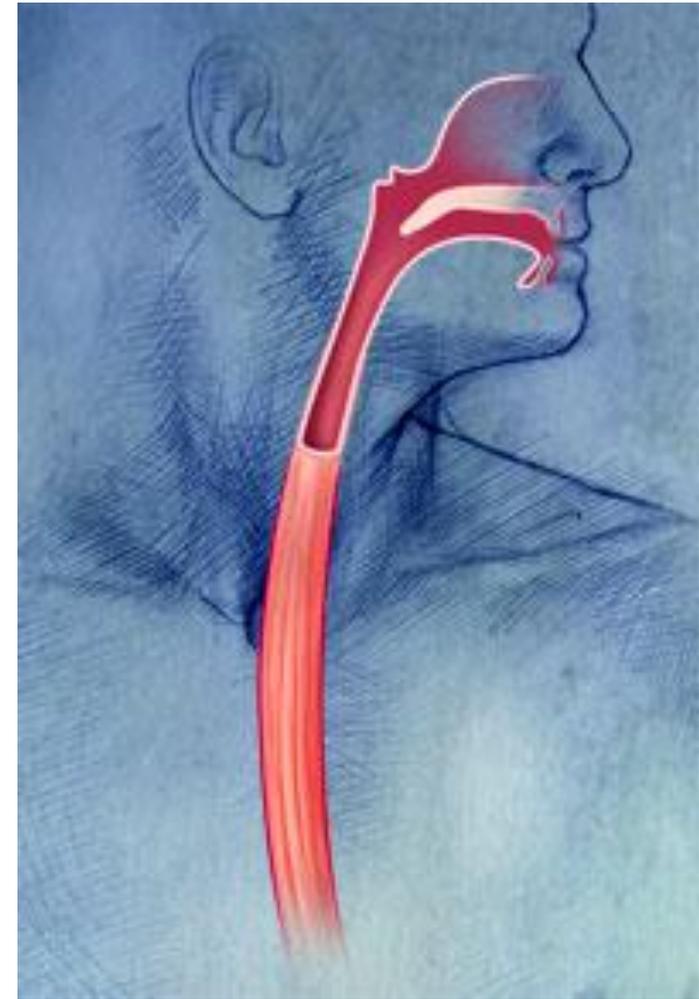


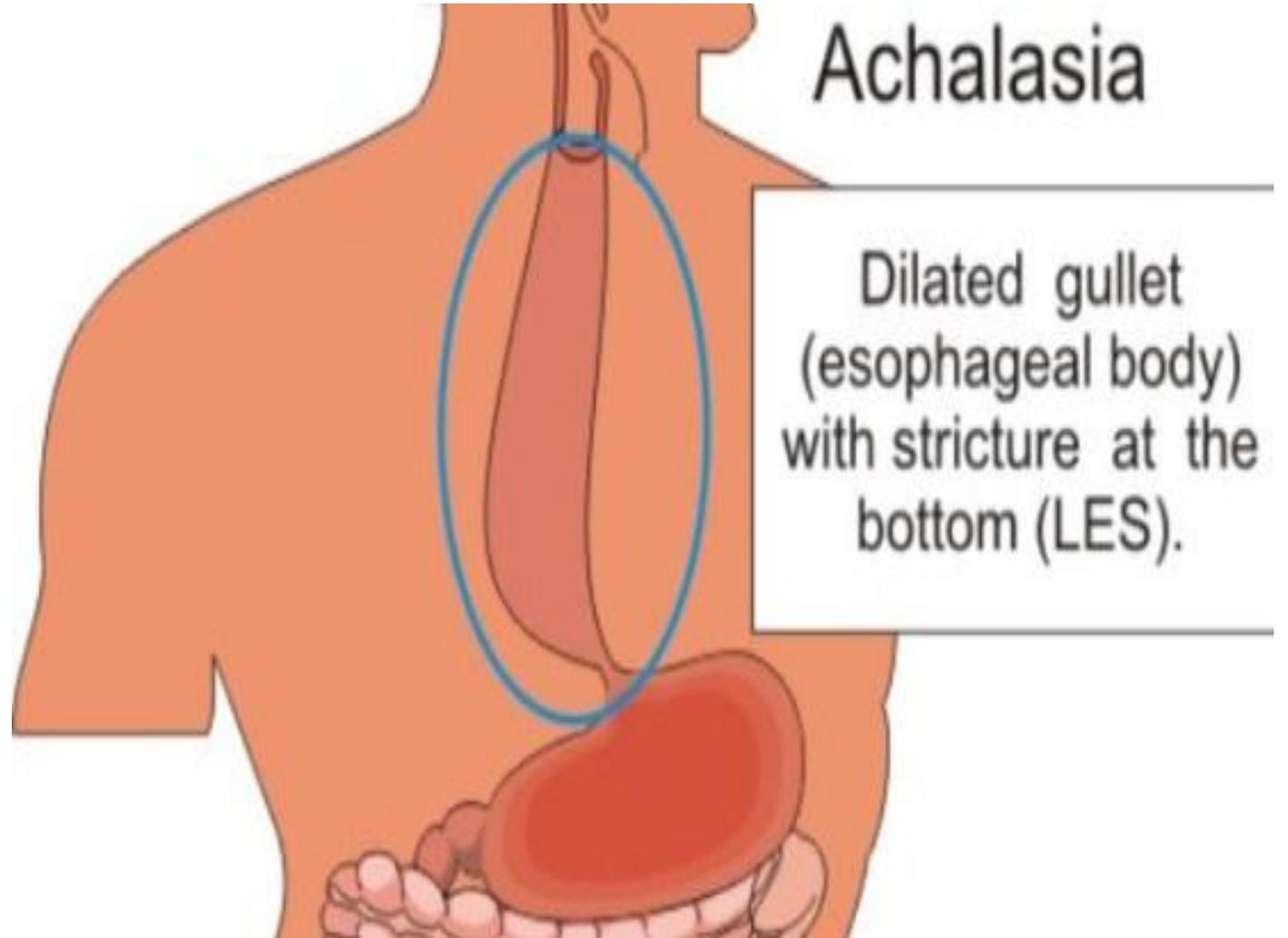
BENIGN DISEASES OF ESOPHAGUS



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Achalasia Cardia

- Abnormal dilatation of esophagus
- Degeneration of NO producing inhibitory neurons
 - loss of ganglionic cells in the myenteric plexus (distal to proximal)
- Non relaxation of LES
- Basal LES pressure rises

