Dysphagia, melena, haematemesis

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November 2023

Dysphagia

History taking

- Duration of symptoms
- Progressive dysphagia? (significant)
- Level of obstruction/hold up
- Current diet (fluid/soft/solid diet)
- Weight loss
- Associated symptoms (e.g. acid reflux/epigastric pain etc)
- Smoking/drinking history
- Place of origin

Dysphagia

Difficulty in swallowing

1. Esophagus:
- Mechanical obstruction
- Neuromuscular
2. Oropharyngeal: neuromuscular disease

Mechanical Obstruction

- Intraluminal (acute onset)
  - Foreign body
  - Food bolus
- Wall
  - Cancer of esophagus
  - Submucosal lesion of esophagus e.g leiomyoma, GIST
  - Stricture (e.g. caustic, peptic, radiation, medication)

- Extraluminal (Extrinsic compression)
  - Mediastinal lymph node/mass, retrosternal goiter
  - Vascular compression

Dysphagia

Neuromuscular disorders:

- Scleroderma
- Achalasia
- Spastic motor disorder: diffuse esophageal spasm, nutcracker esophagus etc

Neurological disease:

- Cerebrovascular accident, Parkinson's disease
- Brainstem tumor
- Myopathy (e.g. muscular dystrophy)
- Myasthenia gravis
- Peripheral neuropathies
- Degenerative disease (e.g. multiple sclerosis)

Physical examination

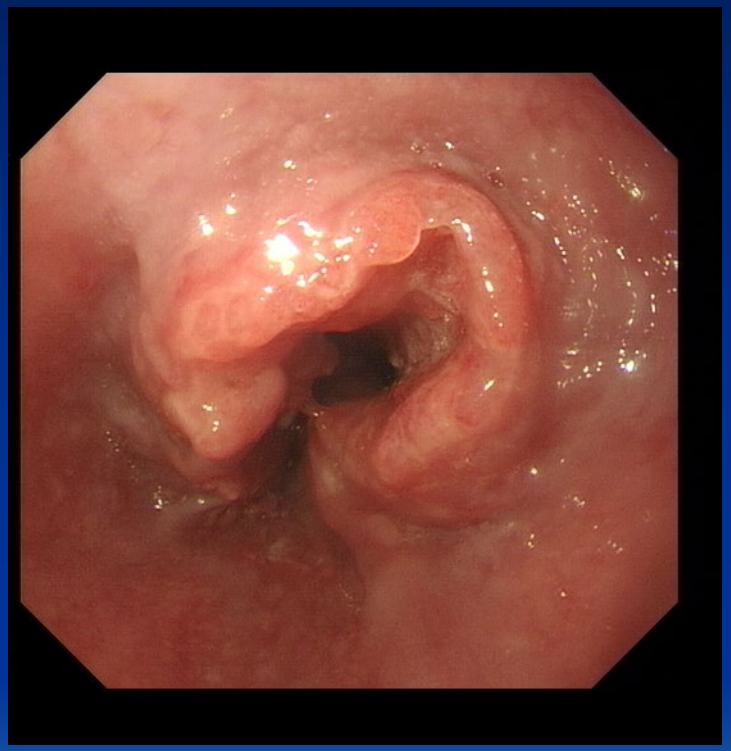
- Hoarseness of voice
- Cachexia
- Cervical lymphadenopathy
- Others: goiter, cranial nerve palsy
- May not have positive physical signs

