# OG Bleeds

# Presentation

- Jack Black, 62 year old male presents to ED at 1500 on a Sunday complaining of abdominal pressure and states he has had a black vomit. He has been at his son's wedding on Saturday, celebrating since Thursday. During the weekend, he has been drinking beer, champagne, and whisky.
- What information do you require?

# Pain assessment

- Site:  across the middle of the abdomen
- Onset:  since Friday
- Duration:  constant
- Frequency:  has happened before, at his son's stag party in Newcastle
- Radiation:  occasionally left flank pain and epigastric pain
- Severity:  8/10
- Nature:  pressure and ache
- Associated symptoms:  nausea, heartburn, coffee ground emesis x 1

# PmHx

- HTN on lisinopril
- Fractured ankle 6 months ago after a fall at a retirement party- required surgical pinning

Medications:

- Lisinopril
- Occasional Ibuprofen and paracetamol for ankle pain
- NKDA
- No other OTC, herbal remedies, or illicit drugs

# Social history

- Divorced with 2 adult children
- Lives in a flat
- Works as a bank manager
- Watches football at the pub and goes to home games
- Drinks 2 pints of ale most nights with a whisky before bed during the week, more at weekends
- Smokes 10/day since he was 16 (23 pack years)

# Clinical Assessment/Exam

- Obese, BMI 32
- Pale, diaphoretic, clammy
- HR 112bpm, regular
- RR 22/min
- BP 140/90mmHg
- Saturations 94% on room air.

# Clinical signs

- Elevated JVP
- Distended abdomen, bowel sounds present
- Abdomen tender on exam, particularly near umbilicus and left upper quadrant/left hypochondriac
- Liver signs:  palmar erythema, dupuytren's contracture, clubbed fingernail beds, spider naevi, no hair in axilla

- What is your impression?

# Impression

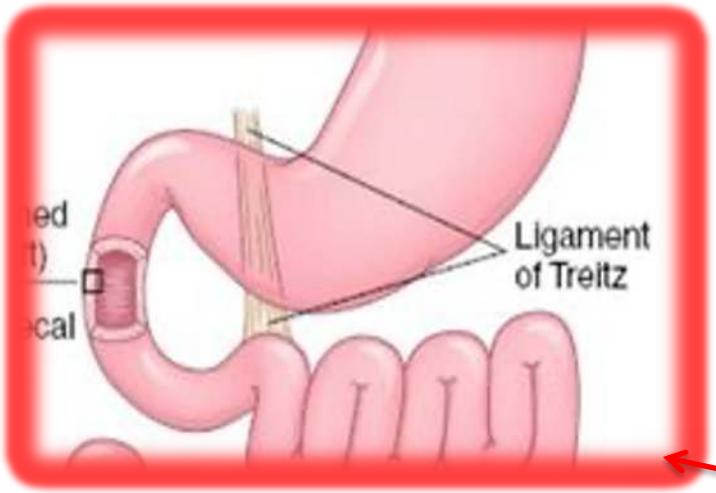
- UGI bleed:  duodenum, stomach, esophagus. Indicated by coffee ground emesis and malena, not active at present.  *
- 7000 admissions/year/Scotland, mortality 7% if admitting dx, 26% if admitted for another reason.  Mortality west of Scotland 8.2%