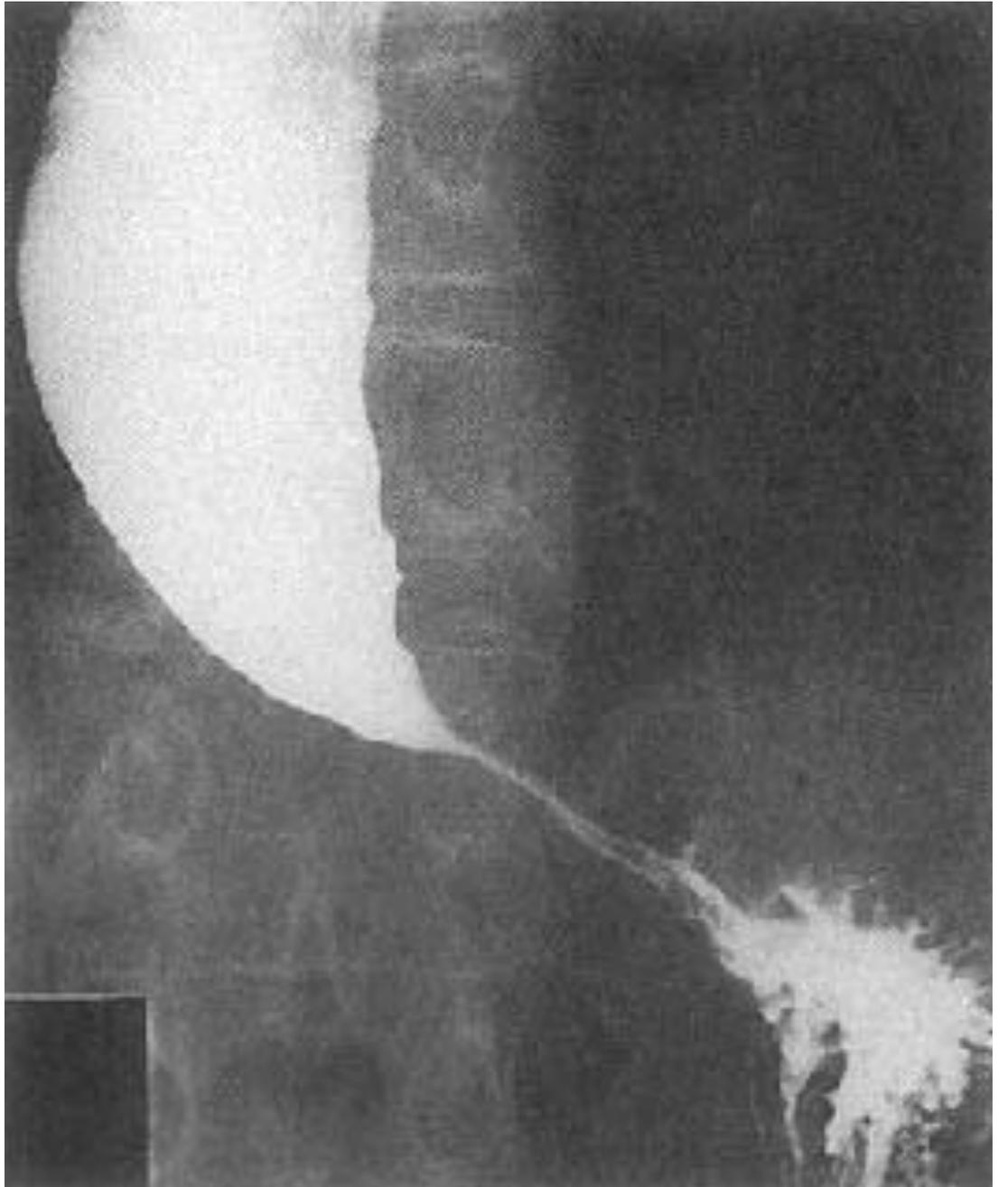


Symptoms

- Dysphagia more for liquids than solids
- Chest Pain
- Regurgitation
- Nocturnal cough
- Recurrent aspiration

Diagnosis

- Plain x ray (air-fluid level, wide mediastinum, absent gastric bubble)
- Barium Swallow (dilated esophagus with taper at LES)- **BIRD BEAK** appearance
- Endoscopy-tight cardia & food residue in esophagus
- **Esophageal manometry** -absent peristalsis, ↓ LES relaxation, & resting LES >45 mmHg)

