

Gastroesophageal Reflux Disease (GERD) – Simplified Notes

Definition:

GERD is a chronic condition where stomach contents reflux into the esophagus due to dysfunction of the lower esophageal sphincter (LES), leading to symptoms such as heartburn and regurgitation.

Etiopathogenesis:

- Weak or transient relaxation of the lower esophageal sphincter (LES).
- Increased intra-abdominal pressure (obesity, pregnancy).
- Delayed gastric emptying.
- Hiatal hernia.
- Dietary and lifestyle factors (spicy food, alcohol, caffeine, smoking).
- Impaired esophageal clearance and mucosal defense.

Pathophysiology (Flowchart):

LES Dysfunction / Transient Relaxation
↓
Reflux of Gastric Contents into Esophagus
↓
Exposure to Acid & Pepsin
↓
Mucosal Injury & Inflammation
↓
Symptoms: Heartburn, Regurgitation, Chest Pain

Clinical Manifestations:

- Heartburn (burning sensation in chest).
- Regurgitation of food/sour liquid.
- Dysphagia (difficulty swallowing).
- Chronic cough, hoarseness, sore throat.
- Chest pain (non-cardiac).
- Complications: Esophagitis, Barrett’s esophagus, Stricture.

Management:

Non-Pharmacological	Pharmacological
- Lifestyle modification: weight loss, avoid late meals, elevate head of bed, etc.	- Antacids, H2 blockers, PPIs, etc.