Investigations

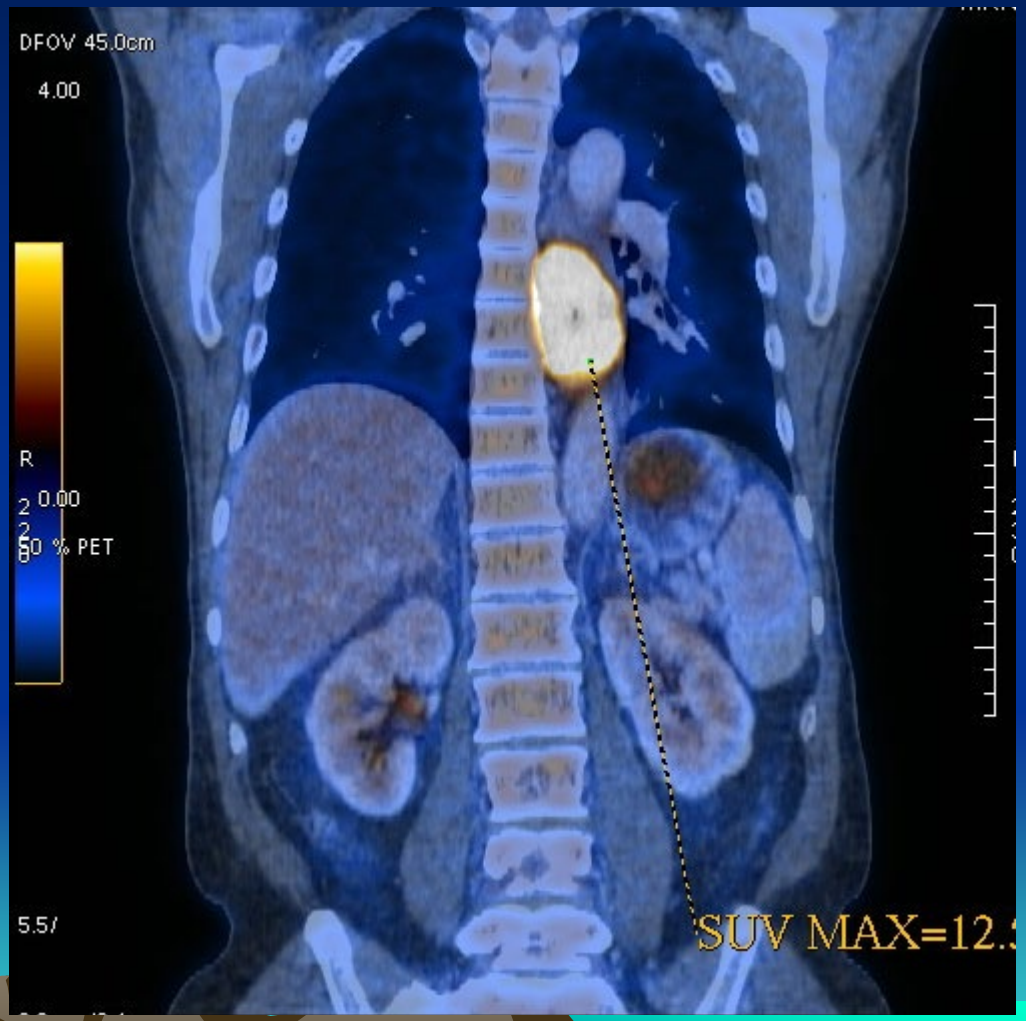
- OGD
- Barium swallow
- CXR
- CT scan/PET-CT scan
- Other investigations: high resolution manometry (HRM), 24 hr pH study (selected patients)

