

## 9. PEPTIC ULCER DISEASE

### Peptic ulcer disease

Peptic ulcers (discontinuity in mucosa) occur in the elderly in about 10% and gastric ulcers are more common. If untreated, develop alarming complications like perforation, hematemesis increasing the morbidity and mortality.

Symptoms

- ❖ Pain (periodic)
- ❖ Vomiting (due to pyloric obstruction)
- ❖ Bleeding (hematemesis and melena-due to erosion of underlying vessels)
- ❖ Weight loss (due to prolonged vomiting)

Clinical examination

Epigastric tenderness

- ❖ Anaemia (due to chronic blood loss)
- ❖ Signs of complications like
  - Mass
  - Visible gastric peristalsis (due to outlet obstruction)

Investigations

- ❖ Basic investigations (refer page no. 7)
- ❖ Gastroduodenoscopy
- ❖ Ultrasound abdomen

### Treatment guidelines for peptic ulcer disease

Relief of pain, Promote ulcer healing, Prevention of complication

Medical treatment

- ◆ H<sub>2</sub>- Receptor antagonist
- ◆ Proton pump inhibitors
- ◆ Cytoprotective drugs
- ◆ H-Pylori eradication therapy

Surgical treatment

- ◆ Indicated only when medical management fails and complications arise.
- ◆ Aim of surgery is to decrease the acid secretion and promote gastric drainage
- ◆ Procedures
  - ◆ Truncal vagotomy and drainage
  - ◆ Truncal vagotomy and antrectomy
  - ◆ Selective vagotomy and drainage
  - ◆ Highly selective vagotomy

## **General measures**

Behaviour modification:

- To avoid smoking, alcohol, betel nut chewing
- Timely intake of food, avoiding oily and fried foods

## **Medication**

- Supervised consumption or avoidance of NSAID

## **Complication of peptic ulcer**

- Perforation
- Haematemesis
- Gastric outlet

### **Duodenal perforation**

Duodenal perforation is one of the common complications of acid peptic disease. Elders mostly females, suffer from this complication. NSAIDs appear to be more responsible for most of these perforations.

#### **Clinical features:**

- .. Abdominal pain
- .. Distention
- .. Rigidity (may not be pronounced)
- .. Shock (may be present)

#### **Investigations**

- .. Basic investigations (refer page no 7 )
- .. Plain X-ray chest and abdomen erect or left lateral decubitus position in ill patients (To identify the air under the diaphragm)
- .. Ultrasonogram abdomen. ( to identify the free fluid abdomen)
- .. Diagnostic peritoneal lavage if necessary

#### **Treatment**

- Resuscitation and initial assessment – simultaneously
- Conservative management
  - ♦ Nasogastric aspiration
  - ♦ Abdominal girth measurement
  - ♦ Intravenous antibiotics
- Fluid and electrolyte correction
- Monitoring urine output, pulse rate and temperature.

#### **Surgical treatment**

- ❖ Failure of conservative management
- ❖ Laparotomy followed by closure of perforation with omental patch
- ❖ Closed flank drainage in patients who are unfit for anaesthesia
- ❖ Laparoscopic perforation closure with flank drain

## **Hemetemesis**

- Upper gastro intestinal bleeding usually occur due to bleeding peptic ulcer or after ingestion of NSAIDS or erosion of blood vessels
  - ◆ Resuscitation and initial assessment - simultaneously
  - ◆ Airway Protection
  - ◆ Adequate oxygenation
  - ◆ Hemodynamic stabilization
  - ◆ Maintenance of vital functions
  - ◆ Followed by endoscopy / definite procedures

## **Gastric outlet obstruction (GOO)**

GOO is the sequelae of healing and scarring of peptic ulcer. Patients may present with vomiting of stale food and ball rolling movement, chronic cases may present with dehydration and weight loss.

## **Investigation**

- ◆ Basic investigation ( refer page no. 7 )
- ◆ Barium meal series
- ◆ Upper gastrointestinal endoscopy and biopsy if indicated.

