

PEPTIC ULCER



INTRODUCTION

- ▶ It is defined as a breakdown in continuity of mucus membrane of duodenum, esophagus and stomach by pepsin and acid are present in abnormally high concentrations.
- ▶ **Peptic ulcers** are sores that develop in the lining of the **stomach**, lower esophagus, or small intestine. They're usually formed as a result of inflammation caused by the bacteria *H. pylori*, as well as from erosion from **stomach** acids.



Esophagus

Stomach

Small
intestine

Duodenal
ulcer

Gastric ulcer

©2016
MAYO

DEFINITION

- ▶ *Peptic ulcers* are open sores that develop on the inside lining of *stomach* and the upper portion of small intestine



TYPES

There are three types of peptic ulcers:

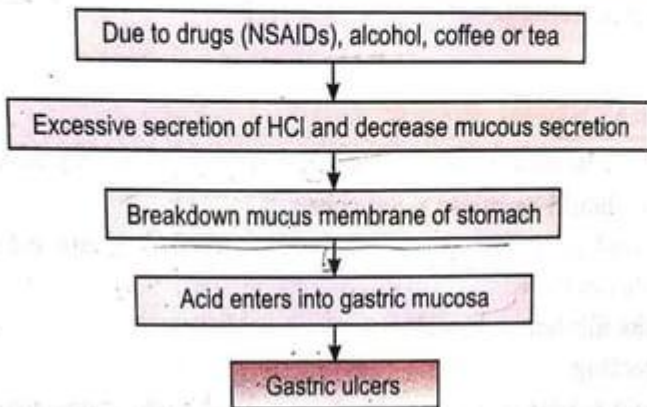
- ▶ **Gastric ulcers:** ulcers that develop inside the stomach
- ▶ **Esophageal ulcers:** ulcers that develop inside the esophagus
- ▶ **Duodenal ulcers:** ulcers that develop in the upper section of the small intestines, called the duodenum

Gastric Ulcer	Duodenal Ulcer
1. They occur in stomach.	1. They occur in duodenum.
2. They cause by injury like substances, alcohol, aspirin, NSAIDs, drugs.	2. But these are cause by HCl secretion by vagus nerve stimulation in fasting period.
3. Pain in left epigastric region in gastric ulcer.	3. Pain in right epigastric region.
4. Nausea is common.	4. Rarely.
5. Vomiting with blood occurs in this case.	5. Stool with blood.
6. Weight loss.	6. No weight loss.
7. Pain starts just after taking food.	7. Onset of pain after 2-4 hrs. of taking food.
8. Pain is present while hungry.	8. Absent.
9. Pain is regular.	9. Not regular.
10. Malignancy is not common.	10. Common.

ETIOLOGY

- ▶ *Helicobacter pylori* (*H. pylori*), a type of bacteria that can cause a stomach infection and inflammation
- ▶ Frequent use of aspirin or other anti-inflammatory drugs (risk associated with this behaviour increases in women and people over the age of 60)
- ▶ Smoking
- ▶ Drinking too much alcohol
- ▶ Radiation therapy
- ▶ Stomach cancer

PATHOPHYSIOLOGY



Due to fasting.