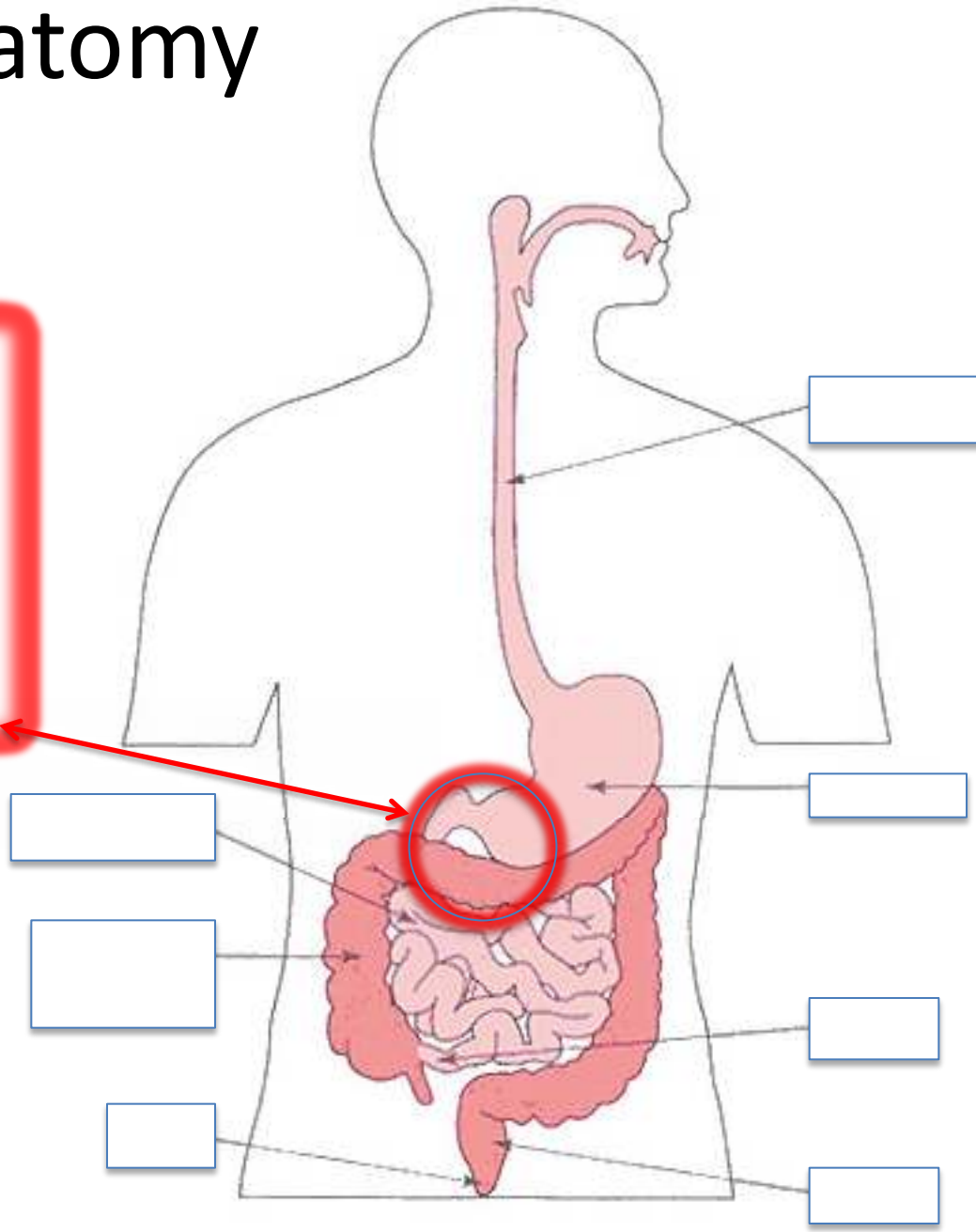
- *haematemasis, malena, hematochezia

# Anatomy

Upper

Ligament of Treitz



Lower

# What actions do  you need to take?

- Blatchford and Rockhall scoring

# Risk Assessment Tools

- Pre-endoscopy

**A Blatchford Score**

| At Presentation | Points |
|---|---|
| Systolic blood pressure | |
| 100–109 mm Hg | 1 |
| 90–99 mm Hg | 2 |
| <90 mm Hg | 3 |
| Blood urea nitrogen | |
| 6.5–7.9 mmol/liter | 2 |
| 8.0–9.9 mmol/liter | 3 |
| 10.0–24.9 mmol/liter | 4 |
| ≥25 mmol/liter | 6 |
| Hemoglobin for men | |
| 12.0–12.9 g/dl | 1 |
| 10.0–11.9 g/dl | 3 |
| <10.0 g/dl | 6 |
| Hemoglobin for women | |
| 10.0–11.9 g/dl | 1 |
| <10.0 g/dl | 6 |
| Other variables at presentation | |
| Pulse ≥100 | 1 |
| Melena | 1 |
| Syncope | 2 |
| Hepatic disease | 2 |
| Cardiac failure | 2 |

