



اسس الطب الباطني COMMON GIT DISORDERS

Sawa University

جامعة ساوة الاهلية

College of health and medical techniques

كلية التقنيات الصحية والطبية

Department of

قسم تقنيات التخدير

Anesthesia.....2nd..... Stage

..... المرحلة الثانية .. الثانية

استاذ المادة : د . محمد جليل الزاملي

F.I.B.MS M.B.CH.B

.....محاضرة رقم 13..

Lecture No. 13.....

نظري

Theoretical

PEPTIC ULCER DISEASE (PUD)

(Definition, Etiology, Pathogenesis)

- Localized mucosal defect in stomach/duodenum.
- Causes: *H. pylori*, NSAIDs, stress, smoking.
- Acid–mucosal imbalance → mucosal injury.
- Genetic predisposition may play a role.
- Pathogenesis: increased acid, reduced defense.
- Gastric ulcers linked to impaired mucosal protection.
- Duodenal ulcers linked to excess acid secretion.
- Risk factors: alcohol, steroids, Zollinger–Ellison syndrome.

(CLINICAL FEATURES, DIAGNOSIS, MANAGEMENT, PREVENTION)

- Epigastric pain (burning, relieved by food/antacids).
- Complications: bleeding, perforation, obstruction.
- Diagnosis: endoscopy, H. pylori testing (urea breath, stool antigen).
- Treatment: PPIs, H. pylori eradication (triple therapy).
- Avoid NSAIDs, smoking, alcohol.
- Surgery for complications (perforation, bleeding).
- Prevention: hygiene, rational NSAID use.
- Long-term follow-up for recurrence.

GASTROENTERITIS

- (Definition, Etiology, Pathogenesis)
- Acute inflammation of stomach & intestines.
- Causes: viruses (rotavirus, norovirus), bacteria (E. coli, Salmonella).
- Transmission: contaminated food/water, poor hygiene.
- Pathogenesis: mucosal damage → fluid/electrolyte loss.
- Toxins (e.g., cholera toxin) increase secretion.
- Common in children & travelers.
- Seasonal outbreaks (summer, rainy season).
- Risk factors: malnutrition, immunosuppression.

GASTROENTERITIS

(Clinical Features, Diagnosis, Management, Prevention)

- Sudden diarrhea, vomiting, abdominal cramps.
- Dehydration: dry mouth, sunken eyes, hypotension.
- Diagnosis: stool culture, rapid antigen tests.
- Management: oral rehydration solution (ORS), IV fluids if severe.
- Antibiotics only for bacterial causes.
- Zinc supplementation in children.
- Prevention: handwashing, safe food/water.
- Vaccines: rotavirus for infants.

CHOLERA

- (Definition, Etiology, Pathogenesis)
- Acute diarrheal illness by *Vibrio cholerae*.
- Transmission: contaminated water/food.
- Cholera toxin $\rightarrow$ $\uparrow$ cAMP $\rightarrow$ massive fluid secretion.
- Rapid onset, epidemic potential.
- Endemic in poor sanitation areas.
- Pathogenesis: small intestine hypersecretion.
- No mucosal invasion.
- Risk: floods, refugee camps.

CHOLERA

(Clinical Features, Diagnosis, Management, Prevention)

- Profuse watery diarrhea (“rice-water stools”).
- Severe dehydration, shock, death if untreated.
- Diagnosis: stool culture, rapid dipstick tests.
- Management: ORS, IV fluids (Ringer’s lactate).
- Antibiotics: doxycycline, azithromycin.
- Prevention: safe water, sanitation.
- Oral cholera vaccines available.
- Public health measures during outbreaks.

TYPHOID FEVER

- (Definition, Etiology, Pathogenesis)
- Systemic infection by *Salmonella typhi*.
- Transmission: fecal–oral via contaminated food/water.
- Bacteria invade intestinal mucosa → bloodstream.
- Pathogenesis: Peyer's patch hyperplasia, necrosis.
- Incubation: 1–2 weeks.
- Endemic in developing countries.
- Risk: poor sanitation, unsafe food.
- Chronic carriers (gallbladder).

TYPHOID FEVER

(Clinical Features, Diagnosis, Management, Prevention)

- Step-ladder fever, abdominal pain, constipation/diarrhea.
- Rose spots on trunk, hepatosplenomegaly.
- Diagnosis: blood culture (gold standard), Widal test.
- Treatment: antibiotics (ceftriaxone, azithromycin).
- Supportive care: fluids, nutrition.
- Complications: perforation, hemorrhage.
- Prevention: vaccines (Vi polysaccharide, Ty21a).
- Sanitation & food hygiene essential.

VIRAL HEPATITIS

(Definition, Etiology, Pathogenesis)

- Inflammation of liver due to viruses A–E.
- Hep A/E: fecal–oral transmission.
- Hep B/C/D: blood, sexual, vertical transmission.
- Pathogenesis: immune-mediated hepatocyte injury.
- Acute vs chronic forms.
- Hep B/C → chronic liver disease.
- Hep D requires Hep B coinfection.
- Global health burden.

VIRAL HEPATITIS

(Clinical Features, Diagnosis, Management, Prevention)

- Symptoms: jaundice, malaise, anorexia, dark urine.
- Diagnosis: serology, LFTs, viral markers.
- Management: supportive for A/E.
- Antivirals for B/C (tenofovir).
- Prevention: vaccines for A & B.
- Safe practices: blood screening, hygiene.
- Complications: cirrhosis, hepatocellular carcinoma.
- Surveillance in chronic cases.

CIRRHOSIS

- (Definition, Etiology, Pathogenesis)
- End-stage chronic liver disease.
- Etiology: alcohol, hepatitis B/C, NAFLD.
- Pathogenesis: fibrosis → nodular regeneration.
- Distorts architecture → portal hypertension.
- Progressive, irreversible.
- Risk factors: obesity, toxins.
- Common cause of liver failure.
- High mortality if untreated.

CIRRHOSIS

(Clinical Features, Diagnosis, Management, Prevention)

- Symptoms: ascites, varices, jaundice, encephalopathy.
- Diagnosis: LFTs, imaging, biopsy.
- Management: diuretics, beta-blockers, lactulose.
- Treat underlying cause.
- Liver transplant definitive.
- Prevention: alcohol avoidance, hepatitis vaccination.
- Surveillance for HCC.
- Nutritional support.

GASTROESOPHAGEAL REFLUX DISEASE (GERD)

- (Definition, Etiology, Pathogenesis)
- Chronic reflux of gastric contents into esophagus.
- Etiology: LES dysfunction, obesity, pregnancy.
- Pathogenesis: acid injury → esophagitis.
- Risk: hiatal hernia, smoking.
- Common in adults.
- Chronic course, relapsing.
- May progress to Barrett's esophagus.
- Lifestyle factors important.

GERD

(Clinical Features, Diagnosis, Management, Prevention)

- Symptoms: heartburn, regurgitation, nocturnal cough.
- Diagnosis: endoscopy, pH monitoring.
- Management: lifestyle changes (weight loss, avoid triggers).
- PPIs mainstay therapy.
- Surgery: fundoplication if refractory.
- Prevention: avoid late meals, elevate head of bed.
- Complications: strictures, Barrett's, adenocarcinoma.
- Long-term monitoring needed.

Thank you