Objectives

- Evaluate the esophagus for
  - Nontumorous lesions that may necessitate further evaluation by a foregut surgeon
  - Nontumorous lesions that need no directed evaluation
- Correlate posterior mediastinal findings on plain film, CT, and MRI in relationship to esophageal lesions

Outline

- Trauma
- Iatrogenic perforations
- Strictures
- Hiatal hernias
- Post-operative esophagus
- Inflammatory and miscellaneous changes

Trauma: Foreign Body Impaction

- 10-20% require endoscopic removal
- Esophagus is vulnerable to subsequent complications due to anatomy
Trauma Blunt: Intramural hematoma

- Relatively rare
  - Protected position of the esophagus
- Associated with significant regional trauma
  - Vascular, spinal cord, tracheal
- Range from minimal trauma to catastrophic

Intramural hematoma: Coumadin

- Occurs in the setting of chest pain
- Differentiate from acute cardiovascular disease
  - Aortic
  - Pulmonary artery
  - Coronary artery
- Resolves in a few days or weeks

Trauma: Boerhaave syndrome

- Coumadin
- Occurs in the setting of chest pain
- Differentiate from acute cardiovascular disease
  - Aortic
  - Pulmonary artery
  - Coronary artery
- Resolves in a few days or weeks
**Trauma: Boerhaave syndrome**

- Incomplete cricopharyngeal relaxation during vomiting
- Abrupt increase intraluminal pressure
- Pressure elevation high enough to rupture the esophagus
- Distal left posterior wall is the most common site of spontaneous rupture

**Trauma: Mallory-Weiss tear**

- Longitudinal mucosal laceration
- Distal esophagus or at GE junction
- Pathogenesis
  - similar to Boerhaave syndrome
  - Complication of endoscopy
- A mucosal laceration without transmural perforation can be radiologically occult
  - Small foci of extraluminal gas or hemorrhage

**Trauma: Iatrogenic perforation**

- Endoscopic procedures
- Post-surgical procedures
- Thermal injury during left atrial ablation

**Trauma: Mucosal laceration**

**Trauma: Stricture dilatation**
Trauma: Left atrial RF ablation

Trauma: RF Ablation

Trauma: Complications
- Mediastinitis
- Pneumonia
- Empyema
- Pulmonary Abscess
- Acquired fistulas

Trauma: Acquired TEF

Strictures
- Post-radiation
- Gastroesophageal reflux
- Scleroderma
- NGT
- Barrett esophagus
- Caustic ingestions
- Medication
- Skin diseases
- Unknown cause

Strictures: Post radiation
- Peak incidence is 3-4 weeks into a course of radiation therapy
- Can be dose limiting
- Risk factors
  - Age
  - Tumor type
  - Tumor burden
  - Concurrent chemotherapy
  - BMI
- Imaging findings
  - Smooth, long, concentric, tapered, narrowing
  - Location consistent with port location
- Exclude recurrences
  - More irregular
  - Asymmetric
  - Mass effect
Strictures: GERD
- Lower esophageal
- Smooth, concentric, tapered
- 1-4 cm in length
- Can lead to sacculations

Strictures: no etiology

Thickening: Barrett esophagus

Benign dilation: Achalasia

Epiphrenic diverticulum
- Acquired mucosal outpouching
- Distal esophagus
- Associated with motility disorders