# Risk Assessment Tools

- Rockall Score

| Variable | Score 0 | Score 1 | Score 2 | Score 3 |
|---|---|---|---|---|
| Age (years) | <60 | 60-79 | >80 | |
| Comorbidity | Nil major | | Congestive heart failure, ischaemic heart disease | Renal failure, liver disease, metastatic cancer |
| Shock | No shock | Pulse >100 bpm | Systolic BP <100 mmHg | |
| Source of bleeding | Mallory-Weiss tear | All other diagnoses: e.g., oesophagitis, gastritis, peptic ulcer disease, varices | Malignancy | |
| Stigmata of recent bleeding | None | | Adherent clot, spurting vessel | |

# Further actions

- Monitoring, contact endoscopy, admit, bloods:
- FBC, Us&Es, coag, x-match, LFTs
- What would you anticipate:  AST/ALT, GGT
- ABG?
- HB 88  Lactate 4

- Jack says he suddenly feels much worse and vomits into a sick bowl 400mL of frank blood
- HR 130bpm, BP 110/60mmHg, RR 24/min, sats 88% on RA.
- Becoming confused, removing oxygen, distressed by nausea and abdo pressure
- What actions are now required?

# Final Considerations

- Vomits again, 300mL frank blood and is incontinent of malena
- HR 130bpm ST and thready, BP 95/60mmHg, RR 24/min, sats 93% with oxygen with incoherent and removing mask.
- Actions:
- Recognise shock:  give fluids, notify major haemmorhage, intubate?, ICU

# Fluid Resuscitation

# Causes

**Upper**

- Peptic ulcer (44%)
- Oesophagitis
- Gastritis
- **VARICES (13%)**
- Mallory weiss tear(5%)

**Lower**

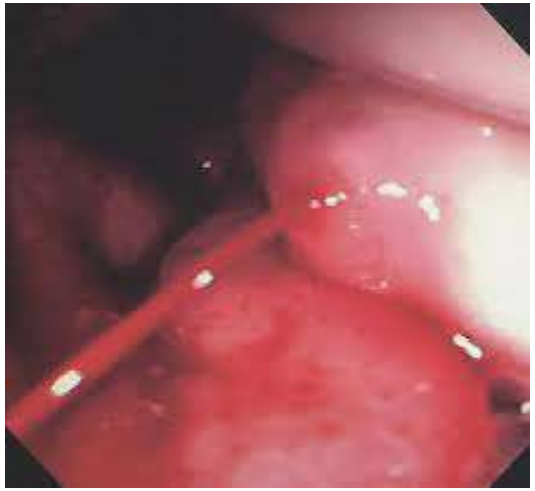
- Angiodysplasia (small bowel)
- Diverticular disease (Large Bowel)

(SIGN, 2008., Patient.co.uk)

