

Management of Hematemesis and Melena

Definitions

1. Hematemesis is the vomiting of blood, which may be obviously red or have an appearance similar to coffee grounds.
2. Melena is the passage of black, tarry stools.

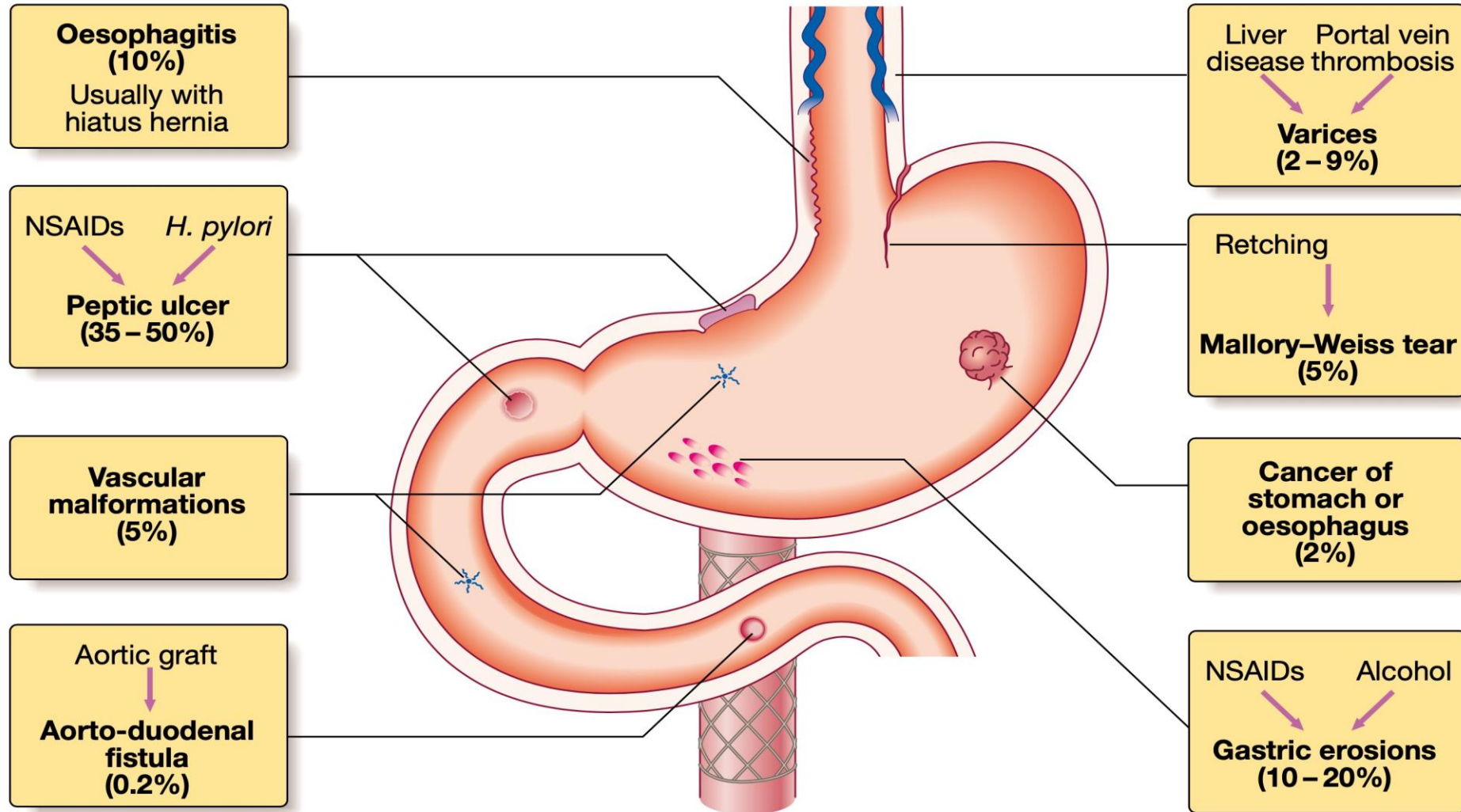
- ▶ Acute upper gastrointestinal bleeding is a common medical emergency which carries hospital mortality in excess of 10%.
- ▶ The most important causes are peptic ulcer and varices.

Causes

Upper GI bleeds can occur in the:

1. Esophagus
2. Stomach
3. Duodenum, the initial part of the small intestine

Causes of upper GI bleeding



Management of upper GIT bleeding

- Careful history and examination are important:
 1. Consider Source Of Bleeding .
 2. Assess Severity,
 3. Identify Comorbid Condition
 4. Look for sign that indicate complication.

Physical Examination of GI Bleeding

- Look for:
 - Hemodynamic instability
 - Intravascular depletion
 - Potential etiologies of bleeding
- General:
 - Altered mentation, jaundice
- Vitals
 - Hypotension
 - Tachycardia
 - Orthostatic changes
 - ↓ in BP and/or ↑ HR with position change from supine to standing
 - Suggests intravascular volume depletion of $\geq 2L$

Physical Examination of GI Bleeding

- **Head and Neck:**
 - Conjunctival pallor
 - Scleral icterus
 - Dry mucous membranes, furrowed tongue, ⊕JVP
- **Chest:**
 - ⊕skin turgor at sternal angle
 - Axilla: dry or moist
- **Abdomen:**
 - Tenderness, masses, hepatosplenomegaly, stigmata of chronic liver disease
 - **Digital rectal exam:**
 - Red blood? Melena?
 - Hemorrhoids, fissures
 - Masses

Investigation

1. CBC with indices

(Hb, WBC, Platelets ... etc)

2. When indicated **liver function test**

(TSB, AL.Phosph, SGOT,SGPT)

3. Coagulation profile

(PT, PTT, INR, clotting factors)

4. Renal function test

(B.Urea, S.creatinine)

5. Endoscopy when the patient is stable

6.Sonography

in patient when portal hypertension is suspected.

7.Abdominal angiography in selected cases.

Management of upper GI bleeding

► In medical emergency :

1. Protect airway
2. Iv line for fluid
3. Cross match blood

Management of upper GI bleeding

4. Monitor urine output

5. Correct clotting abnormality

6. Monitor pulse, Blood pressure

▶ In post emergency

1. Locate and diagnose the source of bleeding e.g endoscopy.
2. Stop bleeding e.g surgery ,laser therapy ,electrocautery, adrenaline ,clipping ,banding.

Treatment

1. For small amount of blood loss with normal pulse and blood pressure crystalloid like normal saline is enough.
2. For moderate blood loss crystalloid plus colloid like dextran are required to maintain Bpr.

Blood transfusion may require according to patient fitness and hemoglobin.

3. For sever bleeding both crystalloid and and blood is required.

Fluid input are monitored by central venous pressure ,pulse, Bpr, hourly urine output.

Pressure agent like dopamine , dobutamine infusion, may required.