Stimulation of vagus nerve



Increases gastric secretion



HCl secretion level increase



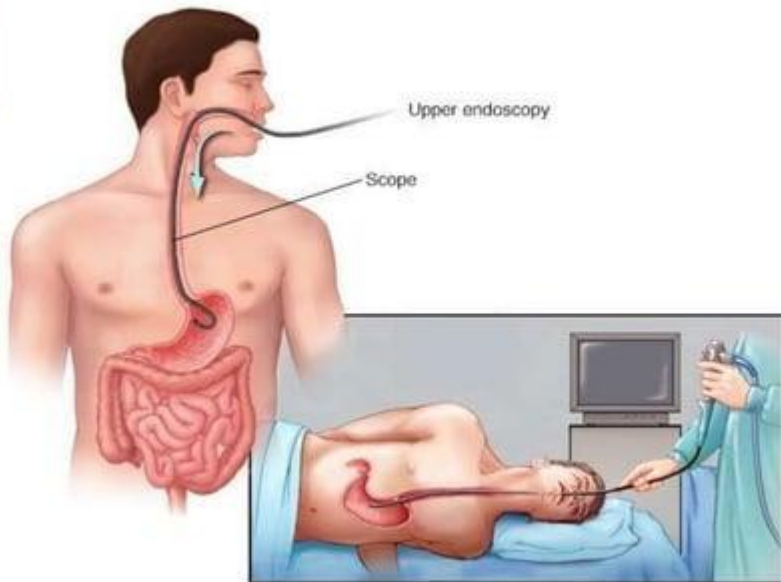
That leads to duodenal ulcer

CLINICAL MANIFESTATIONS

- ▶ The most common symptom of a peptic ulcer is burning abdominal pain that extends from the navel to the chest, which can range from mild to severe. In some cases, the pain may wake you up at night. Small peptic ulcers may not produce any symptoms in the early phases.
- ▶ Other common signs of a peptic ulcer include:
 - ▶ Changes in appetite
 - ▶ Nausea
 - ▶ Bloody or dark stools
 - ▶ Unexplained weight loss
 - ▶ Indigestion
 - ▶ Vomiting
 - ▶ Chest pain

Diagnostic tests

- ▶ Medical history
- ▶ Physical Exam
- ▶ Lab **tests**
- ▶ Upper gastrointestinal (GI) endoscopy and biopsy
- ▶ Upper GI series
- ▶ Computerized tomography (CT) scan

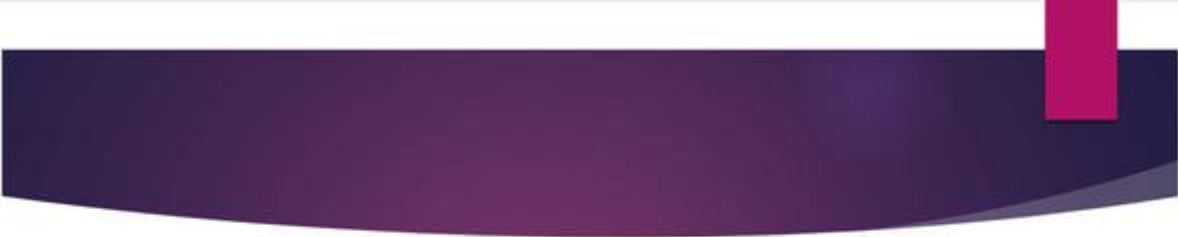


COMPLICATIONS

- *Perforation* leading to peritonitis
- *Haemorrhage* by erosion of vessel in base
- *Penetration* of surrounding organ (liver/pancreas)
- *Obstruction* (by scarring) - pyloric stenosis
- (Cancer - rare event in true peptic ulcer)

MANAGEMENT

- ▶ **Antibiotic medications to kill *H. pylori*.** If *H. pylori* is found in your digestive tract, your doctor may recommend a combination of antibiotics to kill the bacterium. These may include **amoxicillin** (Amoxil), clarithromycin (Biacin), metronidazole.
- ▶ **Proton pump inhibitors** — also called PPIs — reduce stomach acid by blocking the action of the parts of cells that produce acid. These drugs include the prescription and over-the-counter medications **omeprazole** (Prilosec), **lansoprazole** (Prevacid).
- ▶ **Acid blockers** — also called histamine (H-2) blockers — reduce the amount of stomach acid released into your digestive tract, which relieves ulcer pain and encourages healing....ex. **ranitidine**

- 
- ▶ **Antacids** neutralize existing stomach acid and can provide rapid pain relief. Side effects can include constipation or diarrhea, depending on the main ingredients.



THANK YOU