

OBJECTIVES FOR COMMON CLINICAL PROBLEMS

Gastrointestinal Bleeding

A. KNOWLEDGE: Students should be able to define, describe, and discuss:

1. The common causes for and symptoms of upper and lower gastrointestinal blood loss, including:
 - Esophagitis/esophageal erosions
 - Mallory Weiss tear
 - Peptic and duodenal ulcer disease
 - Esophageal/gastric varices
 - Erosive gastritis
 - Arteriovenous malformations
 - Gastrointestinal tumors, benign and malignant
 - Diverticulosis
 - Ischemic colitis
 - Hemorrhoids
 - Anal fissures
2. The distinguishing features of upper versus lower GI bleeding
3. The indications for inpatient versus outpatient evaluation and treatment
4. The principles of stabilization and treatment of acute massive GI blood loss.
5. The role of contributing factors in GI bleeding such as H. pylori infection; NSAIDs, alcohol, cigarette use, coagulopathies; and chronic liver disease.

B. SKILLS: Students should demonstrate specific skills, including:

1. History-taking skills: Students should be able to obtain, document, and present an age-appropriate history that differentiates among etiologies of disease, including:
 - Features that distinguish upper from lower GI bleeding
 - Quantification of degree of blood loss
 - Chronology and duration of bleeding
 - Associated symptoms
 - Relevant past medical history
 - Medication history, including use of tobacco and alcohol
2. Physical exam skills: Students should be able to perform a physical examination to establish the diagnosis and severity of disease, including:
 - Postural blood pressure and pulse
 - Abdominal palpation for organomegaly, masses, and tenderness
 - Search for stigmata of chronic liver disease
 - Rectal examination
3. Differential diagnosis: Students should be able to generate a differential diagnosis recognizing specific history and physical examination findings that suggest a specific etiology for GI bleeding
4. Laboratory interpretation: Order and interpret diagnostic and laboratory tests based on the differential diagnosis. These may include:
 - Stool and emesis fluid tests for occult blood
 - CBC
 - PT/PTT
 - Hepatic function panel
 - Tests for *Helicobacter pylori*

Students should be able to define the indications for:

- Esophagogastroduodenoscopy
 - Colonoscopy
 - Barium studies of the gastrointestinal tract
5. Management skills: Students should be able to develop an appropriate evaluation and treatment plan for patients that includes:
 - Establishing adequate venous access
 - Administering crystalloid fluid resuscitation
 - Ordering blood and blood product transfusion
 - Determining when to obtain consultation from a gastroenterologist or a general surgeon
 - Outlining long-term management when appropriate (e.g. *Helicobacter pylori* eradication, antacid, H-2 blocker or proton pump inhibitor therapy, smoking /alcohol cessation, NSAID restriction, and dietary modification)