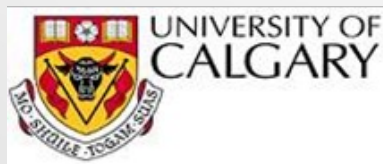


Dysphagia: Diagnostic Possibilities and Endoscopic Approach

Paul Belletrutti, MD FRCPC

Clinical Associate Professor, University of Calgary

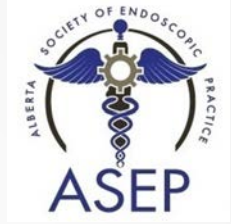


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Endo Skills 2024

Disclosure of Commercial Support

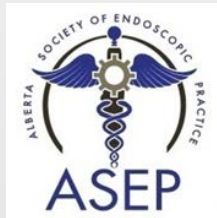


- Endo Skills is presented by the Alberta Society for Endoscopic Practice (ASEP)
- ASEP: not for profit organization, whose goal is to provide education, resources and collaboration for endoscopists and their teams
- Endo Skills planning is independent from the exhibitors
- ASEP covers expenses of speakers and provides gift+/- small honorarium to speakers and planning committee

Endo Skills 2024

Managing Sources of Potential Conflict

- Endo Skills Planning Committee: oversees the program's content development to ensure accuracy and balance.
- Information and recommendations are evidence and/or guidelines-based, and opinions of the independent speakers will be identified as such.
- Program developed in accordance to ethical standards meeting Cert+ guidelines.



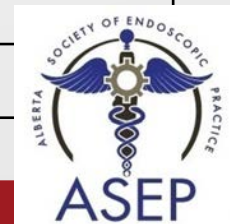
Conflict of Interest Disclosure



(Over the past 24 months)

Name: Paul Belletrutti

| Commercial or Non-Profit Interest | Relationship |
|-----------------------------------|--------------------|
| | |
| Pentax Medical | Speaker, Honoraria |
| Vantage Endoscopy | Advisory Board |
| | |



Objectives



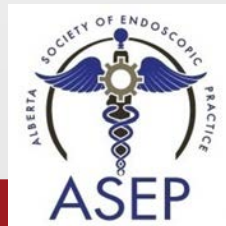
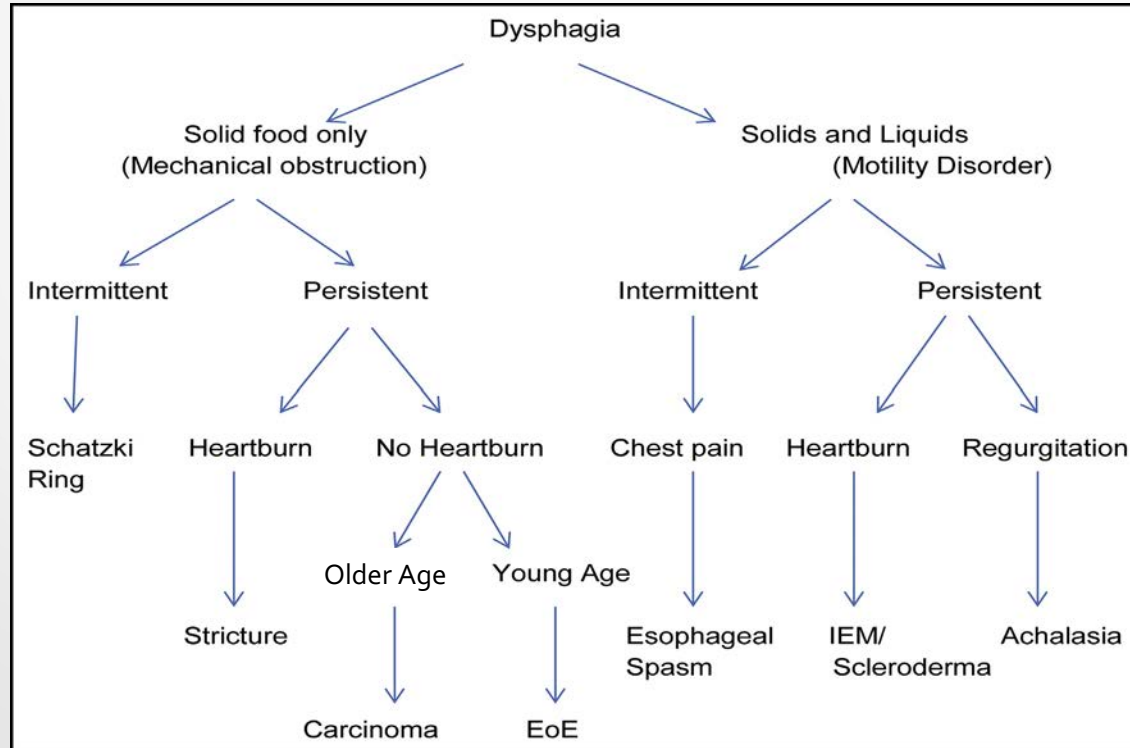
1. Understand common etiologies of dysphagia and endoscopic recognition of these etiologies.
2. Review the prevalence, history and endoscopic findings of eosinophilic esophagitis (EoE)

