

# **ESOPHAGITIS**



## **Learning Outcomes**

- LO1:What is esophagitis
- LO2:Describe and identify the varied clinical manifestations of esophagitis
- LO3:Identify the various etiologies of and risk factors for esophagitis
- LO4:Diagnostic tests for esophagitis
- LO5:Treatment strategies of esophagitis
- LO6:Complications of esophagitis



# **LO1:Esophagitis**

• Esophagitis is a general term for any inflammation, irritation, or swelling of the esophagus.



# LO2:Most common types of Esophagitis

- 1. Reflux Esophagitis/GERD
- 2. Infectious esophagitis
  - Candidiasis
  - HSV
  - CMV
- 3. Eosinophilic esophagitis
- 4. Pill Induced esophagitis
- 5. Radiation esophagitis
- 6. Esophageal cancer



## **LO2:Clinical features**

- 1. Dysphagia
- 2. Heartburn
- 3. odynophagia are symptoms with a high degree of specificity for the esophagus
- 4. Chest pain



# **LO3:Reflux Esophagitis**

- Gastroesophageal reflux disease (GERD) is a condition in which the stomach contents (food or liquid) leak backwards from the stomach into the esophagus.
- This action can irritate the esophagus, causing heartburn and other symptoms.
- Due to defect in LES.



## LO3:GERD risk factors

- The risk factors for reflux include
  - hiatal hernia
  - Pregnancy
  - Scleroderma
  - Obesity
  - Cigarettes
  - Alcohol
  - Certain meds:
    - Anticholinergic
    - Beta blockers, CCB
    - Bronchodilators
    - Dopamine
    - Sedatives/anxiety meds, tricyclic antidepressants



# **LO4:Endoscopy advantages**

- The major advantages of endoscopy over contrast radiography in evaluation of diseases of the alimentary tract include
  - Direct visualization
  - More accurate and sensitive evaluation of mucosal lesions
  - <u>The ability to obtain biopsy specimens</u> <u>from superficial lesions</u>
  - <u>The ability to perform therapeutic</u> <u>interventions</u>.

#### LO4:

Esophageal pH monitoring, the "gold standard" for identifying acid reflux, is performed by fixing a small pH probe in the esophagus, 5 cm above the LES, and recording all episodes in which esophageal pH drops to less than 4 over a 24- to 48-hour period



# LO5:Treatment trial over endoscopy

- Currently, the preferred method for establishing GERD as the cause of symptoms (e.g., chest pain, wheezing) is an *empirical trial of acid suppression with a PPI* (e.g., omeprazole, 20 mg twice daily),
  - which normalizes esophageal acidity in approximately 95% of subjects.



# **LO5:Lifestyle modifications**

- Elevate the head of the bed 6 inches
- Stop smoking
- Stop excessive alcohol consumption
- Reduce dietary fat
- Reduce meal size
- Avoid bedtime snacks
- Lose weight (if overweight)

- Avoid:
- Chocolate
  - Coffee (caffeinated and decaffeinated),
- Tea,
- Cola beverages,
- Tomato juice



#### **LO5:Nissen Fundoplication**



• When indicated, the operative procedure of choice is laparoscopic Nissen fundoplication, with a success rate of about 90%



# **LO6:Complications**

• The two major complications of GERD are peptic stricture formation and Barrett's esophagus (frequency, 5 to 15%)



## LO6:Barrett's esophagus

- Barrett's esophagus is replacement of reflux-damaged squamous epithelium in the distal part of the esophagus by metaplastic, specialized columnar epithelium.
- It is found in 10 to 15% of patients with GERD, principally in white individuals.
- The lesion is suspected on endoscopy by the presence of reddish epithelium extending from the stomach into the tubular lumen of the esophagus



# LO6:Barrett's esophagus





- Confirmation is by biopsy.
- Barrett's metaplasia is a premalignant lesion that increases the risk for esophageal adenocarcinoma 30- to 125-fold over that of the general population.



- Factors that increase the risk for malignancy in Barrett's esophagus include:
  - White race,
  - Male sex,
  - Alcohol and tobacco use,
  - Obesity,
  - Its length.



# **Infectious Esophagitis**

- most commonly found in patients who are immunocompromised:
  - usually from cancer chemotherapy,
  - post-transplant antirejection medication
  - AIDS
  - **DM**
  - Candida albicans
  - herpes simplex virus type 1 (HSV-1)
  - CMV

#### **Candidal esophagitis**



Endoscopic evaluation of the esophagus revealed an erythematous mucosa covered with white plaque like lesions through the esophagus. *Courtesy of Andres Gelrud, MD.* 





### **Pill-Induced Esophagitis**

- commonly develops in patients, particularly the elderly, who are taking medication improperly (i.e., while supine or with too little liquid).
- It also occurs in patients with a preexisting abnormality, such as a stricture, diverticulum, or motor disorder.
- Pills adhere to the esophageal mucosa and cause necrosis and ulceration by the topical release of caustic medication

#### **Pill esophagitis**



Endoscopy revealed superficial ulcerations with bleeding localized in the proximal esophagus at the level of the aortic arch. The mid and distal esophageal mucosa appeared normal. *Courtesy of Andres Gelrud, MD and Kenneth Falchuk, MD*.