- Speech therapist: VFSS
- Physician/neurologist consultation

OGD

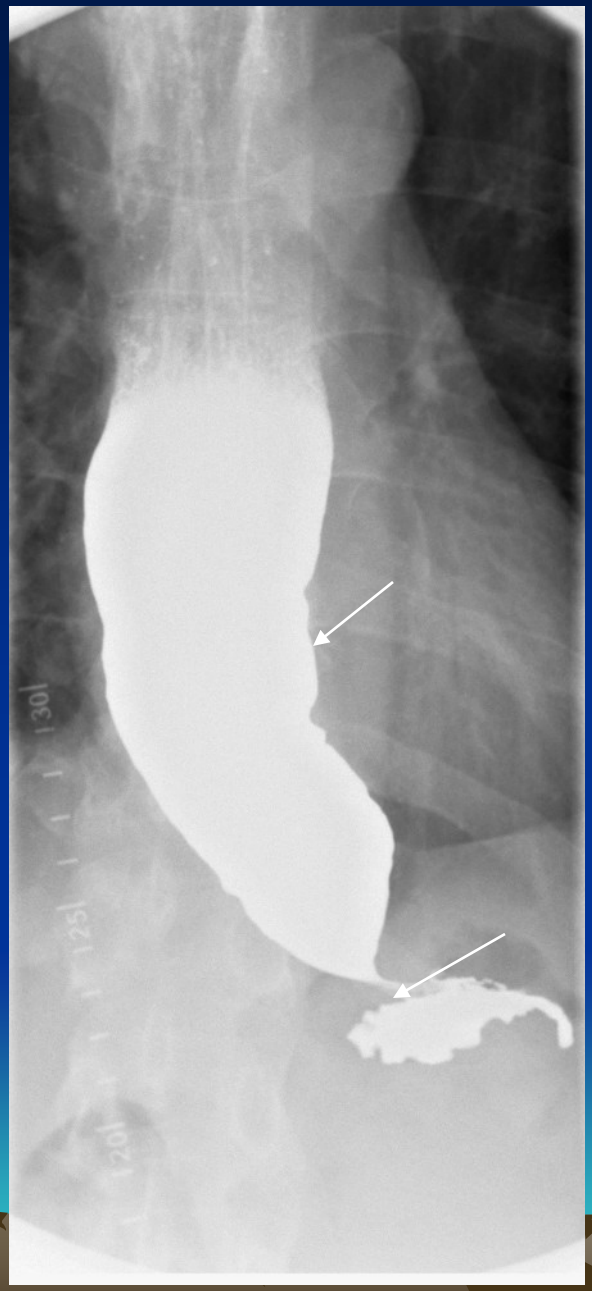


PET-CT scan



OGD -> biopsy
Cancer of esophagus – usually squamous cell carcinoma (SCC), middle third

PET-CT -> staging (lymph node metastases, distant metastases)



Barium swallow

NOT CA esophagus !

Management

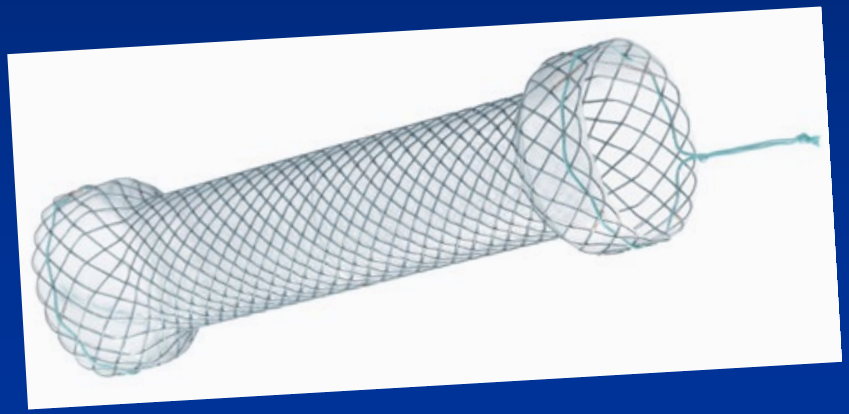
- High aspiration risk -> may need non-oral feeding (e.g. tube feeding, gastrostomy feeding)
- Treat underlying cause

Management

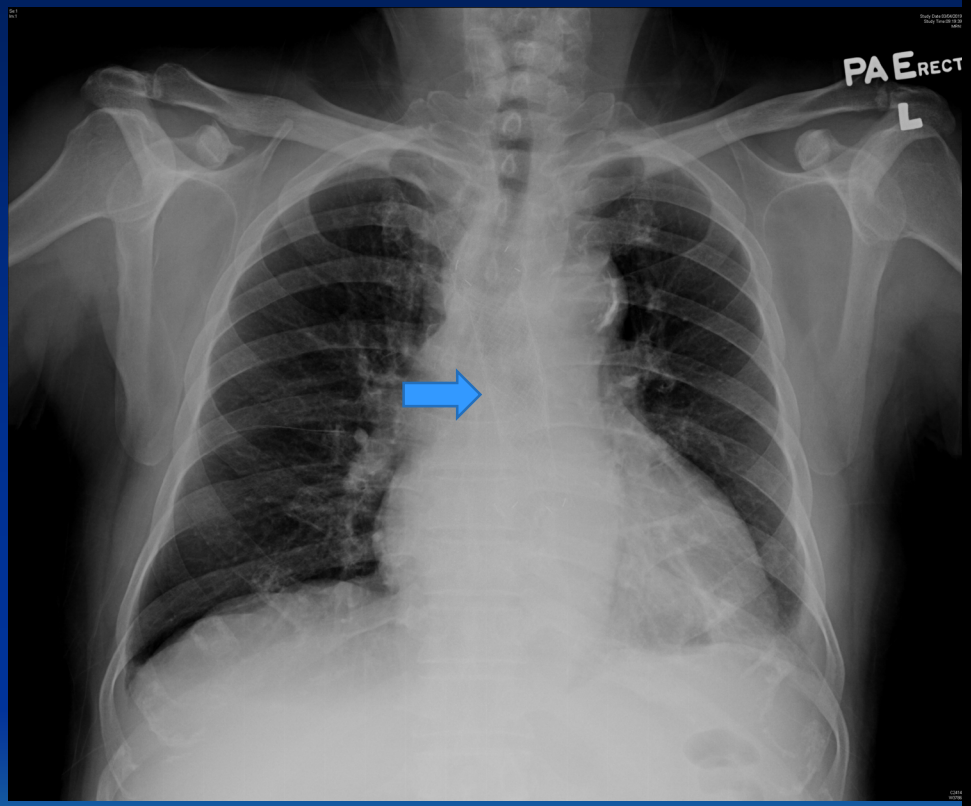
- According to the cause of dysphagia:
  - Cancer of esophagus
    - Early stage: endoscopic treatment/esophagectomy
    - Advanced stage: neoadjuvant chemoradiation followed by esophagectomy
    - Palliation: palliative radiotherapy/metallic stenting
  - Achalasia
    - Endoscopic treatment: peroral endoscopic myotomy (POEM); pneumatic dilatation etc
    - Surgery: laparoscopic Heller's myotomy