Oropharyngeal dysphagia

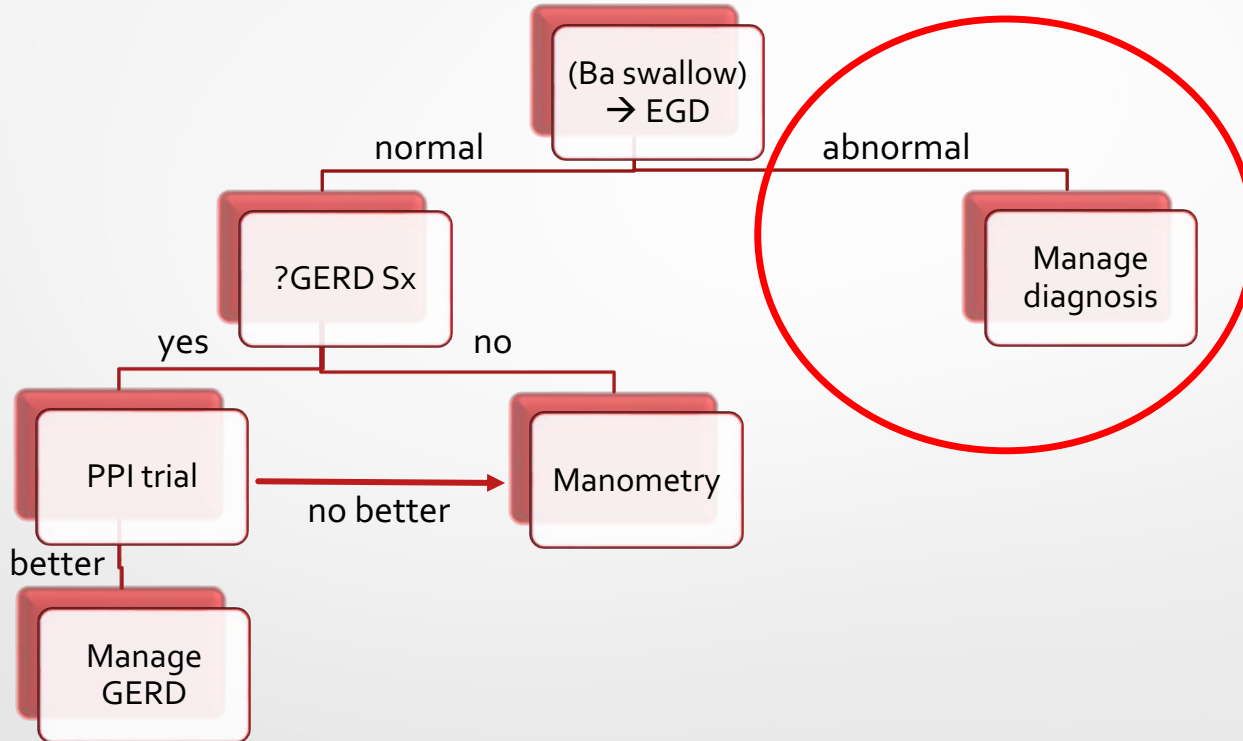


- To be distinguished from esophageal dysphagia
- Clues
 - Trouble initiating the swallow
 - Coughing/choking with swallowing
 - Trouble with Liquids > Solids
 - History of neurologic disease, stroke, skeletal muscle disease (dystrophy, myositis)

Dysphagia



Simplified approach

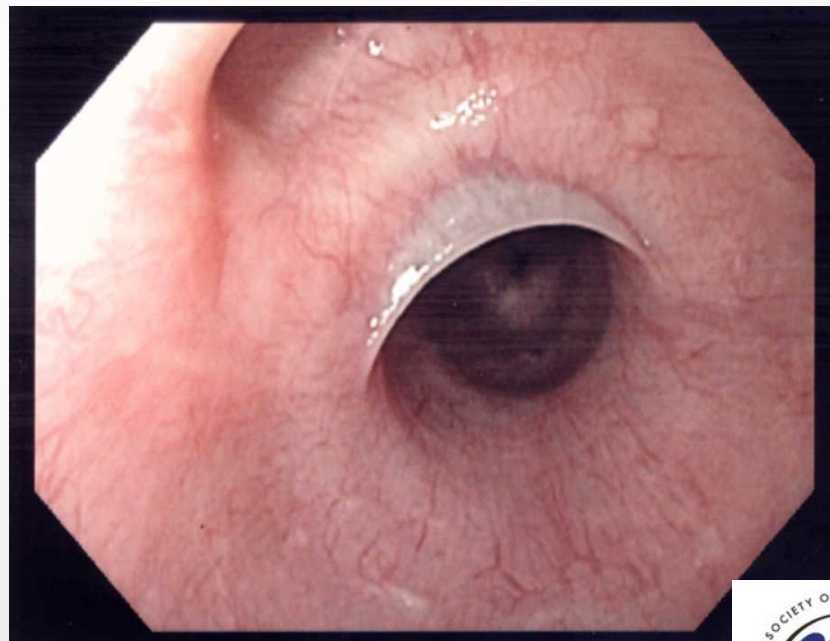
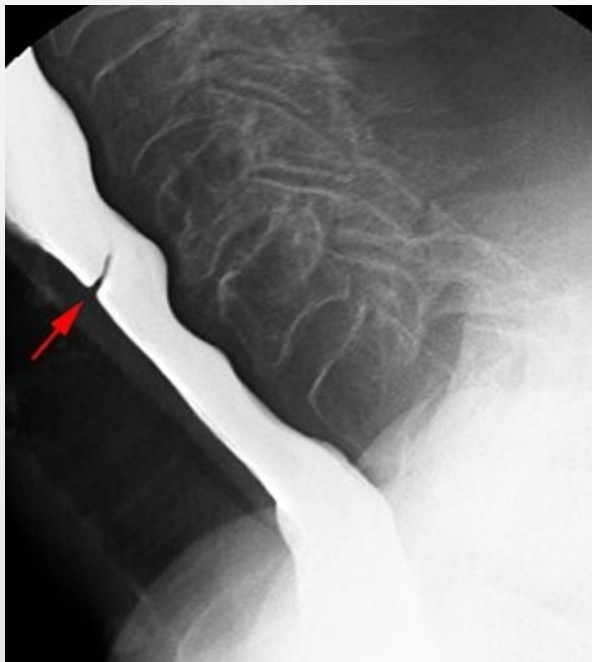