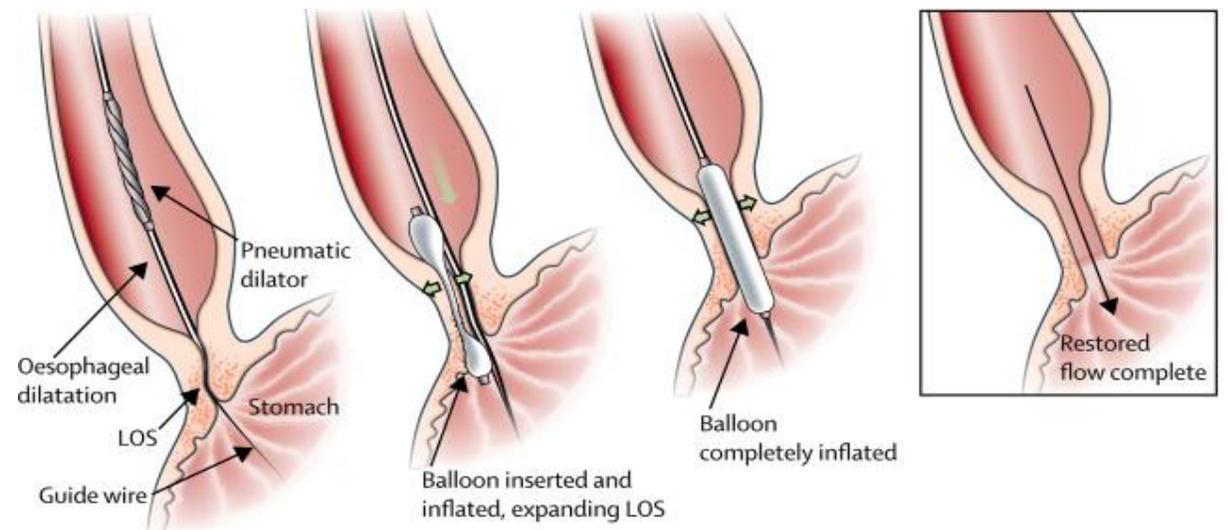


TREATMENT

- Isosorbide dinitrate
- CCBs-Nifedipine
- Botulinum Toxin
 - prevents ACH release at NM junction
 - Endoscopic injection into LES
 - needs repetitive sessions

Pneumatic Dilatation

- Balloon dilatation of cardia
- Disruption of circular muscle
- Complication- perforation



