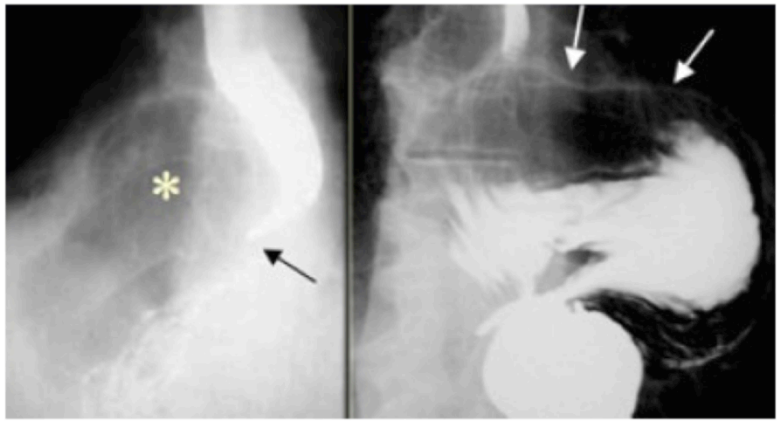
•most common type

• other then its association with acid reflux, usually does not require repair except in conjunction with anti-reflux surgery.

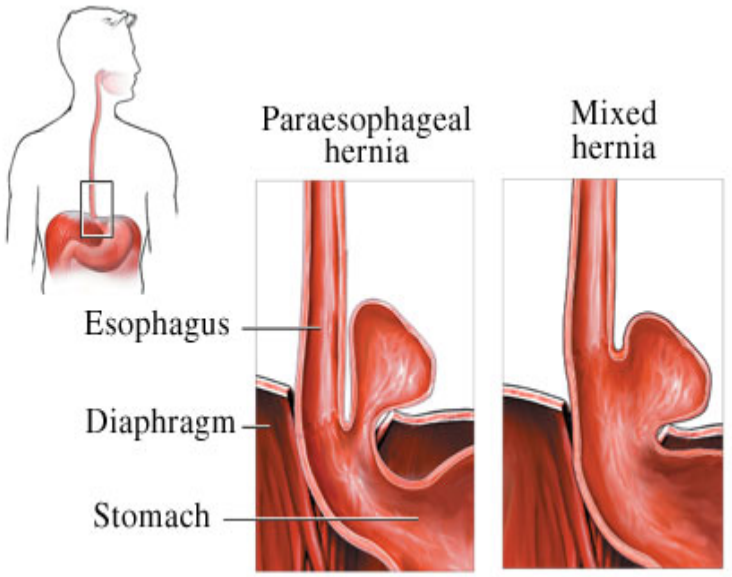




Paraoesophageal



- In a paraesophageal hernia, the stomach bulges up through the opening in the diaphragm alongside the oesophagus.
- The LES remains in its normal location inside the opening of the diaphragm.
- This type of hernia most commonly occurs when there is a large opening in the diaphragm next to the oesophagus.



Mixed

•In a mixed hiatal hernia, the LES is above the diaphragm as in a sliding hiatal hernia, and the stomach is alongside the oesophagus as in a paraesophageal hiatal hernia.

•If not treated, the Paraesophageal and mixed hernias can grow.

•This can result in volvulus of the stomach which requires emergency surgical treatment. Because of the risk involved in emergency treatment, it generally is recommended that all people with these types of hernias undergo surgery regardless of the symptoms.