Abnormal Endoscopy

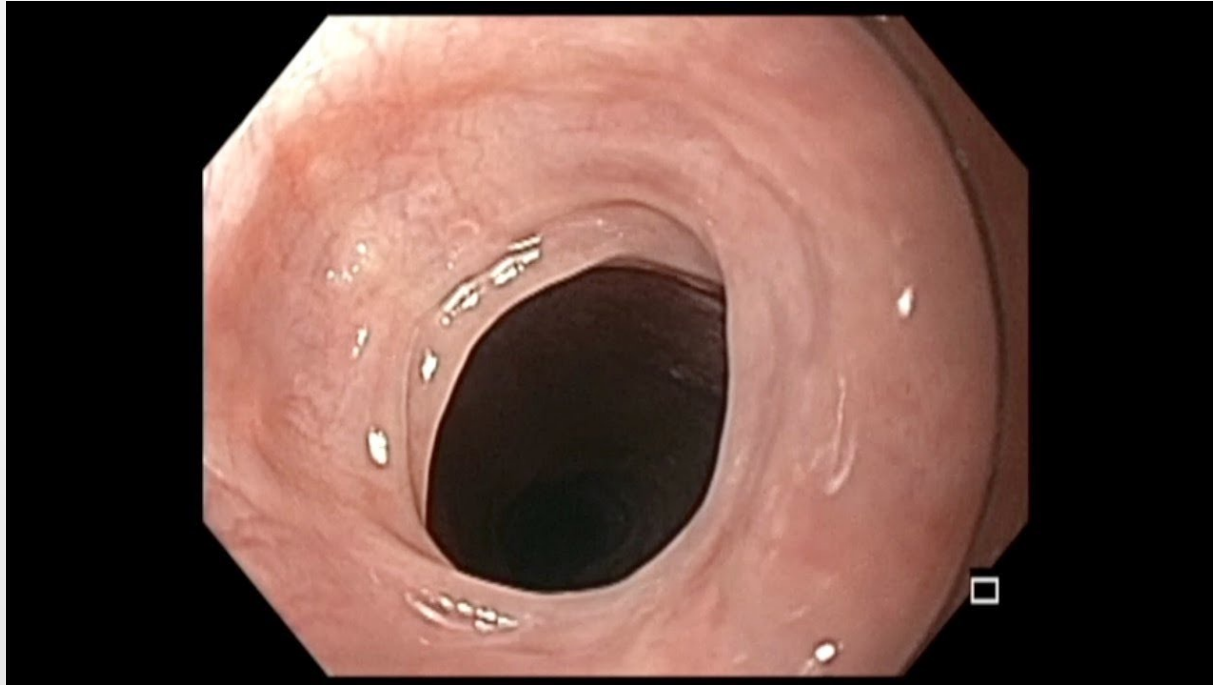


- Rings and webs
- Strictures
 - Malignant
 - Benign
- Inflammation
 - Peptic, Pill
 - Infectious
 - Eosinophilic esophagitis
- Extrinsic compression
 - Intramural
 - Leiomyoma, GIST
 - Mediastinal
 - Lymphadenopathy
 - Vascular
- Diverticulum
- Achalasia

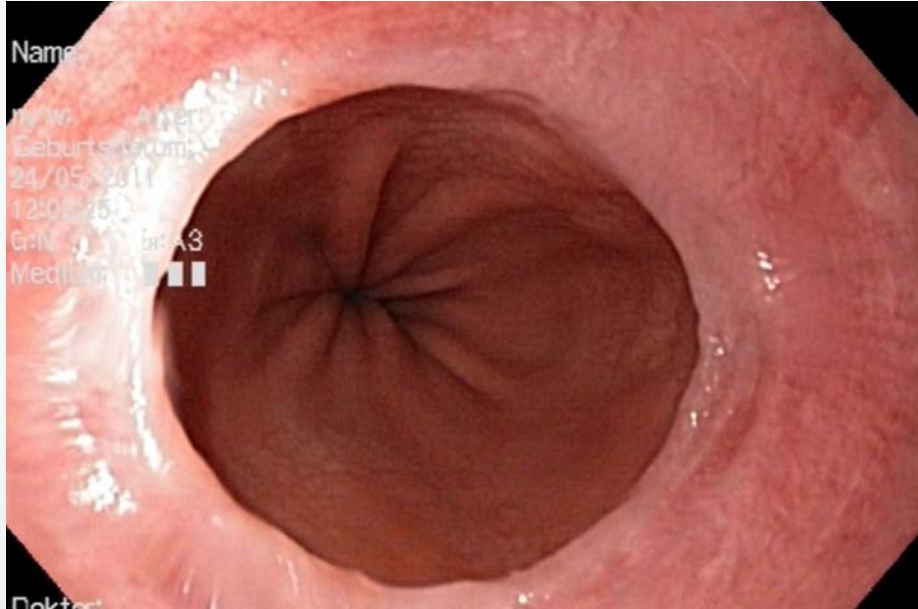
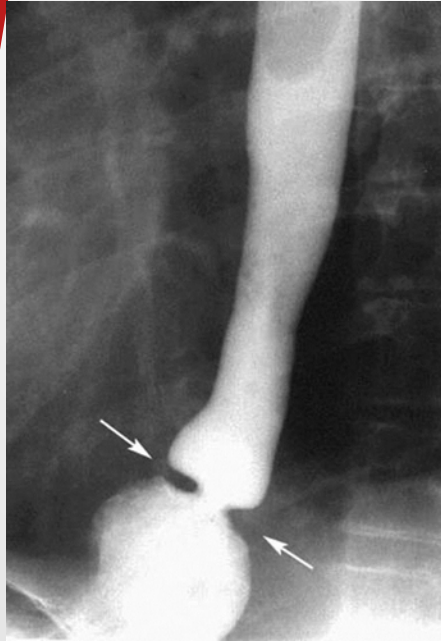
Rings and webs