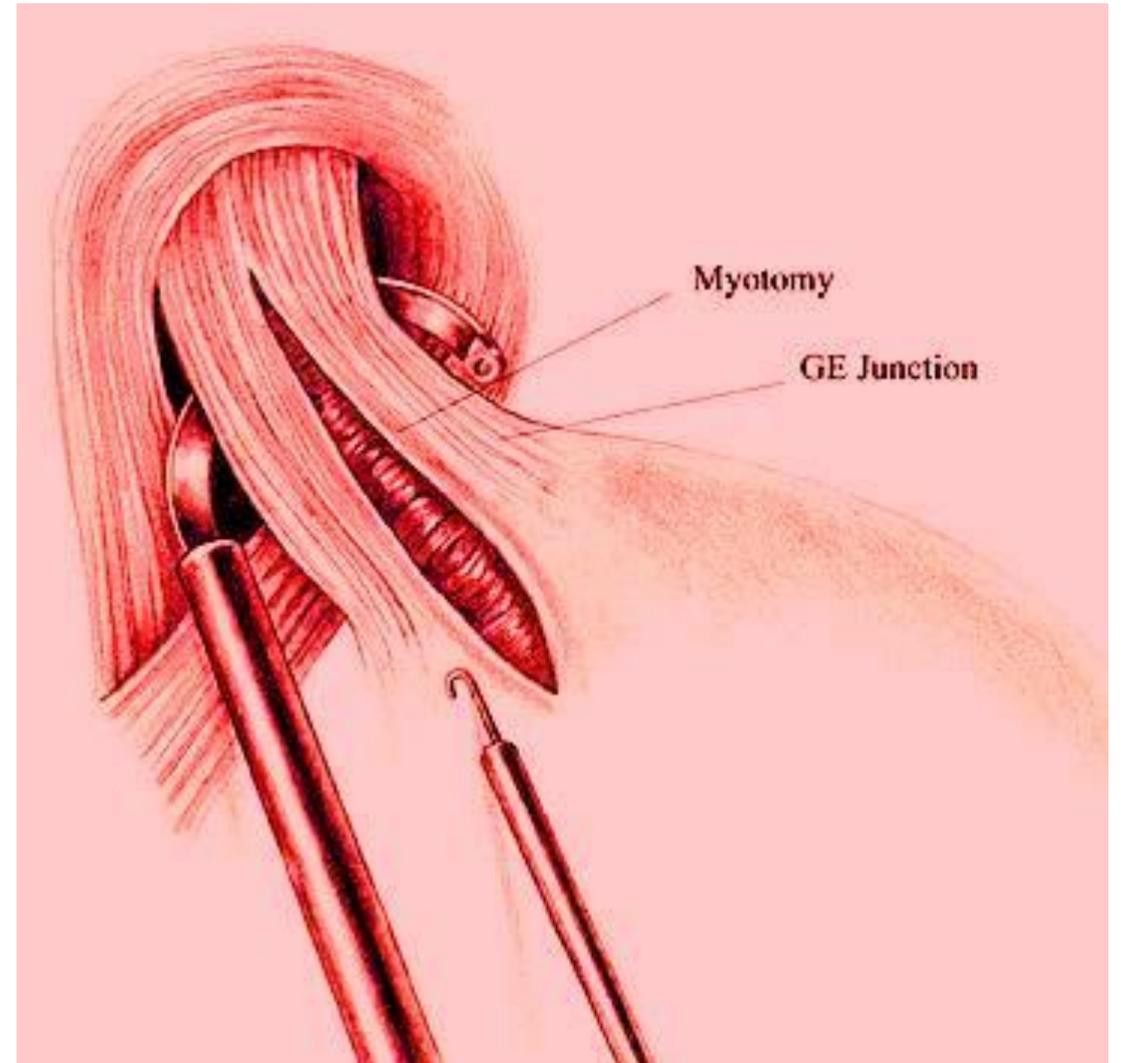
Surgical Treatment

- **HELLERS MYOTOMY**

Cutting muscle of Lower esophagus & cardia.

