Standard Operating Procedure

# Hematemesis and Melaena

## 1. Purpose

To provide a standardized protocol for the rapid resuscitation, diagnosis, and management of upper gastrointestinal bleeding (haematemesis and melaena) to reduce mortality (5–10%) and rebleeding.

## 2. Scope

Applicable to all healthcare providers (Emergency Physicians, Medical Officers, Surgeons, and Nursing Staff) managing patients with suspected or confirmed upper GI bleeding.

## 3. Responsibilities

- Emergency Physician/Medical Officer: Initial resuscitation, stabilization, investigations, and urgent referral.
- Surgeon Endoscopy and therapeutic intervention, Management of failed endoscopic control or rebleeding.
- MO/Nursing Staff: Monitoring, medication administration, fluid balance, and supportive care.

## 4. Procedure

**A. Initial Assessment**

- History: vomiting of blood (fresh blood/coffee-ground), Melaena NSAID/steroid/alcohol use, prior ulcer/varices, liver disease.
- Examination: Vital signs (shock, tachycardia, hypotension), abdominal tenderness, signs of chronic liver disease.

**B. Investigations**

- Laboratory: CP(Hb drop), coagulation profile, urea/electrolytes, LFTs, group & cross-matching
- Endoscopy (OGD): Urgent (within 12–24 hours; immediate if unstable) by experienced operator for diagnosis and therapy.

**C. Management**

- Resuscitation: ABC, large-bore IV access, IV fluids/crystalloids, blood transfusion if >30% volume loss or Hb <7–8 g/dL. Correct coagulopathy (FFP/platelets if needed).
- Medical: High-dose IV PPI (after endoscopy to prevent rebleeding); tranexamic acid
- Endoscopic therapy: Adrenaline injection + heater probe/clips for peptic ulcers; banding/sclerotherapy for varices.
- If rebleeding or failed endoscopy: Angiography/embolization (expert centers) or surgery (under-run bleeding vessel ± gastrectomy for ulcer; minimal surgery in elderly).
- Special causes: Sengstaken–Blakemore tube/octreotide/terlipressin for varices; treat stress erosions, Mallory–Weiss, Dieulafoy, tumors accordingly.

**D. Monitoring & Complications**

- Admit to HDU/ICU if unstable
- Monitor vitals, Hb, rebleeding (fresh haematemesis, shock).
- Watch for perforation, aspiration, coagulopathy.

**E. Discharge & Follow-up**

- Discharge when stable, no rebleeding 24–48 hours post-endoscopy, Hb stable.
- Continue oral PPI; H. pylori eradication if ulcer; lifestyle advice (stop NSAIDs /smoking/ alcohol).
- Surgery OPD follow-up in 1–2 weeks; repeat endoscopy if needed.

## 5. Documentation

- Admission notes (history, resuscitation).
- Endoscopy report and therapy details.
- Progress notes (daily).
- Discharge summary with medication plan and follow-up instructions.