Final Review

- GERD- Lower Esophageal Sphincter (LES) dysfunction.
  - S/S: Heartburn (burning in chest), regurgitations, dysphagia, and chest pain.
  - Treatment: lifestyle modifications-HOB elevated, avoid citrus, alcohol, caffeine, carbonation, avoid eating before bedtime, smoking cessation as it weakens the sphincter.
  - Medications: Antacids, if it doesn't improve, EGD.
  - NP roe in GERD management is to evaluate the effectiveness of treatment.
  - Warning signs of GERD: age over 50, dysphagia, odynophagia (pain on swallowing), N/V, wt loss, melena, feeling full after little food.

- Esophageal Stricture- chronic inflammation and the development of scar tissue that thickens the wall of the esophagus.
  - Risk factors: GERD, esophagitis, radiation therapy, ingestion of caustic substances like strong acids or bases, and tumors.
  - S/S: dysphasia, sensation of food sticking to the throat, pain when swallowing, food regurgitation, unintentional weight loss.
  - Diagnosis: Barium swallow or EGD.
  - Treatment: Meds to reduce inflammation, dilation of stricture, and addressing underlying cause.

- Appendicitis- involves obstruction of the lumen or the opening of the appendix which leads to a cascade of events resulting in inflammation, infection, and, if untreated, potential perforation.
  - Patho: luminal obstruction -> increased luminal pressure -> compromised blood flow (ischemia) -> bacterial overgrowth (E. coli) -> acute inflammation (pus formation) ->
    Perforation
  - S/S: Periumbilical pain, RLQ pain, fever and leukocytosis, N/V
  - Diagnosis: WBC > 10,000 and increased neutrophils and CRP, abd. ultrasound, CT scan, MRI
  - Treatment: appendectomy
    - Risk is colon CA among those aged 50-74 y/o

- Hiatal Hernia- Major risk factor for GERD.
  - Diaphragmatic weakness
  - Factors: aging, obesity, pregnancy, increased intra-abdominal pressure (chronic coughing or Valsalva maneuver), structural abnormalities of diaphragm
  - Treatment: lifestyle modification, eating small and frequent meals, meds (antacids, PPI;s, prokinetic agents), surgery to repair (usually w/ severe S/S).

- Duodenal Ulcer- Most common peptic ulcer
  - Usually caused by H. pylori 95-100% of the time (bacteria that stimulates gastrin secretion leading to gastric acid hypersecretion)
  - Disruption of the balance between aggressive and defensive factors:
    - Aggressive: Gastric acid, pepsin, H. pylori, NSAIDS
    - Defensive: Mucus-bicarbonate layer, prostaglandins, cellular repair mechanisms
  - S/S: Pain begins 30min-2hrs after eating when the stomach is empty, not unusual for pain to occur in the middle of the PM and disappear by AM.
  - Exam findings: anemia, dehydrated, pain in upper abd., guarding, rigidity, distention
  - Pain is usually relieved by ingestion of food or antacids.
  - Diagnosis: EGD (Gold standard), H. pylori testing, imaging studies
  - Treatment: lifestyle mods, meds, treat H. pylori if that's the reason

- Gastric Ulcer- Pain is relieved w/ food
  - Risk factors: h. pylori, NSAIDS, smoking, alcohol, stress, fam hx, obesity, age >65

- Peptic Ulcer Disease (PUD)- a break or ulceration in the protective mucosal lining of the lower esophagus, stomach, or duodenum.
  - Least likely to occur in the Large Intestine
  - Erosion- superficial ulcers, don't penetrate
  - Ulcer- damages blood vessels
  - S/S: epigastric pain 1-3 hrs after eating, pain relieved by eating

- Zollinger-Ellison syndrome causes increased risk of peptic ulcers d/t increase in gastric acid