Rings and webs

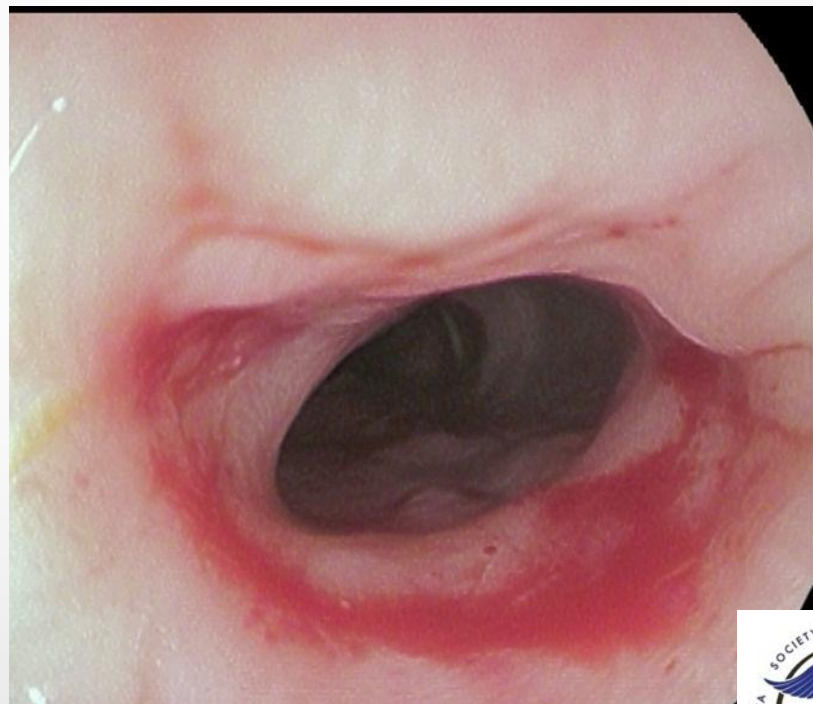
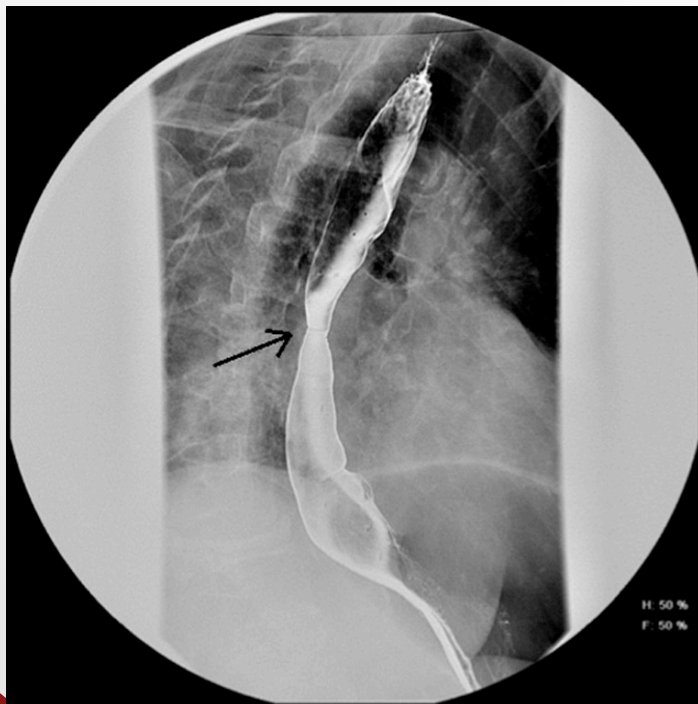


