

Gastrointestinal Tract

"GIT " LECTURE [3]



PEPTIC ULCER DISEASE

PROFESSOR DOCTOR
SAAD HASAN MOHAMMED ALI

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Signs and Symptoms of PUD:

- ❑ **Most patients have long-standing → sharp → localized → recurrent → Epigastric pain= “burning” +++ → Epigastric tenderness**
- ❑ **Duodenal Ulcer → Mostly precipitated on empty stomach → frequently awakens patient in mid night. → → Relieved by Eating → food, milk, or antacids.**
- ❑ **Gastric Ulcers → Mostly precipitated by Ingestion → food**

Complications of PUD:

1) Deeper penetration or perforation of the ulcer =

Increased character of pain & radiating to the back.

2) Gastric outlet (pyloric) obstruction=

Continuous vomiting a few hours after a meal

3) GI hemorrhage= =

1) Melena (=bloody or black stools).

Diagnosis of PUD:

A. Laboratory Diagnostic Tests for H. pylori Infection:

Today, testing for Helicobacter pylori is recommended in all patients with peptic ulcer disease.

- 1) Blood / Serological test = antibodies for H. pylori
- 2) Stool Test = for H . pylori Antigen
- 3) Urea Breath Test = gold standard test

B. Endoscopy=

Esophagogastroduodenoscopy (EGD):

Gold standard and most accurate diagnostic test

with sensitivity and specificity up to 90%

in diagnosing gastric and duodenal ulcers.

Primarily required in some patients to:

→ confirm diagnosis of ulcer

→+ Taking Biopsy

→→rule out malignancy.

→confirm Tissue diagnosis of H. pylori Infection



:Diagnosing *H. pylori*

Urea breath tests are an effective diagnostic method for *H. pylori*. They are also used after treatment to see whether it worked.

Urea Breath Test :

→ *H. pylori* produces an enzyme called **urease**
=breaks **urea** into ammonia and carbon dioxide (CO₂).

→ **To Test presence of *H. pylori* in stomach:** swallow
tablet containing **urea** >>>> measure amount of exhaled
carbon dioxide (CO₂) === High Amount.



Recurrent of Peptic Ulcer:

Causes:

- 1) Discontinue of drug therapy**
- 2) Lack of behavior modification**
- 3) Persistent H. pylori after treatment:**

Causes:

- 1. Inappropriate drug choice**
- 2. H. pylori resistance.**

Medical Management:

☐ If the peptic ulcer:

1) Confined

2) Uncomplicated

3) NO H. pylori present

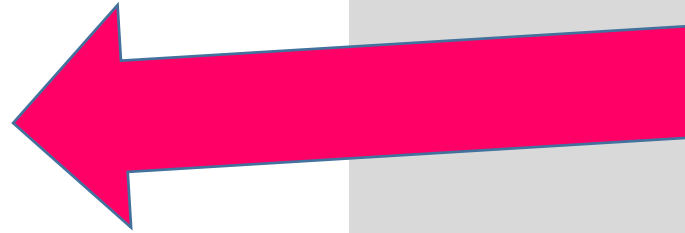
Anti-Secretory

Drug:

☐ For 10 to 14 days

☐ For 4 weeks

=if complications occur



Medical Treatment

❑ If the patient is infected with H. pylori:

1....Triple Therapy =

1 Anti-Secretory Drug + Metronidazole + 1 Antibiotic Drug

❑ Effective Eradication of H. pylori =>90%

❑ Therapy for 10 -14 days

2.....Quadruple Therapy=

Alternative to first-line treatment

OR For Antibiotic Resistance

1 Anti-Secretory Drug + Metronidazole + 1 Antibiotic Drug + Bismuth salt
[Antibiotic Drug =Tetracycline or amoxicillin or Clarithmycin]

Surgery Treatment

Aims:

1) Surgical Treatment of Chronic Gastric & Duodenal Ulcers=> To

Reduce Amount of Acid Secretion By:

- 1) **Cutting the Vagus Nerve (Vagotomy)**
- 2) **Partial Gastrectomy** = Removing the gastrin-bearing mucosa in the antrum

2) Surgical Treatment for complications of PUD such as:

- 1) **Significant Bleeding** (if not respond to endoscopic coagulant procedures)
- 2) **Perforation**
- 3) **Gastric Outlet Obstruction.**

**Thank
You For
Your
Attention**

**Any
questions?**

