

Acid Peptic Diseases

Gastritis and Helicobacter pylori (H. pylori)

Acid peptic diseases refer to a group of disorders that result from the imbalance between stomach acid secretion and the protective mechanisms of the stomach and duodenum. These conditions include gastritis, peptic ulcers, and infections caused by *Helicobacter pylori* (H. pylori). These conditions can range from mild irritation to severe, life-threatening complications such as bleeding or perforation.

1. Gastritis

Gastritis refers to inflammation of the stomach lining and can be acute or chronic.

Symptoms of Gastritis

- Upper abdominal pain: A dull or burning pain, often felt in the upper central abdomen.
- Nausea or vomiting: Sometimes with or without blood (hematemesis).
- Bloating: A feeling of fullness or discomfort in the upper abdomen.
- Indigestion: Often experienced as discomfort or a feeling of heaviness after eating.
- Loss of appetite: Due to discomfort.
- Dark, tarry stools: In severe cases, if there is bleeding from the stomach lining.
- Acidic taste in mouth or belching.

Investigation of Gastritis

- Endoscopy.
- Blood Test
- H. Pylori test, serology antigen test, Urea breath test, stool antigen test
- Blood tests for H. pylori antibodies

Management of Gastritis:

- Alcohol, NSAIDs, and spicy foods can irritate the stomach lining and should be avoided.
- Smoking cessation: Smoking aggravates gastritis and hinders healing.
- Proton Pump Inhibitors (PPIs)
- Antibiotics: If *H. pylori* infection is present

Dietary Modifications:

1. Eat smaller meals more frequently.
2. Avoid irritant foods such as acidic, fried, or spicy foods.
3. Avoid caffeine and alcohol.

Stress Management: Chronic stress can exacerbate gastritis. Practices like meditation, yoga, or relaxation techniques may help.

Peptic Ulcers

Definition: Peptic ulcers are open sores or lesions that develop in the lining of the stomach (gastric ulcer) or duodenum (duodenal ulcer). They result from the erosion of the mucosal lining by stomach acid and digestive enzymes.

Symptoms of peptic Ulcers:

- Burning stomach pain: Often in the upper abdomen, occurring 1-3 hours after eating (for duodenal ulcers) or right after eating (for gastric ulcers).
- Nausea and vomiting: Especially in severe cases.
- Bloating and fullness: Feeling of fullness after eating a small amount of food.
- Loss of appetite: Often accompanied by unexplained weight loss.
- Dark, tarry stools: Indicating possible bleeding.
- Hematochezia (bright red blood in stool) or hematemesis (vomiting blood): In severe cases, a sign of ulcer bleeding.

Investigations Of peptic Ulcers:

- Endoscopy (EGD)
- Urea Breath Test or Stool Antigen Test
- Upper GI Series (Barium Swallow)
- Blood Test
- H. pylori Testing
- Serology, stool antigen test, or urea breath test can be used to confirm the infection.

Management of Peptic Ulcer

- H. pylori Eradication
- PPIs

- Antacids and Sucralfate
- Discontinue NSAIDs
- Avoid Alcohol and Smoking
- Surgical Treatment (in severe cases)

Helicobacter (H. Pylori) Infection:

H. pylori is a type of bacteria that infects the stomach lining and is a leading cause of gastritis and peptic ulcers.

Symptoms of H. Pylori Infection

- Many people with *H. pylori* infection are asymptomatic, but symptoms can include:
- Abdominal pain or discomfort (similar to peptic ulcer pain).
- Nausea and bloating.
- Loss of appetite and weight loss.
- Indigestion.
- In severe cases, bleeding ulcers or gastric cancer can occur.

Investigation of H. Pylori

1. Urea Breath Test: Non-invasive and accurate test to detect *H. pylori* infection.
2. Stool Antigen Test: Detects *H. pylori* antigens in the stool.
3. Endoscopy: Allows for biopsy of the stomach lining to test for *H. pylori* via rapid urease test or histology.
4. Serology: Blood tests that detect antibodies to *H. pylori*, but they cannot differentiate between current or past infection.

Management of H. Pylori Infection

- Antibiotic Therapy:
- PPI (e.g., omeprazole) + CLARITHROMYCIN + AMOXICILLIN OR METRONIDAZOLE for 10-14 days.
- Proton Pump Inhibitors (PPIs)
- Follow-up: After treatment, follow-up testing (such as a urea breath test or stool antigen test) may be done to confirm eradication of the bacteria.
- Prevention: Proper hand hygiene and food/water safety to prevent infection.