Palliative treatment

Metallic stenting



Endoscopic procedure under fluoroscopy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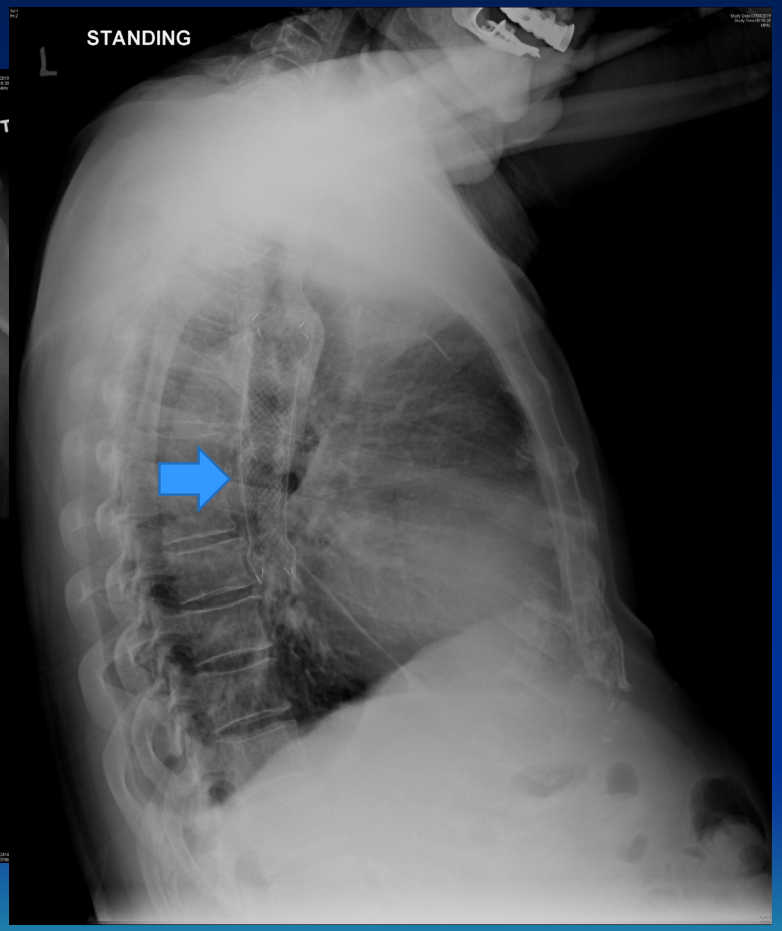
STANDING
L

Haematemesis/melena

- Upper GI bleeding (esophagus, stomach or duodenum)
- Haematemesis: vomit blood
- Ddx: haemoptysis, epistaxis

- Melena: passage of tarry stool
- Ddx: dark stool (greyish-black) in patients taking iron supplement