Rings and webs

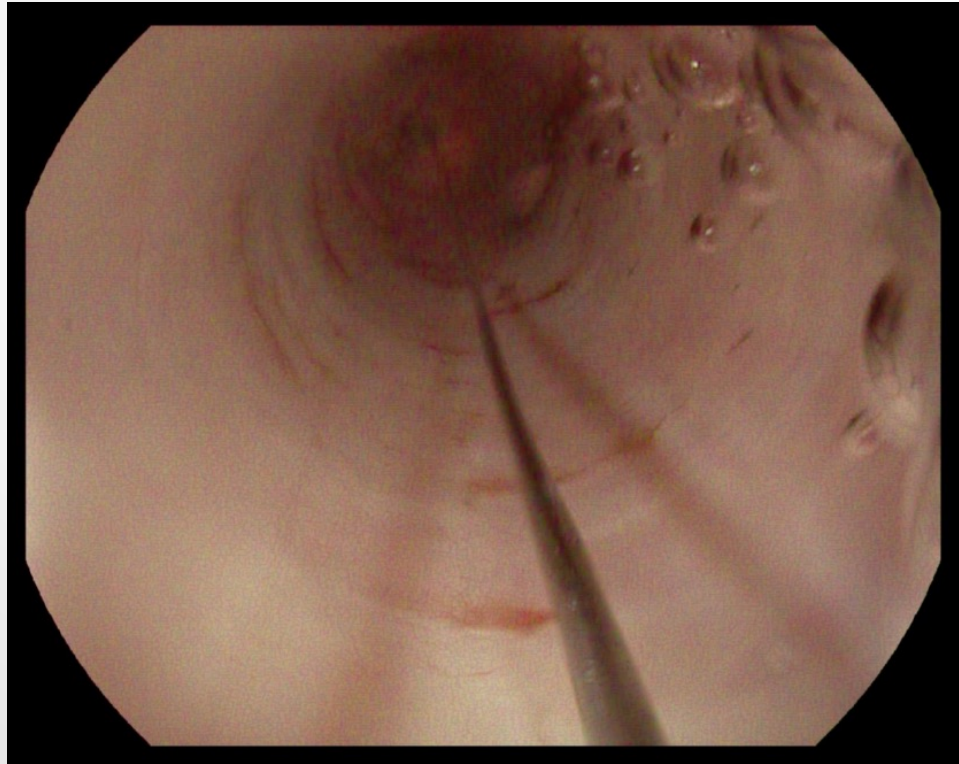


Schatzki ring

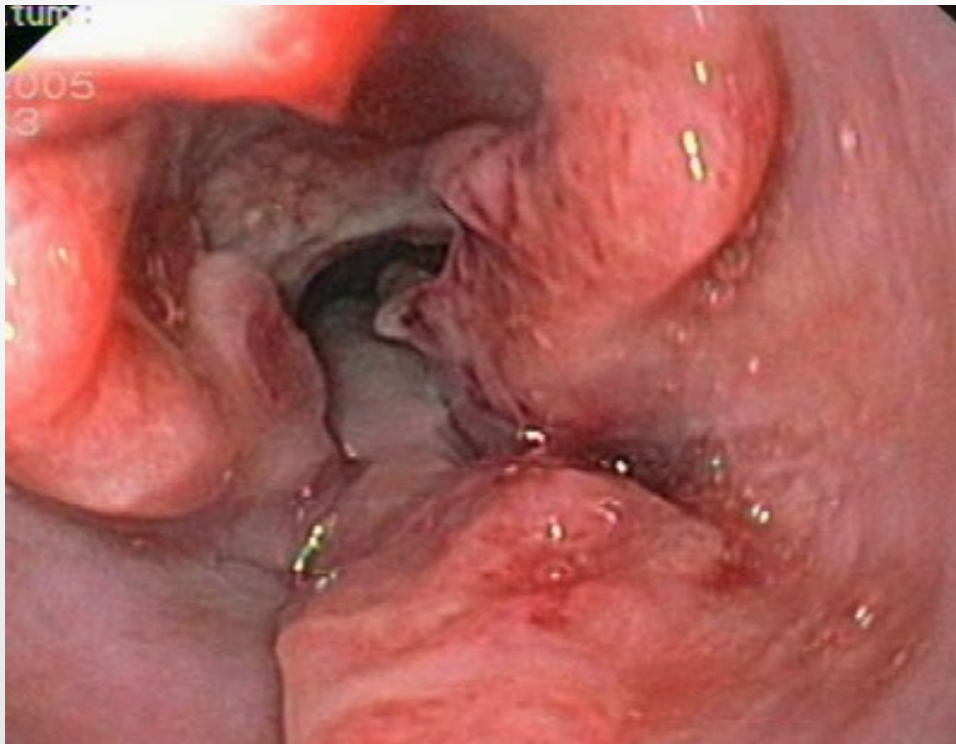
Stricture - benign



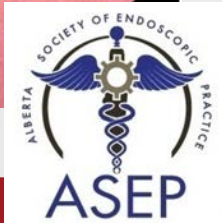
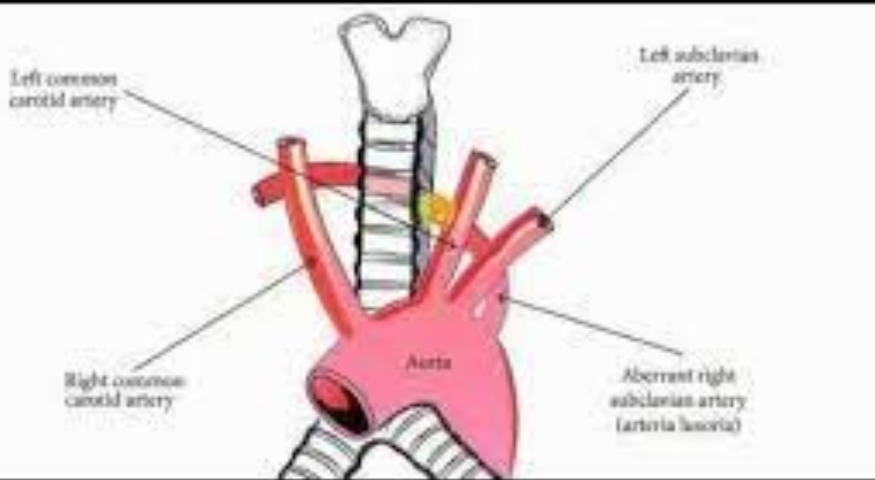
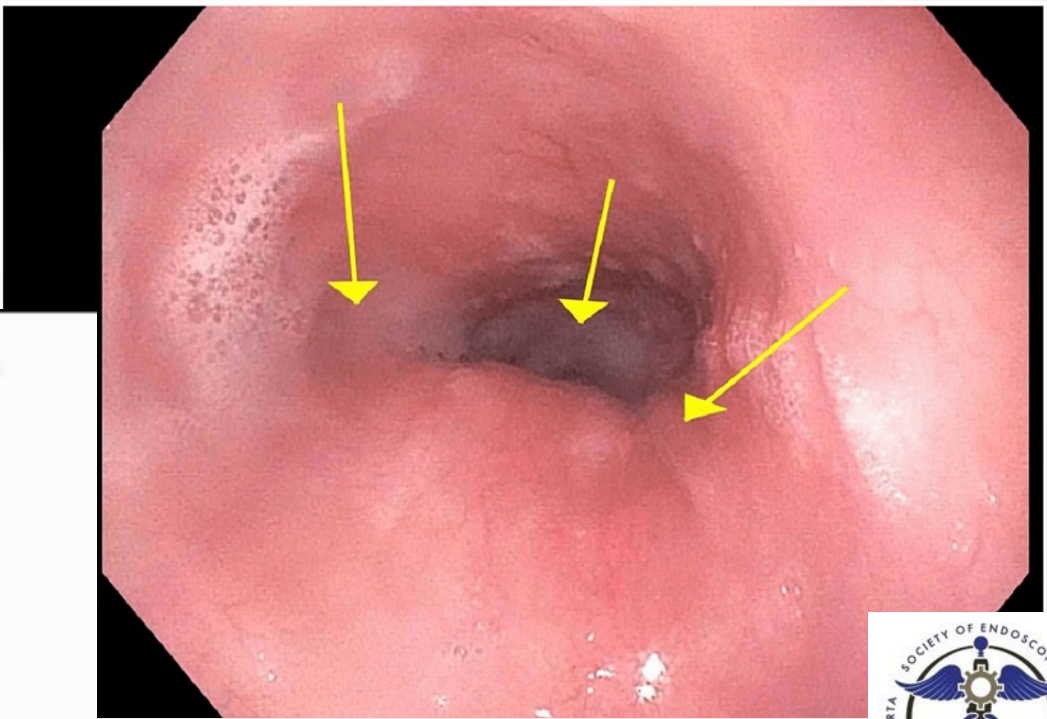
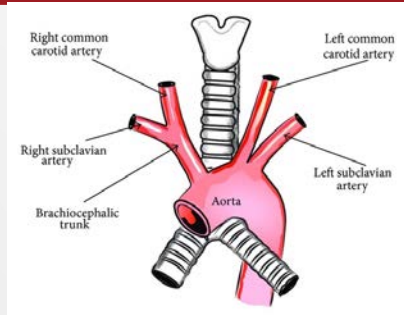
Stricture - benign



