Upper GI Bleeds

AMU Nurse Teaching
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ST6 AIM & GIM
Talk Plan

• Peptic ulcer disease
  - GU
  - DU

• Important considerations in this group of patients- what you need to know...

• Mallory Weis Tear

• Other causes of upper GI bleeding: picture quiz
Peptic Ulcer Disease
What causes them?

• In England, it is estimated ~1 in 10 people will have a stomach ulcer at some point in their life. Incidence DU > GU and M>F

• No single cause identified. However, it is thought that an ulcer is the end result of imbalance in the digestive fluids in the stomach

• Most ulcers are caused by an infection with a type of bacteria called Helicobacter Pylori (H. pylori)
Risk Factors

- >50 years of age
- Use of painkillers called nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin, naproxen
- Excessive drinking of alcohol
- Smoking or chewing tobacco
- Serious illness
- Radiation treatment to the area
- Excess acid production from gastrinomas, tumours of the acid producing cells of the stomach that increases acid output (seen in Zollinger-Ellison syndrome)
Symptoms

• An ulcer may or may not have symptoms. Symptoms may include:

• A gnawing or burning pain in the middle or upper stomach between meals or at night. A DU may be eased with food

• Bloating

• Heartburn

• Nausea or vomiting
Which patients do we tend to see in hospital?

• Audience reflection and sharing of experiences...
BEWARE

• In severe cases, symptoms can include:
  • Dark or black stool (melaena)
  • Vomiting blood ("coffee-ground")
  • Weight loss
  • Severe pain in the mid to upper abdomen
The sick patient

• Tachycardic
• Hypotensive
• Postural BP drop
• Reduced Conscious level
• Aspirated
Priorities

- Stabilise patient for definitive test and treatment: endoscopy. SENIOR MEDICAL PERSONNEL

- Large IV access X2

- **Timely blood transfusion.** O neg in an emergency- need to replace what they have lost

- Crystalloid pending blood. Risk of haemodilution

- Need to be NBM

- Chase endoscopy up: make sure it has been requested, time etc

- Some patients may have an acquired bleeding tendency i.e. on warfarin. Specific reversal guidelines/other blood products with massive transfusion
Latest NICE Guidance

• May cause confusion as we have traditionally done certain things for a long time including:

  - Use of PPI, omeprazole. No clear evidence of benefit pre endoscopy. Potential to reduce endoscopic findings

  - Traditional teaching/practice was to aim for an HB ~ 10 in the bleeding patient. Evidence now shows that the target should be more like 8. Increased mortality in those overtransfused
Endoscopic Treatment

- Midazolam usually used for sedation
- Injection therapy - adrenaline
- Thermal devices - heater probe
- Biopsy for Clo test and histology
- A repeat/follow-up endoscopy may be needed
Post Endoscopy Care

• Hopefully haemostasis has been achieved!

• Important to **regularly monitor obs** to identify potential ongoing/ rebleeding

• Px may well have ongoing melaena/haematemesis as GI tract still contains blood

• Endoscopy may well want a **PPI infusion**

• Endoscopy may want high risk patients to be kept NBM in case further intervention is needed

• With a significant rebleed a decision to rescope or involve the surgeons will need to be made

• H Pylori eradication= triple therapy
Mallory Weiss Tear

• Typical history of vomiting several times then seeing fresh blood

• Caused by a tear in the lining of the gut- GOJ/upper stomach

• Mallory-Weiss syndrome was first described in 1929 by two doctors called Mallory and Weiss. They had noticed it in people retching and being sick (vomiting) after bingeing on alcohol
Management

• Patients tend to be younger 30-50 years of age

• More common in men and those with a hiatus hernia

• Blood loss ranges from trivial to massive

• Serial HB and U+E’s useful

• OGD as per ulcer management

• Therapeutic options range from doing nothing if stopped bleeding to using metal clips, band ligation of blood vessel, heater probe or adrenaline

• Angiographic embolisation for failed therapy (very rare) with surgery
Other causes of GI Bleeding...
Questions
Final remarks

- We have discussed common causes of upper GI bleeding (ulcers, mallory weiss tear, oesophagitis/gastritis, cancer) and related this to being an AMU nurse
- Priority is to stabilise the sick patient which includes a timely blood transfusion
- Regular monitoring
- Pre and post endoscopy care and treatment
- Plenty of exposure on AMU
Oesophageal varices and G.I bleeds
Aims and Objectives

- To have an increased awareness of the causes of variceal bleeding
- To recognise the acutely ill patient with a variceal bleed
- Initial management of the patient
- Ongoing treatment

Efficacy and safety of pharmacological interventions for the treatment of the Alcohol Withdrawal Syndrome (Review)
What is a GI Bleed?
What are oesophageal varices?