Complication- GERD

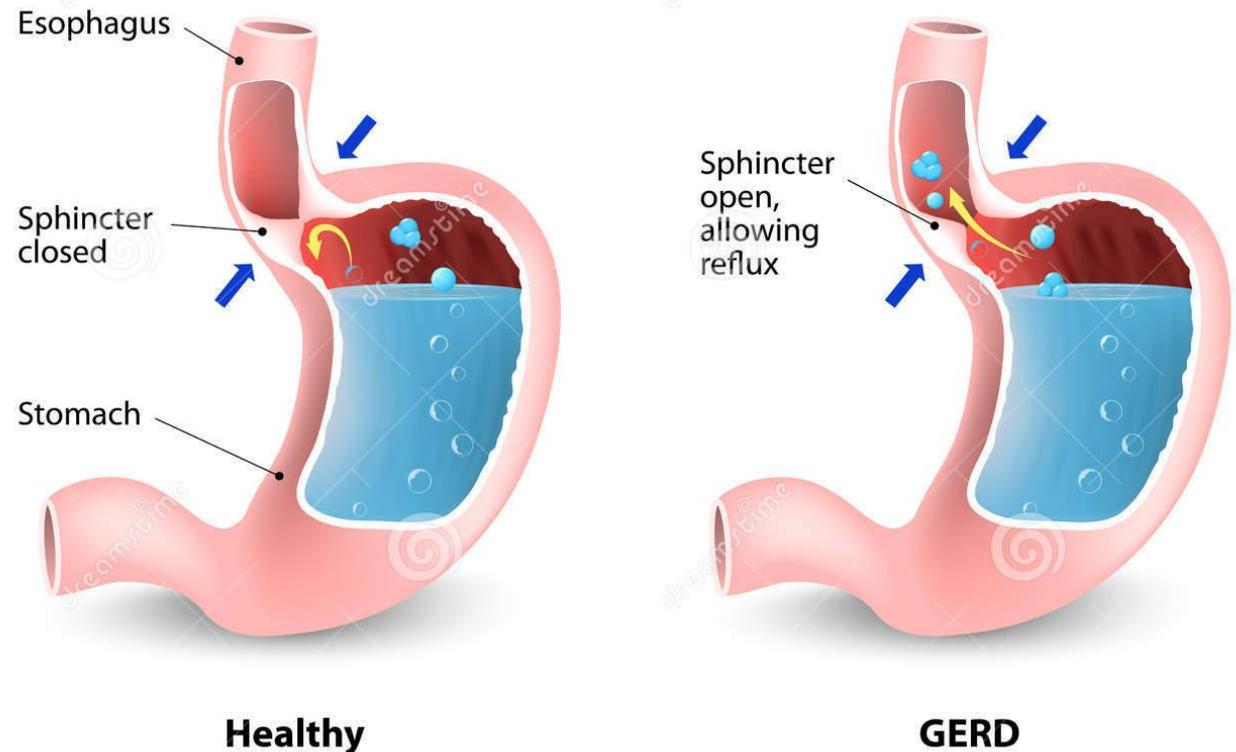
Therefore Partial Anterior Fundoplication (HELLER-DOR's operation) is added.