Haematemesis

Causes

- Esophagus: esophageal varices, esophagitis, Mallory-Weiss tear
- Stomach: gastric ulcer, gastritis, malignancy, gastric varices, hypertensive gastropathy, GIST etc
- Duodenum: duodenal ulcer
- (Small bowel tumor/GIST/ulcers)

Aim of management

- Resuscitation
- Identification of origin of bleeding + haemostasis
- Prevention of rebleeding
- Definitive management

Investigations

- Blood tests including CBP, LRFT, clotting profile, Type & Screen, ABG (arterial blood gas)
- CXR (to exclude free gas under diaphragm)
- OGD
  - Urgent: suspect active bleeding
  - Emergency (within 24 hours)

Airway protection (if indicated) and T&S available before OGD; correction of coagulopathy

Blood/blood product transfusion

Volume replacement

OGD

- Identify the site of bleeding/pathology
- Endoscopic haemostasis if indicated (one or more of the following):
  - Injection of adrenaline
  - Heater probe
  - Band ligation for esophageal varices
  - Argon plasma coagulation
  - Endoclips

ID No. :
Name :

Sex : Age :
D.O.Birth :

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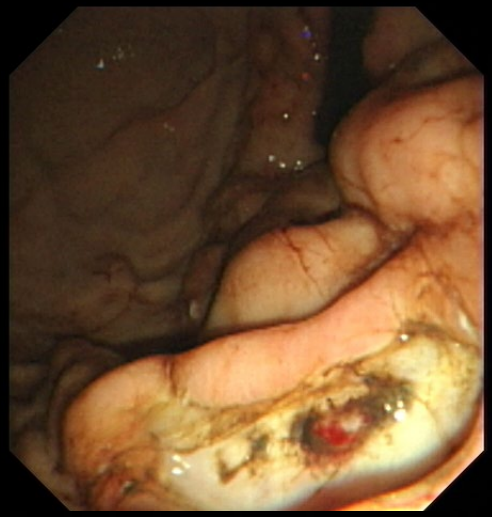
SCV:1

CT:N EH:B1
CE:0

Physician :
Comment :



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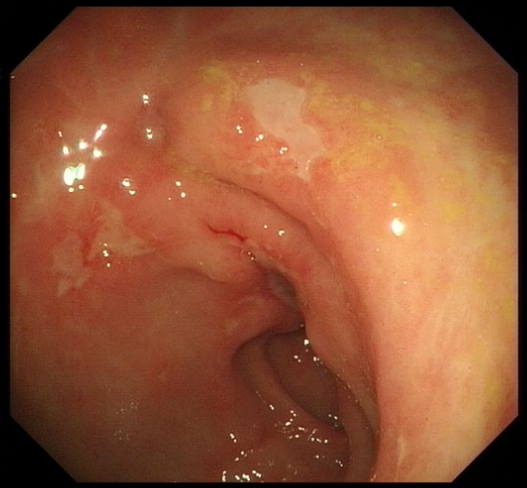

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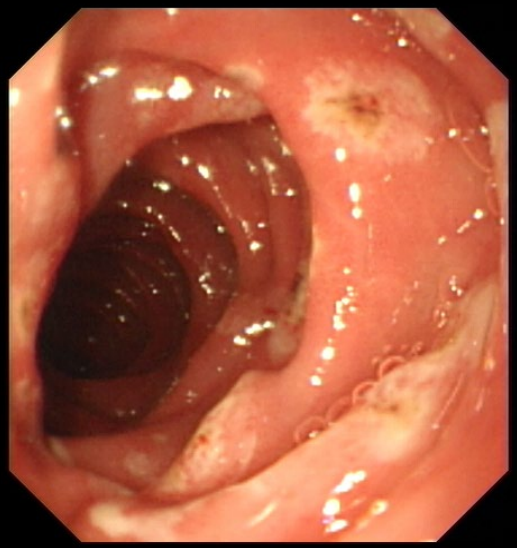

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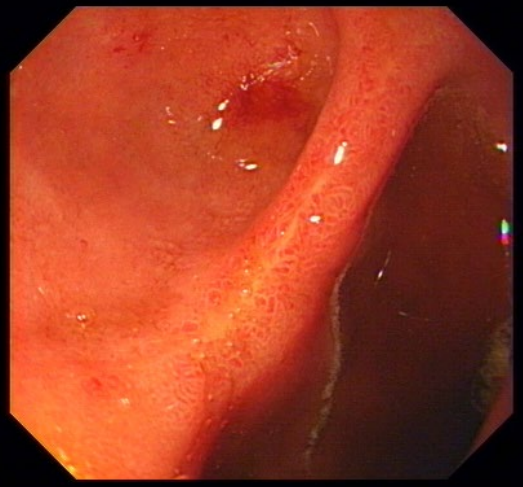