## **Treatment**

- **Surgery** vagotomy with drainage procedure  
(posterior, vertical, short loop, iso peristaltic, retrocolic gastrojejunostomy)

## **Observation for rebleeding**

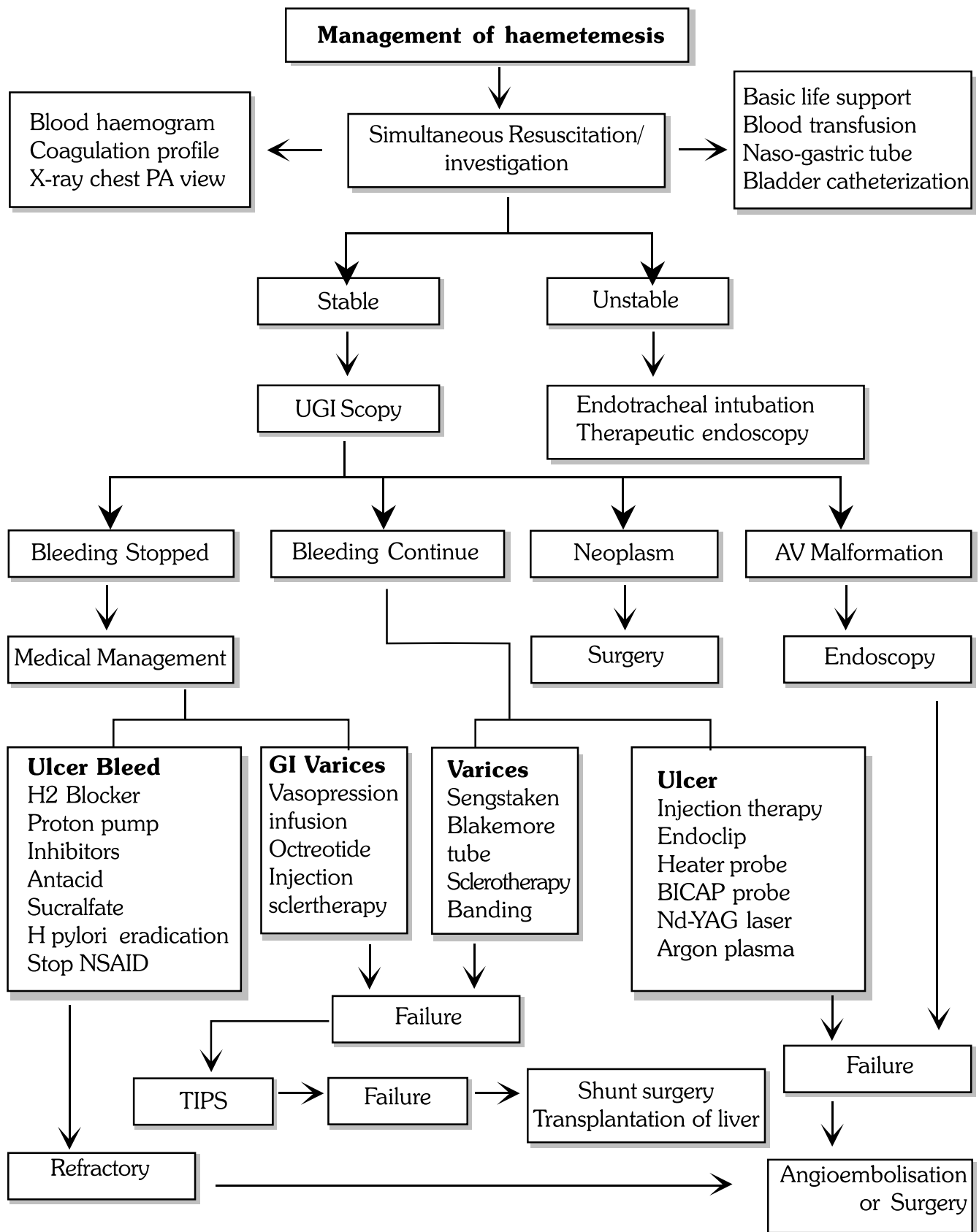
Patient requires intensive observation for 72 hours in the ward and observe for any sign of rebleed

## **Signs of rebleeding**

- Rise in pulse rate
- Fall in blood pressure
- Hemetemeisis or malena
- Pallor
- Decrease in urine output
- Postural hypotension
- Fall in hemoglobin or hematocrit value

## **Management**

- ◆ Resuscitative measures
- ◆ Definitive procedure should be under taken after thorough investigations
- ◆ Poor prognosis in the elderly



**Key Points**

- ☞ Signs of perforation like distension and rigidity may not be present
- ☞ Conservative treatment for very old and ill patients.