GERD Gastro-Esophageal Reflux Disease

- Reflux of contents from stomach into the lower esophagus.
- Due to loss of competence of the Lower esophageal sphincter
- May be associated with hiatus hernia
- Alcohol, smoking, stress

Gastroesophageal reflux disease



- Symptoms- dysphagia
heartburn
epigastric discomfort
regurgitation
cough
hoarseness
wheezing
chest pain



- Diagnosis- Endoscopy

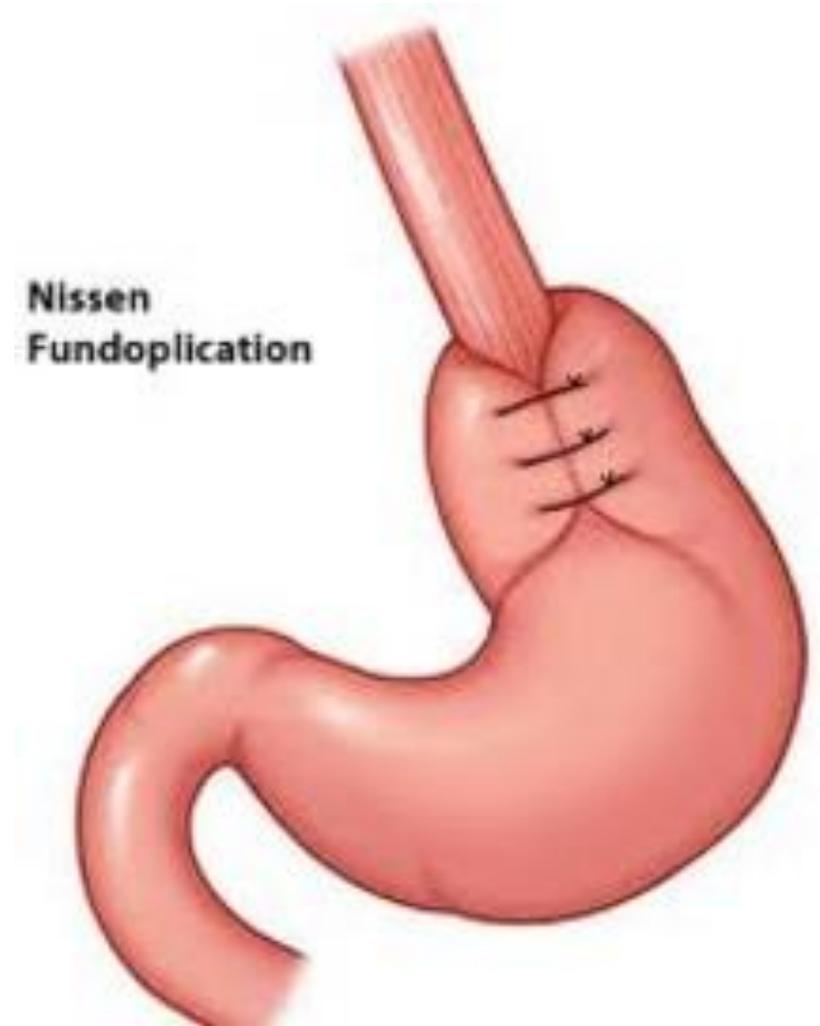
24 hour pH monitoring – GOLD STANDARD

- Complications of GERD:

1. Chronic esophagitis – bleeding & strictures
2. BARRETS ESOPHAGUS- columnar metaplasia of lower part of esophagus which predisposes to ADENOCARCINOMA OF ESOPHAGUS.