Physician :
Comment :

Forrest classification of Endoscopic Stigmata of Recent Haemorrhage (ESRH)

Type	Appearance	Rebleeding risk
1a	Spurter	55%
1b	Oozing	
2a	Visible vessels	43%
2b	Adherent clots	22%
2c	Red dots	10%
3	Clean base	5%

Post OGD

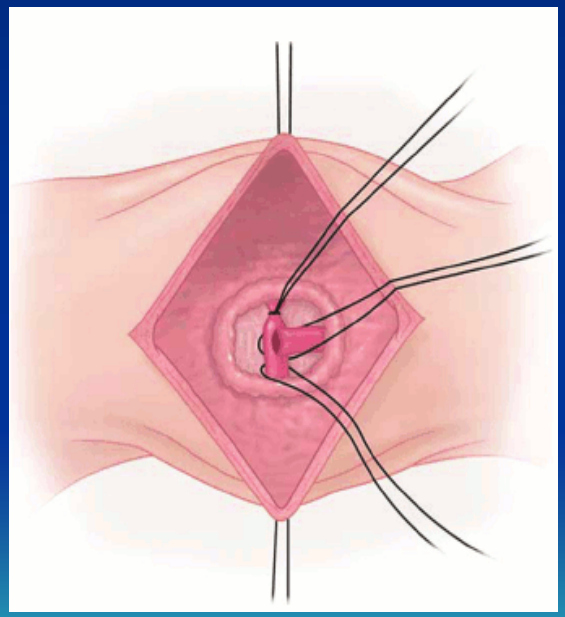
- Medication: proton pump inhibitor (PPI) x 6-8 weeks
- Top up haemoglobin
- Watch out for re-bleeding (tachycardia, hypotension, passage of melena etc)

Rebleeding

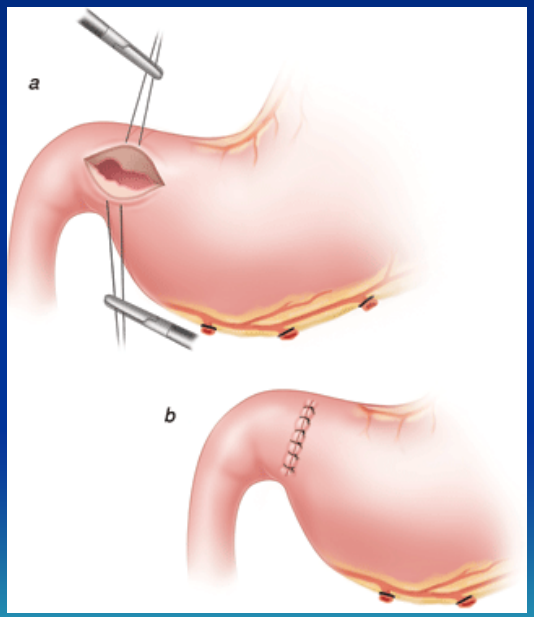
- Operative management may be necessary if failed endoscopic haemostasis

