

Top 100 GI Concepts

BASED ON KMU PRE-PROFFS 2024

MEDICINE • SURGERY • PAEDS

1. ESOPHAGUS & STOMACH

Concept	Exam Pearl / Clinical Scenario
Achalasia	Dysphagia to solids & liquids. "Bird's Beak" on Barium. Loss of Auerbach's plexus.
Barrett's Esophagus	Metaplasia (Squamous → Columnar). Risk factor: chronic GERD. Precursor to Adenocarcinoma .
Mallory-Weiss Tear	Alcoholic, retching followed by hematemesis. Tear at GE junction. Self-limiting.
Boerhaave Syndrome	Esophageal Rupture . Severe chest pain + Subcutaneous emphysema. Surgical emergency.
Pyloric Stenosis (Infant)	Projectile non-bilious vomiting, 3-6 weeks old. "Olive" mass. Hypochloremic Metabolic Alkalosis .
Duodenal Ulcer	Pain relieved by food/milk. Night pain. 90% H. Pylori positive.
Gastric Ulcer	Pain worsens with food. Weight loss. Always biopsy (cancer risk).
H. Pylori Rx	Triple Therapy: PPI + Clarithromycin + Amoxicillin (or Metronidazole). 7-14 days.
Zollinger-Ellison	Gastrinoma. Multiple refractory ulcers + Diarrhea. High Fasting Gastrin.
GIST	Gastrointestinal Stromal Tumor. Submucosal mass. Rx: Imatinib.
Dumping Syndrome	Post-gastrectomy complication. Rapid gastric emptying → Hypoglycemia/Hypotension.
Virchow's Node	Left supraclavicular node. Sign of metastatic Gastric Cancer.

2. LIVER & BILIARY SYSTEM

Concept	Exam Pearl / Clinical Scenario
Hepatitis A	Fecal-oral. Travelers/Shellfish. IgM Anti-HAV = Acute infection. No chronic state.
Hepatitis B Markers	HBsAg = Infection. Anti-HBs = Immunity. HBeAg = High infectivity. IgM Anti-HBc = Window period.
Hepatitis E	Fecal-oral. High mortality in Pregnancy (Fulminant failure).
Autoimmune Hepatitis	Young female. High IgG. ANA / Anti-Smooth Muscle Antibody positive.
PBC	Primary Biliary Cholangitis. Middle-aged female, pruritus. Anti-Mitochondrial Antibody (AMA) .
PSC	Primary Sclerosing Cholangitis. Male, associated with Ulcerative Colitis . "Beaded" ducts on ERCP.
Wilson's Disease	Low Ceruloplasmin. Kayser-Fleischer rings. Neuro + Liver signs. Rx: Penicillamine.
Hemochromatosis	"Bronze Diabetes". High Ferritin. Arthritis, Heart failure. Rx: Venesection.
Hydatid Cyst	Echinococcus. "Water lily sign". Rx: PAIR or Surgery (careful of anaphylaxis).
Pyogenic Abscess	Fever, RUQ pain. Source: Biliary or Portal. Rx: Antibiotics + Drainage.
Amoebic Abscess	"Anchovy Sauce" pus. Hx of dysentery. Rx: Metronidazole (Drain only if large/rupture risk).
Charcot's Triad	Ascending Cholangitis: Fever + Jaundice + RUQ Pain. Reynolds Pentad: + Shock + Confusion.
Courvoisier's Law	Painless Jaundice + Palpable Gallbladder = Ca Head of Pancreas (Not stones).
Biliary Atresia	Neonate with persistent jaundice > 2 weeks, clay stools, dark urine. Rx: Kasai Procedure.

3. INTESTINE & COLORECTAL

Concept	Exam Pearl / Clinical Scenario
Celiac Disease	Gluten intolerance. Villous atrophy. Anti-TTG antibodies. Dermatitis Herpetiformis.
Meckel's Diverticulum	Rule of 2s. 2 feet from ICJ. Ectopic gastric mucosa. Painless rectal bleeding in child.
Intussusception	"Red Currant Jelly" stool. Sausage-shaped mass. Target sign on USG. Rx: Air Enema.
Hirschsprung's	Delayed meconium. Empty rectum on PR. Aganglionic segment. Gold Std: Rectal Biopsy.
Ulcerative Colitis	Continuous, starts from rectum. Bloody diarrhea. Mucosal/Submucosal only. Crypt abscesses.
Crohn's Disease	Skip lesions. Mouth to Anus. Transmural (Fistulas/Strictures). Non-caseating granulomas.
Appendicitis	Migratory pain (Umbilical → RIF). Alvarado Score. McBurney's point tenderness.
Diverticulitis	Left Lower Quadrant pain (Left-sided appendicitis), CT is diagnostic. No colonoscopy in acute phase.
Sigmoid Volvulus	Elderly, constipation. "Coffee Bean Sign" on X-ray. Rx: Flatus tube decompression.
Ischemic Colitis	"Watershed" areas (Splenic flexure). Pain out of proportion? No → Bloody diarrhea after hypotension.
Mesenteric Ischemia	Pain OUT OF PROPORTION to exam. Embolic source (AFib). "Thumprinting" on X-ray.
FAP	Familial Adenomatous Polyposis. APC gene. 100% Cancer risk. Prophylactic Colectomy.
Lynch Syndrome	HNPPCC. DNA Mismatch Repair defect. Risk of Colon + Endometrial + Ovarian Ca.
Rectal Prolapse	Concentric folds (vs Hemorrhoids = Radial folds). Rx: Rectopexy.

4. GI EMERGENCIES & PANCREAS

Concept	Exam Pearl / Clinical Scenario
Acute Pancreatitis	Epigastric pain → Back. Lipase > 3x normal. Causes: Gallstones & Alcohol (GET SMASHED).
Pancreatitis Severity	Scores: Ranson's, APACHE II, Glasgow, BISAP. Signs: Grey-Turner (Flank), Cullen (Umbilicus).
Chronic Pancreatitis	Calcifications on X-ray. Steatorrhea. Diabetes. Rx: Enzyme replacement.
Perforated Viscus	"Board-like rigidity". Air under diaphragm on Erect CXR. Surgical emergency.
Intestinal Obstruction	Vomiting, Distension, Constipation. "Step-ladder" air-fluid levels. Adhesions = #1 cause.
Necrotizing Enterocolitis	Preterm infant. Abdominal distension, bloody stool. X-ray: Pneumatosis Intestinalis .
Spontaneous Bacterial Peritonitis	Cirrhotic with ascites + fever/pain. Ascitic Neutrophils > 250. Rx: Cefotaxime.
Hepatorenal Syndrome	Renal failure in cirrhosis (unresponsive to fluids). Splanchnic vasodilation. Rx: Terlipressin + Albumin.