# Varices

Normal Oesophagus

Distended Vein



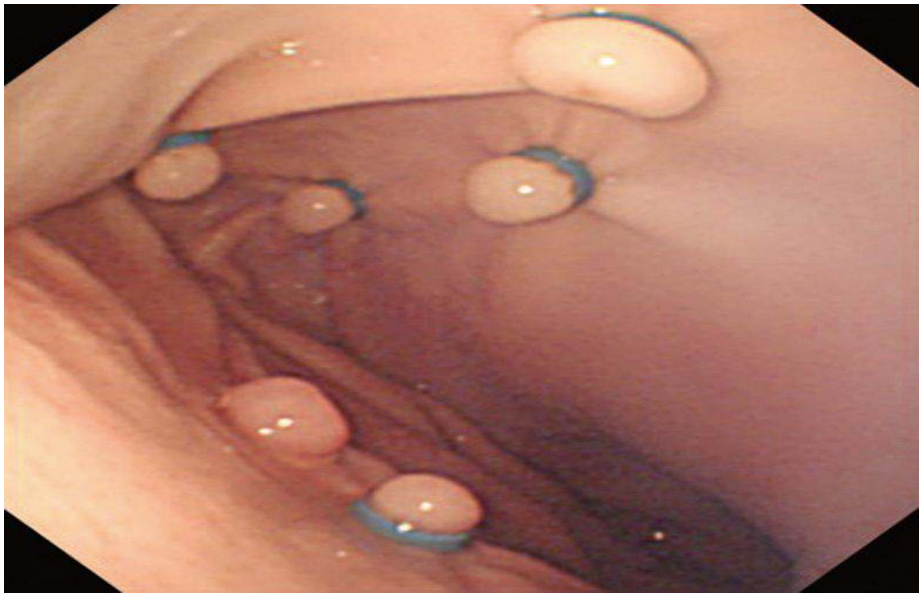
Bleeding Varice

# Varices and the Liver

- Variceal haemorrhage may be suspected if:
  - History of previous haemorrhage
  - When there is known liver disease
  - Clinical assessment identifies ‘stigmata’ of chronic liver disease or **portal hypertension**
  - Portal HTN defined as elevation of portal venous pressure gradient >5mmHg

# Endoscopy

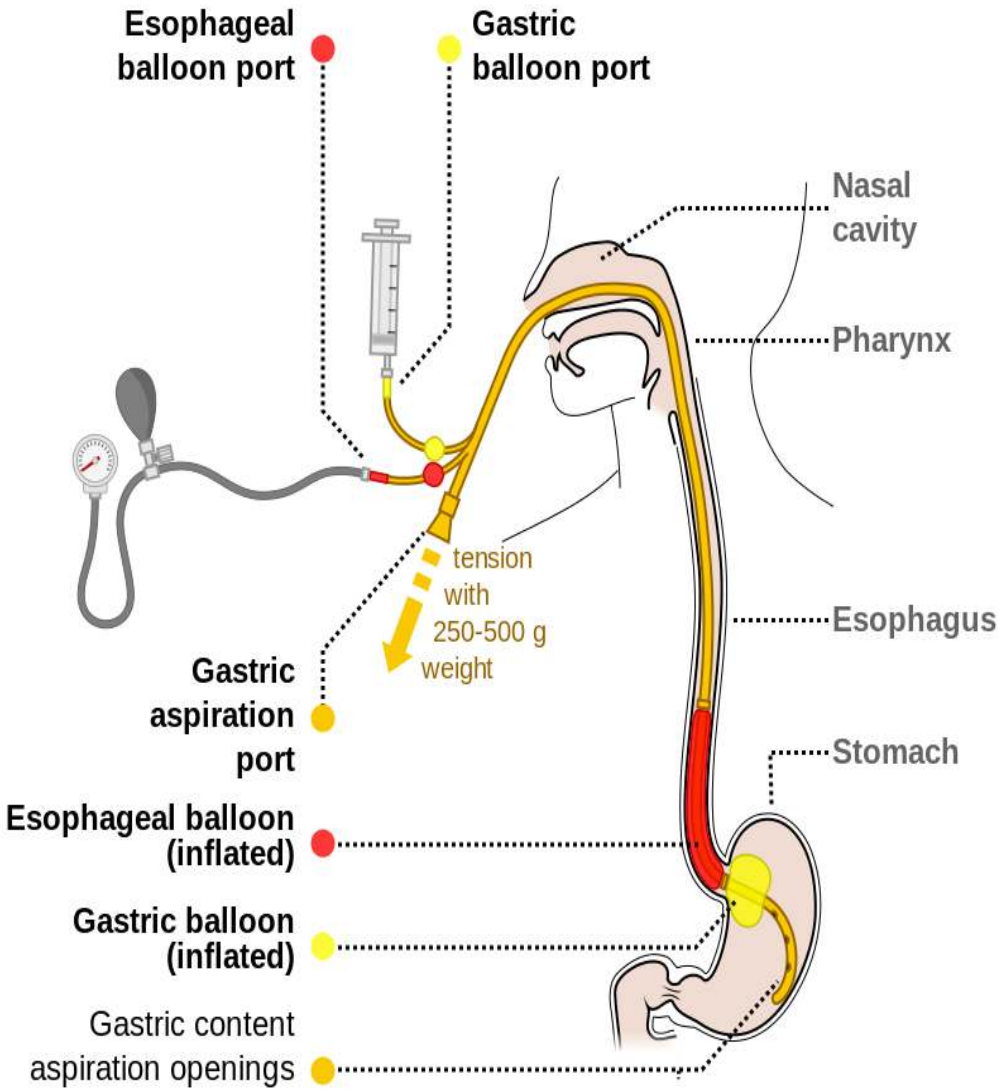
- Endoscopy:  banding attempted but unsuccessful
- Continuing to bleed
- Sengstaken inserted



# Treatment

- Offer terlipressin to patients with suspected variceal bleeding at presentation. Continue until homeostasis is achieved, or for 5 days.
- Offer prophylactic antibiotic therapy at presentation with suspected or confirmed variceal bleeding.