Intervention- Surgery

- Failed haemostasis
- Operative approach depends on the pathology



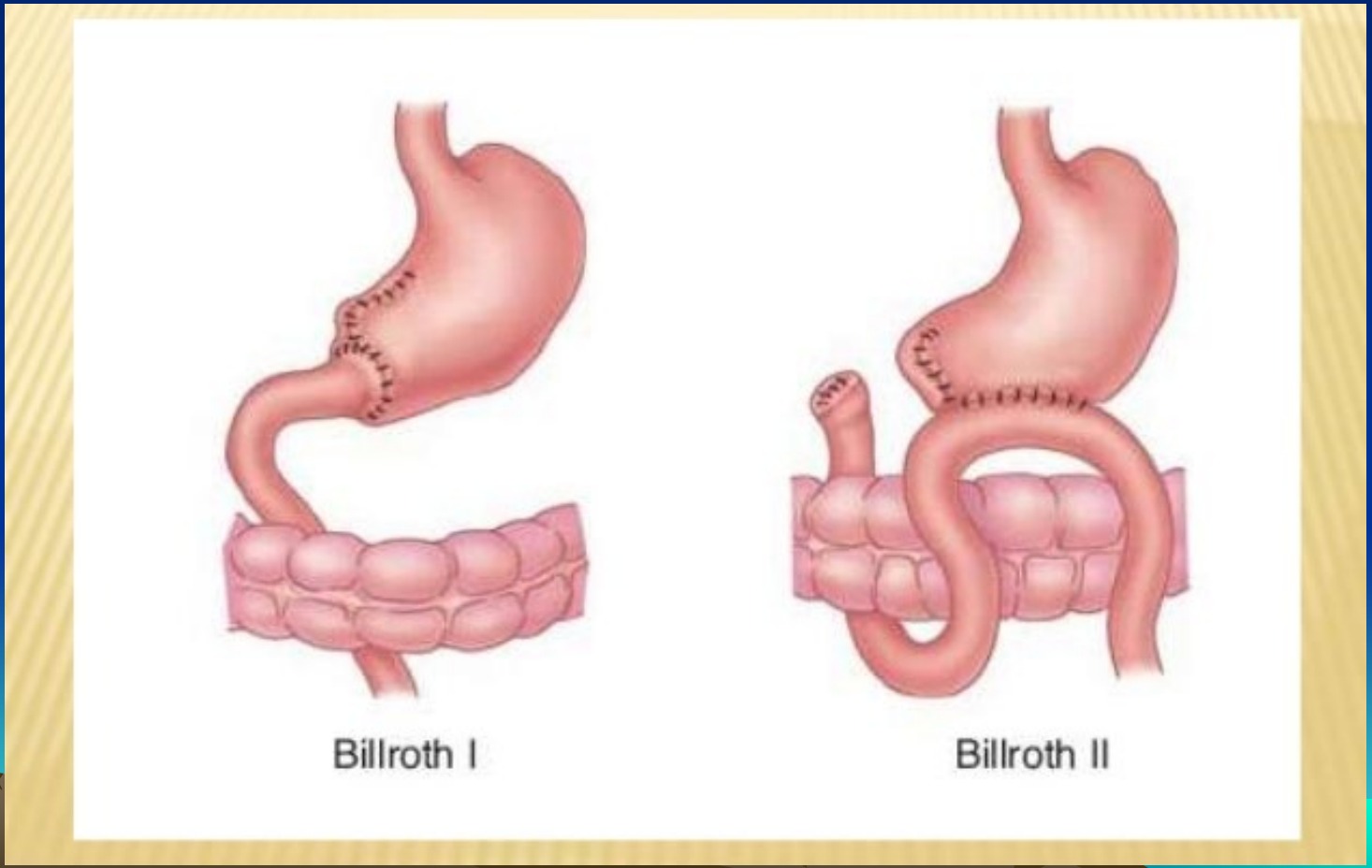
Plication of Gastroduodenal Artery (GDA)



HM pyloroplasty

Intervention - Surgery

- Ulcerectomy/partial gastrectomy may be required in bleeding gastric ulcer



Follow-up

- *Helicobacter pylori* (HP) eradication
- Quit smoking
- Urea breath test to confirm clearance of HP
- Rescope (usually at 6 weeks) for gastric ulcer, biopsy if unhealed
- Nonhealing GU
  - Check drug compliance – noncompliant, resistance
  - Risk factors (smoking, HP status, NSAID)
  - Malignancy, workup (e.g. CT scan) if indicated

Highlights

- Cancer of esophagus: squamous cell carcinoma
- Dysphagia (painless progressive), weight loss
- Risk factor: smoking, drinking
- Treatment intent: curative or palliative (depends on DISEASE factor and PATIENT factor)
- Treatment modalities
  - Surgery
  - Radiotherapy
  - Chemotherapy
  - Endoscopic (e.g. stenting) for palliation

Highlights

- Gastric cancer: adenocarcinoma
- Epigastric pain, anemia, weight loss
- Risk factors: *H pylori*, smoking, diet, pernicious anemia, family history etc
- Treatment modalities:
  - Surgery (gastrectomy)
  - Chemotherapy
  - Palliative radiotherapy (for hemostasis)