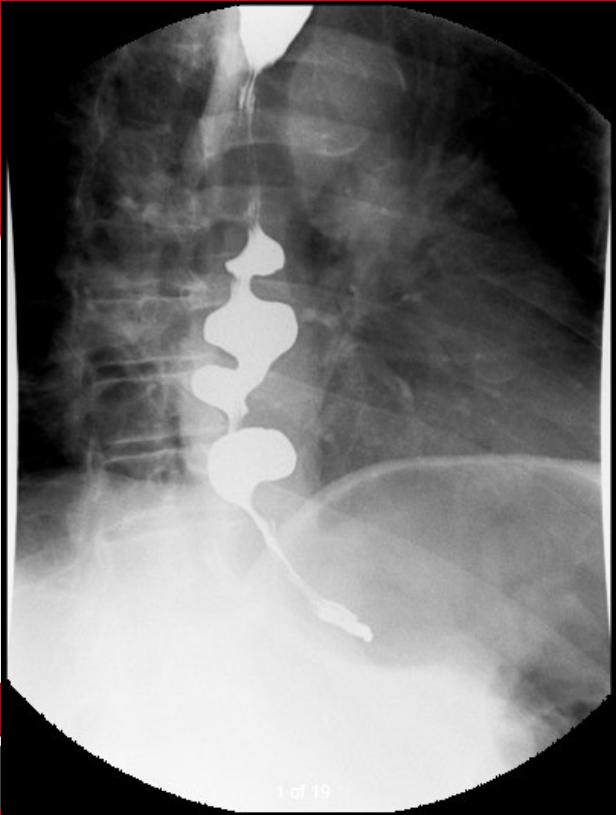
Stricture - malignant



Dysphagia Lusoria



Achalasia



Eosinophilic esophagitis (EoE)



- First characterized in the early 1990s
- Food antigen driven Th2 inflammatory condition
- Aeroallergen sensitization
 - Often concurrent atopic diseases
 - Asthma, allergic rhinitis, eczema
- Estimated prevalence 1 in 2,000

EoE- Histology



- >15 intraepithelial eosinophils/high-power field
- Eosinophil (micro)abscesses
- Eosinophil surface layering
- Bazal zone hyperplasia
- Lamina propria fibrosis

EoE - Classic symptoms



- Dysphagia
 - Solid/pills; food bolus obstruction
- Heartburn/non-cardiac chest pain
- Vomiting
- Abdominal pain
- Feeding difficulties, failure to thrive (pediatrics)C

EoE – Endoscopic findings



Major (EREFS)

- Exudates
- Rings
- Edema
- Furrows
- Stricture

Minor

- Transient rings (feline esophagus)
- Narrow caliber esophagus
- Crepe paper esophagus

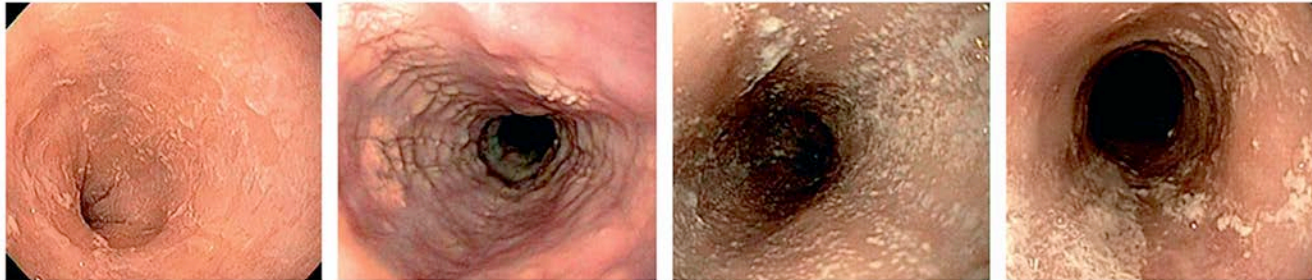
Exudates (plaques, white spots)



