Haematemesis

Dr Naeem Zia
FCPS,FACS,FRCS
• At the end of the lecture the student should be able to
  • Describe Anatomy of oesophagus and stomach
  • Describe Physiology of oesophagus and stomach
  • Enumerate different conditions leading to hematemesis
  • Propose Investigations of patient with hematemesis
  • Outline Management plan
Common causes of haematemesis

- Peptic ulcer: gastric or duodenal
- Acute gastric erosions/gastritis
- Carcinoma of the stomach
- Mallory-Weiss syndrome
- Oesophageal varices
So what might be happening in our patient?
The portal venous system: blood goes from the guts to the liver
Hepatic portal vein pressure

Pressure = output (flow) x resistance, so..

pressure increases due to an increase in flow or resistance
What might cause an increase in resistance?
Increase in portal pressure:

- A blocked portal vein: thrombosis or tumour
- Liver disease: cirrhosis, tumour, infection (e.g. schistosomiasis)
What would happen if the portal venous pressure increases? (Portal hypertension)
In portal hypertension..

- Portal flow slows
- Vessels dilate due to back-pressure
- Flow may go elsewhere: anastomoses open up:
  At the base of the oesophagus
  At the umbilicus
  At the haemorrhoidal plexus
Anastomosis with oesophageal veins
What is the umbilicus?
Umbilicus: insertion site of umbilical cord: 2 arteries and one vein
In adult life:

- The umbilical arteries become the obliterated umbilical arteries in the medial umbilical ligaments

- The umbilical vein becomes the ligamentum teres in the falciform ligament

THIS BECOMES PATENT IN PORTAL HYPERTENSION
The caput Medusa
management

- Resuscitation
- Hb, X-match blood, U&Es, LFTs, clotting studies
- Investigation: endoscopy; imaging
- Treatment: stop the bleeding; address the underlying problem
endoscopy
Treatment of varices:

- Medical: IV vasopressin; octreotide
- Ligation; banding
- Sclerotherapy
- Balloon tamponade
banding
The Sengstaken-Blakemore tube
Prognosis from bleeding varices

- Patients who have bled once from esophageal varices have a 70% chance of rebleeding.
- Approximately one third of further bleeding episodes are fatal.
- Risk of death highest during the first few days after the bleeding episode and decreases slowly over the first 6 weeks.
Duodenal Ulcer (DU)  
Gastric Ulcer (GU)