

# Dysphagia and GERD

Morning Report

12/1/03



# Classification

- Oropharyngeal (transfer) dysphagia: upper esophagus, pharynx, or upper esophageal sphincter
  - Food gets stuck in cervical region immediately after swallowing
- Esophageal dysphagia: body of esophagus, lower esophageal sphincter, or cardia
  - Food gets stuck at sternum or suprasternal notch several sec. after swallowing. Discomfort localized to suprasternal notch is often referred from actual location below.
- Functional dysphagia: no cause identified

# History

- Solid vs. solid and liquid at onset
- Progressive vs. intermittent (ring, achalasia)
- Patient localization
- **Heartburn** (neither sensitive nor specific)
- **Weight loss**
- **Odynophagia:** infection, pill-induced, tumor
- **Regurgitation:** Upper lesion
- **Hoarseness:** tumor invading laryngeal nerve, GERD
- **Aspiration**
  - During swallowing: OP cause or TE fistula
  - At other times: achalasia, Zenker's, GERD
- **CP:** DES, large bolus/foreign body
- **Hiccups:** distal esophagus
- **Anemia** (Plummer-Vinson, peptic stricture)
- **Dry mouth/eyes:** Sjogren's, medications

# Lower Esophageal Causes of Dysphagia

- Obstructive
  - Stricture (Peptic, infection, caustic, pill esophagitis, XRT)
  - Rings/Webs
  - Carcinoma
  - Extrinsic Lesions
    - Vascular abnormalities
    - Thyromegaly
    - Cervical spine
    - Mediastinal mass
  - Scleroderma
- Motility
  - Achalasia (abnormal LES relaxation)
  - Pseudoachalasia
  - DES
  - Chagas
  - Neuromuscular
  - Scleroderma

# Evaluation of dysphagia

- EGD: procedure of choice
- Barium Swallow
  - Should be performed first when an upper lesion is suspected (EGD, which requires blind intubation of the esophagus, may risk perforation)
  - May detect rings or external compression which may be missed by EGD
- Motility Study:
  - Abnormal in up to 50% of patients with nonstructural dysphagia
  - Indicated for patients with persistent dysphagia despite treatment of apparent cause

# Pathophysiology of GERD

- Acid hypersecretion
  - Zollinger-Ellison
- LES incompetence
  - Recumbency
  - Hiatal hernia
  - NG tube
  - Heller myotomy
  - Scleroderma
  - Meds: CaCB, Nitrates
- Increased Gastric Pressure
  - Obesity
  - Pregnancy
  - Ascites
- Increased gastric volume
  - Large meal
  - Pyloric obstruction
  - Gastroparesis

# Presentation of GERD

- Sensitivity for classic symptoms (heartburn and water brash) remains low.
- Atypical S/SX: Asthma, CP, cough, globus, hoarseness, ST
- Dysphagia is presenting symptom in up to 1/3 of pts. with strictures
- Warning sx: dysphagia, early satiety, GIB, Iron deficiency, emesis, weight loss

# Diagnosis

- Dx: usually made clinically
- Empiric acid suppression 4-8 weeks
- Further testing indicated in patients with warning sx, no response to PPI or disease duration 5-10 years
- 24Hr pH probe: accepted standard
- EGD to identify complications

# Complications of GERD

- Esophagitis
  - Mild: may or may not be seen on EGD
  - Erosive: marked erythema, friability, bleeding, linear ulcers, exudates visible on EGD
- Peptic stricture
  - Progressive dysphagia of solids to liquids
  - Long-standing inflammation resulting in fibrosis
  - Incidence: 10% of GERD
  - Risk factors: age, male, duration of symptoms, or Increased acid exposure

# Complications of GERD

- Barrett's
  - Replacement of squamous epithelium by columnar.
  - May be complicated by stricture or esophageal ulcer
  - AdenoCA occurs in 2-5%
- Asthma:
  - 34-89% of asthmatics have GERD
  - Due to micro-aspiration into tracheobronchial tree
- Laryngitis/subglottic stenosis
- Pharyngitis
- Pneumonitis/Aspiration
- Sinusitis
- Dental disease

# Treatment

- H2Blockers
- Proton Pump Inhibitors
- Metoclopramide: adjunctive only
- Avoid Meds: CaCB, nitrates, anticholinergics
- Strictures
  - progressive dilation
  - Aggressive PPI or fundoplication

# Surgery for GERD

- Indications

- failed medical management but at least partial response to acid suppression
  - Patient preference
  - Complications
  - Large Hiatal hernia
  - Normal gastric emptying and esophageal motility but decreased LES pressure
- Less effective for alleviating cough, asthma, laryngitis than for heartburn
  - Complications: dysphagia(10%), bloating, diarrhea, nausea, early satiety (2-3%)
  - Marginal superiority over antacid, ~50% require antireflux therapy within 3-5 years

# Lifestyle Modifications for GERD

- Recommended by American College of Gastroenterology as adjunctive treatment but most are based on expert opinion and not on good data. None work as well as medication.
  - Weight loss<sup>\*2</sup>
  - Elevate HOB<sup>^1/1</sup>, sleep left-side down<sup>0</sup>
  - Smoking cessation<sup>0</sup>
  - Avoid fatty foods<sup>\*3</sup>, coffee<sup>^1/1</sup>, EtOH<sup>0</sup>, mint<sup>0</sup>, citrus<sup>0</sup>
  - Small meals<sup>^2/0</sup>, do not eat <2hr before sleep<sup>0</sup>

\* RCTs show no benefit<sup>number of trials</sup>

^ Number of RCTs supporting/number of RCTs not supporting

0 No trials found

# Surveillance

- EGD should be performed every 1-2 years for Barretts without dysplasia and more frequently with intestinal metaplasia
- High grade dysplasia is indication for esophagectomy
- Warning sx
- No response to PPI
- Disease duration 5-10 years