Management of GERD

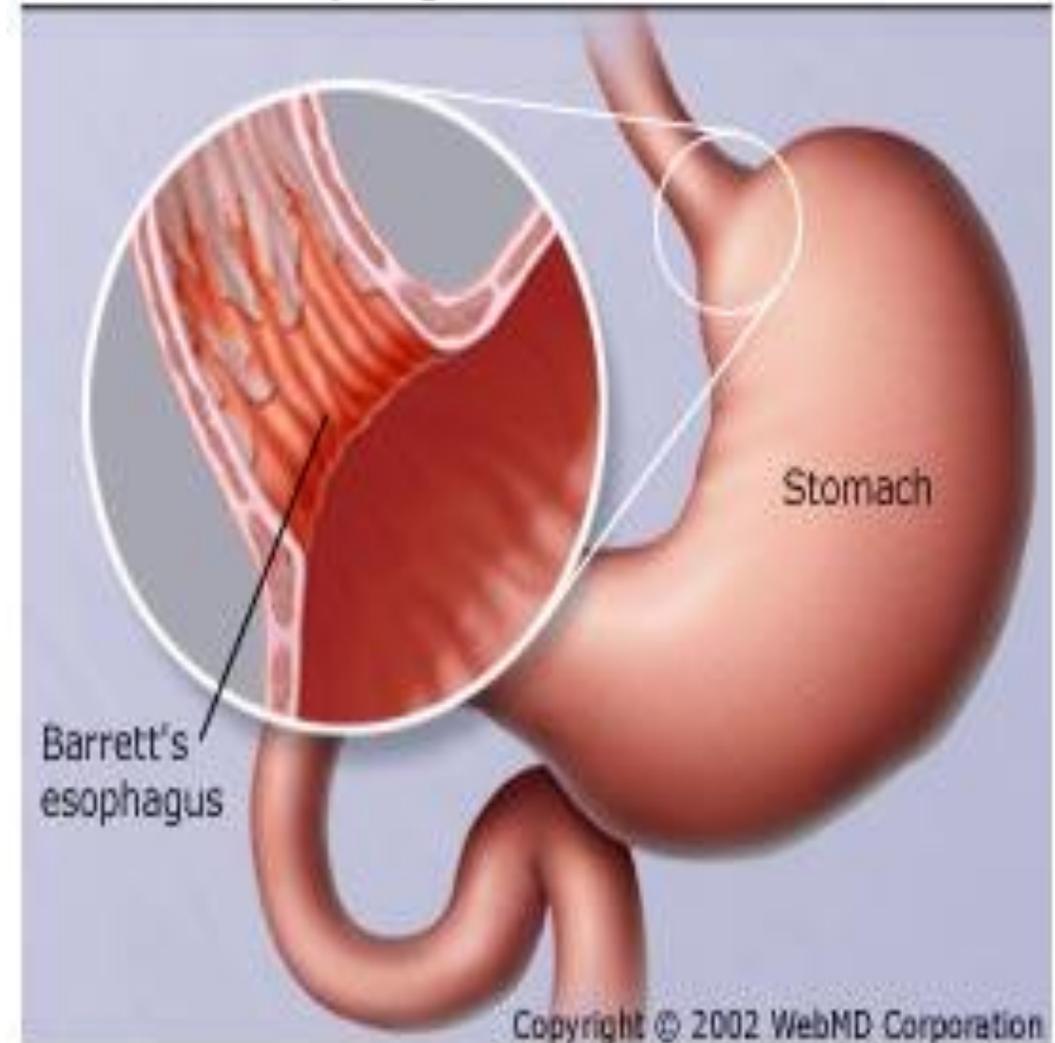
- Lifestyle changes: control of obesity
stop smoking & alcohol
Avoid tea, coffee, chocolate
- Medical Management :
- PPIs – Omeprazole 20 mg BD for 3-6 months
- Prokinetic drugs-
Metoclopramide, Domperidone
- Surgical management : Laparoscopic
Fundoplication