Mild: White lesions occupying < 10% of the esophageal surface area



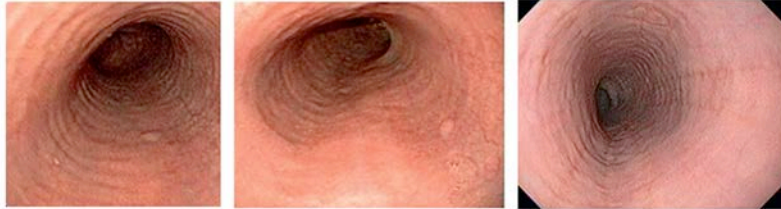
Severe: White lesions involving $\geq 10\%$ of surface area of esophagus



Rings (concentric, trachealisation)



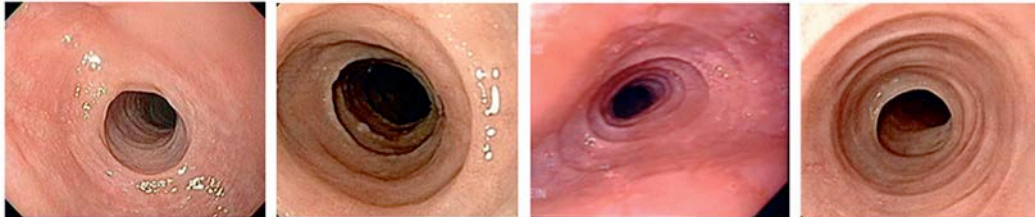
Mild: Subtle circumferential ridges seen on esophageal distension



Moderate: Distinct rings that do not occlude passage of diagnostic endoscope



Severe: Distinct rings that do not permit passage of diagnostic endoscope



Edema (decreased vascular pattern)



Normal: Distinct vasculature



Mild: Decrease clarity of vessel



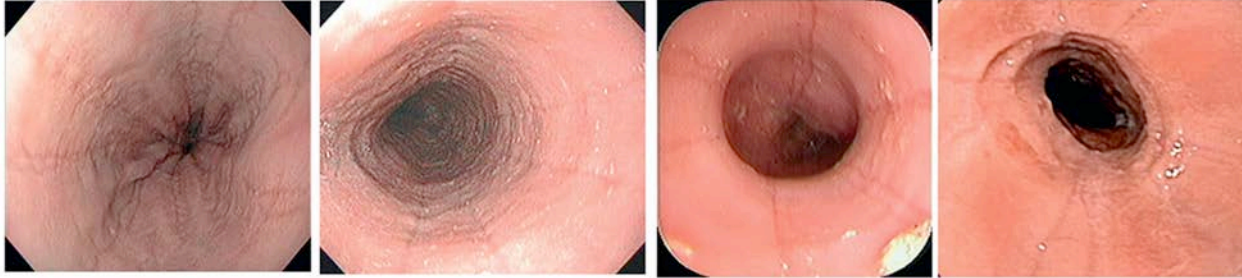
Severe: Vessels are no longer appreciated



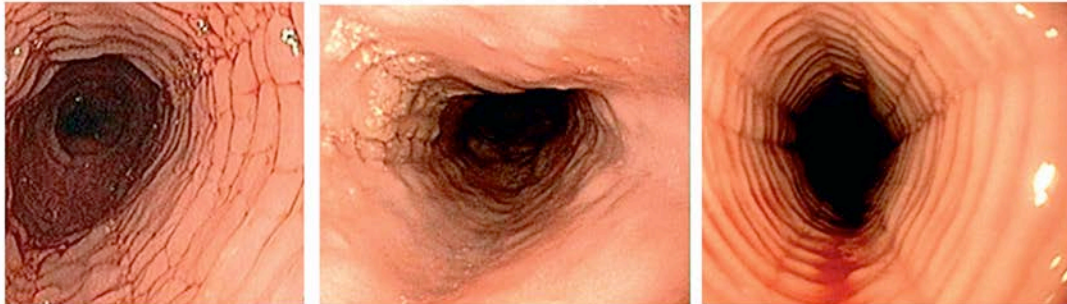
Furrows (linear, vertical lines)



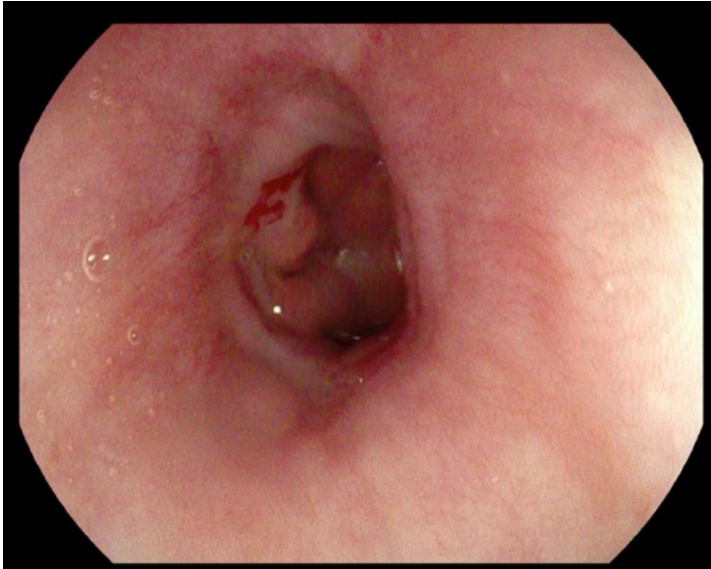
Mild: Vertical lines without visible depth