# Balloon Tamponade




- Pressure applied to sengstaken-blakemore

tube with tongue depressors

- Oesophageal Balloon Inflated

to achieve homeostasis

- Gastric Balloon can also be

Inflated if homeostasis not achieved

- Gastric Aspiration port allows

for removal of blood from stomach

- Oesophageal balloon should be

deflated periodically to reduce risk of oesophageal necrosis

- Balloon pressure gradually

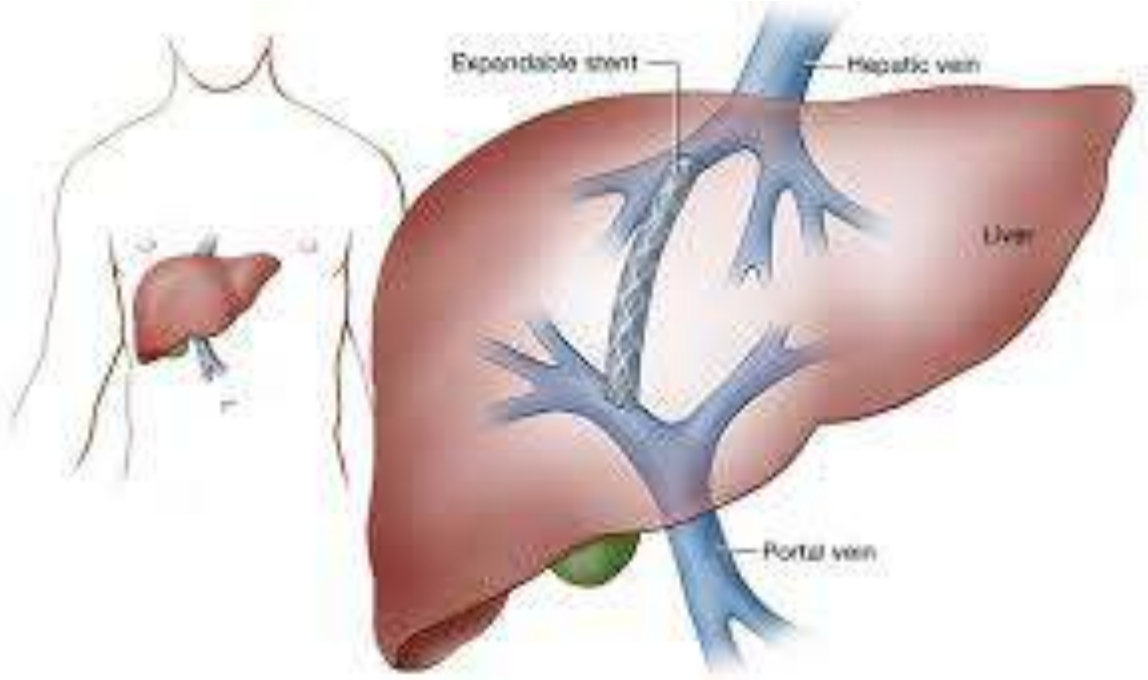
Reduced under surgical guidance

# Outcome

- Jack tolerates sengstaken tube, is on Terlipressin = bleeding controlled.
- Extubated
- Liver function and varices are discussed
- Consents for TIPSS

# TIPSS

- Trans-jugular Intrahepatic Portosystemic Shunt



# Re-bleeding

- 50% risk of re-bleeding in first day following management of acute haemorrhage
- 80% risk of re-bleeding within first year
- Consideration should be given to the introduction of a beta-blocker prior to discharge (propanalol)
- Portosystemic shunt considered to be most effective in reducing risk of re-bleeding in patients with chronic liver failure.

- Jack is discharged home