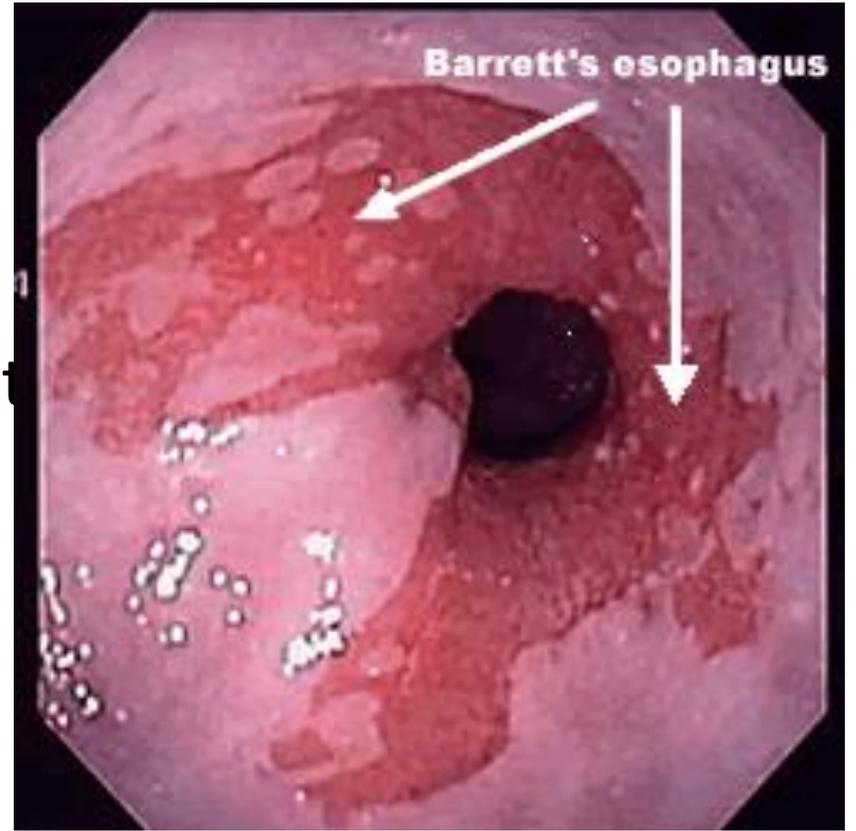
BARRETTs Esophagus

- Metaplastic change in mucosal lining of esophagus in response to chronic GERD
- Columnar epithelium
- Hallmark-presence of mucus secreting Goblet cells (intestinal metaplasia)
- Increased risk of Adenocarcinoma of Esophagus

Barrett's Esophagus



- Classic Barrett's – 3cm or more columnar epithelium
- Short segment Barrett's- < 3 cm columnar epithelium
- Cardia Metaplasia – intestinal metaplasia at the GE junction without any macroscopic change at endoscopy
- TREATMENT – treat the underlying GERD



Perforation

- Can be caused
 1. Spontaneously (Boerhaeves syndrome) OR by
 2. Instrumentation - most common cause
 3. Foreign bodies
 4. Penetrating injuries – bullets, knives
- May lead to mediastinitis, septic shock or subcutaneous emphysema

Mallory Weiss Tear

- Mucosal tear at the cardia due to forceful vomiting
- Vigorous vomiting produces a vertical split in gastric mucosa immediately below the squamo-columnar junction at the cardia.
- Hematemesis
- TREATMENT- conservative management
 - endoscopic injection therapy for severe hematemesis.

Boerhaave Syndrome

- Occurs when a person vomits against a closed glottis, leading to
 - Rapid increase in esophageal pressure
 - Esophagus bursts at its weakest point in lower third
 - Sending a stream of material into mediastinum & pleural cavity
 - Leading to mediastinitis,pleuritic
-
- Severe chest pain following meal
 - Shortness of breath

- Chest X ray- air in mediastinum, pleura or peritoneum
- Contrast swallow or CT needed

- MANAGEMENT – mostly conservative
 - nasogastric suction
 - broad spectrum i/v antibiotics

SURGICAL MANAGEMENT required when patients

- Are unstable due to sepsis or shock
- Have heavily contaminated mediastinum,pleura or peritoneum.
- Have widespread intrapleural or intraperitoneal extravasation of contrast material.

- Direct repair preferred if perforation is recognized early (first 4-6 hours)
- For delayed presentation- Creation of a controlled fistula & distal enteral feeding by placing T-tube into esophagus with drains & feeding jejunostomy.

Plummer Vinson syndrome

- Paterson Kelly syndrome or Sideropenic Dysphagia
- Post cricoid web in esophagus
- Iron deficiency anemia
- Glossitis
- Koilonychia
- Treatment – Balloon Dilation