Severe: Vertical lines with clear depth (indentation) into the mucosa



Stricture

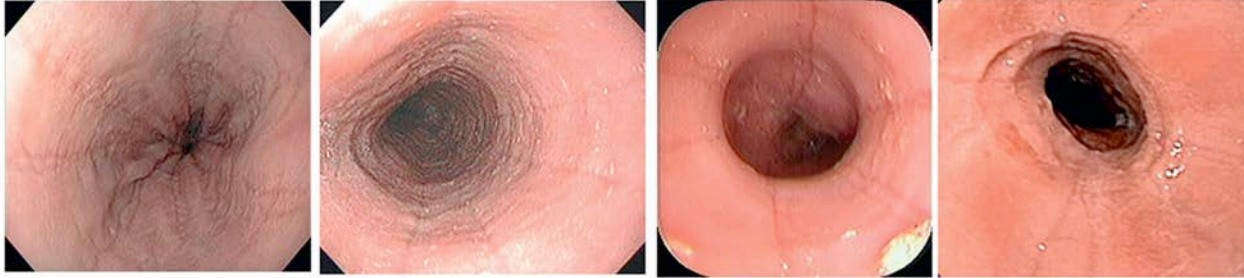


Stricture
Grade 0: absent
Grade 1: present

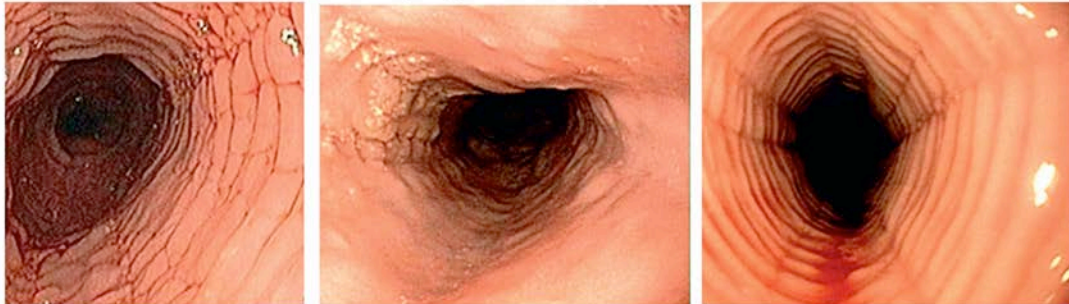
Transient rings (feline esophagus)



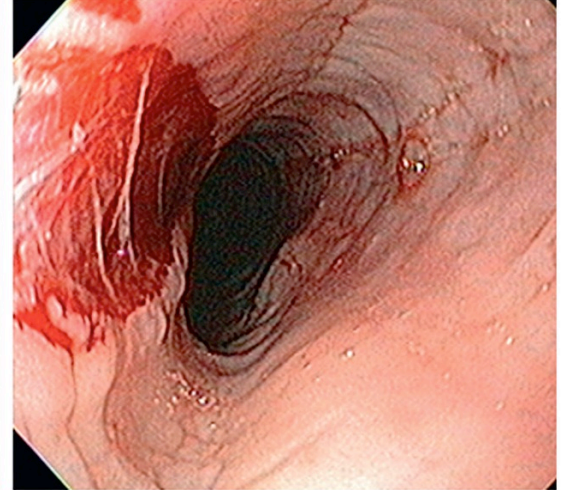
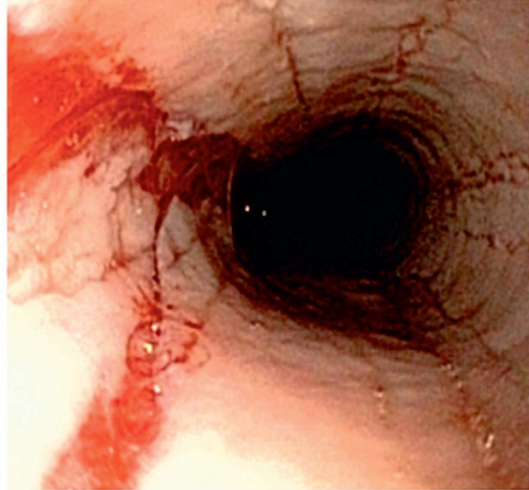
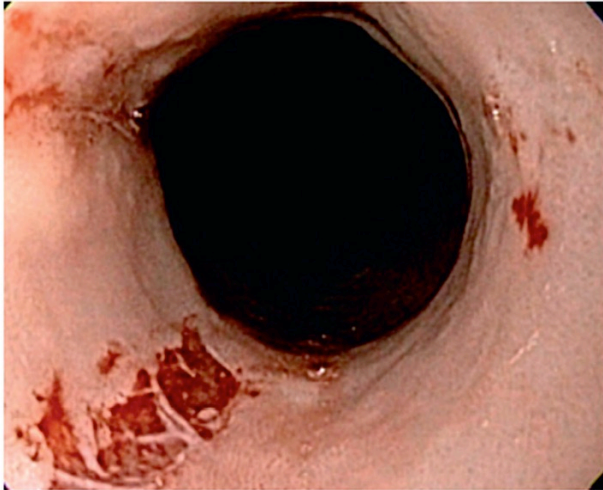
Mild: Vertical lines without visible depth



Severe: Vertical lines with clear depth (indentation) into the mucosa



Crepe paper esophagus



EoE - Biopsies



- If EoE suspected take biopsies even if esophagus appears normal
- Biopsy distal and mid/proximal esophagus
- Take at least 6 samples

EoE - Biopsies

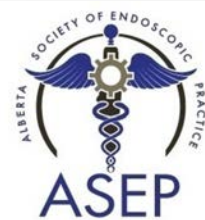


- At index endoscopy, if compatible symptoms or endoscopic appearance, biopsy stomach and duodenum to r/o eosinophilic gastroenteritis or celiac disease
- Take esophageal biopsies at the time of food impaction

EoE – Treatment Approach



- Dilation
 - If dominant stricture(s)
- PPI
 - 30-50% response
- Topical corticosteroids
 - 70% response
- Elimination diet
 - 1 food, 2 food, 4 food 6 food
- Biologics
 - Dupilumab (IL-4R α agonist)
- Biologics under study
 - Cendakimab, dectrekumab (IL-13)
 - Mepolizumab, reslizumab (IL-5)
 - Benralizumab (IL-5 α)
 - Lirentelimab (Siglec-8)



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