- Gastrointestinal bleeding can occur anywhere from the Oesophagus, Stomach, Small intestine, Large Intestine and Rectum
- Upper GI bleeds affect oesophagus, stomach and first part of small intestine
- Lower GI Bleeds affect the colon and rectum

- Varices are swollen veins in the Oesophagus
- Form at a rate of 5-15% a year in patients with Liver Cirrhosis
- 1/3 will go on to haemorrhage (Habib, 2007)
Varices

- Oesophageal varices are enlarged veins in the lower oesophagus
- Due to obstructed blood flow through the portal vein, which carries blood from the intestine, pancreas and spleen to the liver
- Oesophageal varices develop when normal blood flow to the liver is obstructed due to cirrhosis
- Blood flows into smaller blood vessels that are not designed to carry large volumes of blood
- The vessels may leak blood or even rupture, causing life-threatening bleeding
Detection of Varices

- OGD
- USS
- CT
- MRI
- Endoscopic ultrasound

- Current practice is that all patients with cirrhosis should have an endoscopy to detect varices
- If no varices detected, should be rescoped 2-3 years later
- If small varices detected repeat scope in 1-2 years later

Efficacy and safety of pharmacological interventions for the treatment of the Alcohol Withdrawal Syndrome (Review)
Variceal Bleeding

Efficacy and safety of pharmacological interventions for the treatment of the Alcohol Withdrawal Syndrome (Review)
Variceal Bleeding

Variceal Bleeding is a serious complication of portal hypertension associated with 25-50% mortality.

Risk of haemorrhage is related to variceal size as well as severity of liver disease.

Prophylactic Beta Blockers and variceal band Ligation will reduce haemorrhage and improve survival.
Alcohol acts by facilitating GABA-A function, by interacting with the GABA-A receptor, but at a site different from the GABA binding site or the benzodiazepine binding site. This results in the sedative and anxiolytic effects and the rebound hyperexcitability seen during withdrawal.

Kalant, (1998)
Signs and symptoms of Alcoholic liver Disease

**Signs**
- Drowsiness
- Confusion/agitated behaviour
- Abdominal swelling
- Jaundice

**Symptoms**
- Nausea
- Weightloss
- Loss of appetite
- Abdominal pain
- Haematemesis / Loose stool
## Management of Variceal bleed

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<tbody>
<tr>
<td>• A Airway protection..suction ready</td>
<td>• Terlipressin 2mg IV STAT Vasoactive medication that decreases portal blood flow. Shown to decrease mortality and promote haemostasis Wells et al (2012)</td>
<td>• Re- bleeds and high risk patients may require Balloon tamponade, transjugular intrahepatic portosystemic shunt (TIPPS) NICE Interventional procedural Guidelines IPG392 , 2011)</td>
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<tr>
<td>• B Maintain sat 94-98%</td>
<td>• FFP/cryo/platelets</td>
<td>• Key RAPID RECOGNITION OF ACUTELY UNWELL ADULT</td>
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<td>• C IV access, large bore cannulas x2. IV Fluids to maintain BP 100 systolic, Take bloods for Group and xmatch 2-6 units, FBC, U&amp;E Clotting ,Amylase vbg</td>
<td>• Metoclopramide</td>
<td>• GET SENIOR HELP</td>
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<td>• D GCS, CBG</td>
<td>• IV Taz Pts with confirmed variceal bleed are prone to infection (NICE clinical Guideline 141)</td>
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Ongoing management

- Beta Blockers  
  Aim for heartrate 55-60 whilst maintaining BP systolic 100, 40 mg o.d,

- Terlipressin  
  2mg stat iv bolus, 4 hourly iv injection based on weight. Contraindicated in IHD/PVD Patients.

- Blood products/IV Fluids  
  maintain hb 8
Admission with haematemesis and/or melaena

- Vaso-active drug
- Diagnostic endoscopy
- Actively bleeding oesophageal varices (spurting or oozing)
- Sclerotherapy/band ligation

Technical failure
- Balloon tamponade (drug continued) gastric and/or oesophageal balloon without traction (24 h maximum)
- Drug continued (for 5 days)
- Failure
- Balloon tamponade
- 2nd therapeutic endoscopy
- Failure
- Problem bleeders
  - TIPS (grade B and C patients, if TIPS unavailable, transection)
  - Shunt surgery or TIPS (grade A patients)
  - Transplantation decision

Success
- Drug continued (for 5 days)
- Failure
- Secondary prevention

Drug stopped
- Success (after 5 days)
- Secondary prevention