Evaluating Dysphagia: EGDs and Beyond

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Objectives

• Review common causes for dysphagia
• Consider options for diagnosis of swallowing disorders
• Discuss available treatments for dysphagia

SYMPTOMS

• Choking, coughing, aspiration
• Food getting stuck
• Heartburn
• Regurgitation
• Chest pain
Key questions to ask

- Trouble with solids, liquids or both?
- Where is food getting stuck?
- Trouble initiating swallow or getting stuck in the chest?
- Is there associated coughing, choking, aspiration, emesis, regurgitation?
- Comorbidities
  - GERD?
  - Allergic conditions?
- Pain with swallowing?
- History of weight loss, smoking?
- Family history of gastric or esophageal cancer?

What tools should I consider?

- Detailed History
- Endoscopy (biopsies, dilation)
- Referral for consultation
  - GI
    - Esophageal manometry
  - Speech Therapy
  - Neurology
  - ENT
- Imaging
  - Modified barium swallow/Speech evaluation
  - Barium esophagram
  - CT
- Medications
- Close clinical follow-up
Best tool: The History

- Is this dysphagia?
- Difficulty swallowing - solids, liquids, pills

What dysphagia is not:
- “Fullness,” “sense something is there,” “pressure”
- Present in absence of swallowing
- Pain – *odynophagia* may or may not be present with dysphagia, and may exist without dysphagia

Esophageal vs Oropharyngeal?

- **Oropharyngeal Dysphagia**
  - Begins *immediately* at onset of swallow
  - Coughing, sputtering, choking
  - Liquids are worse
  - Differential: usually neuromuscular causes

- **Esophageal Dysphagia**
  - The “swallow” goes well
  - A few seconds *after*, there is a sense of food sticking at the epigastrum, retrosternal area, or suprasternal notch
  - May resolve within seconds, minutes, or hours
  - Usually “structural”
  - Top differential: peptic stricture, shatzki’s ring, eosinophilic esophagitis, achalasia, mass
If esophageal, is it structural?

- Is the problem with solids, liquids, or both?
  - If liquids are involved, more likely to be a motility disorder
  - Breads and meats? Think structural!
- Are symptoms intermittent or constant?
  - If symptoms occur with specific foods – think structural
  - Symptoms are more often intermittent with motility disorders

Motility Disorders

- Tend to involve solids and liquids
- Achalasia
  - Frequent regurgitation
  - Lots of frothy sputum in the morning
  - May have weight loss
- Scleroderma
  - Severe, refractory heartburn and reflux with dysphagia
  - Associated with poor/lack of esophageal contractility
Patient Scenario

An 82 year old female presents with a 3 month history of difficulty swallowing.

- Describes “choking”, which you then help her clarify to mean coughing and sputtering
- Occurs immediately upon attempting to swallow
- Worst when she’s drinking water with her pills
- Solid foods don’t cause much of a problem
- Exam reveals marked thoracic kyphosis

Oropharyngeal Dysphagia

- Modified Barium Swallow
  - With Speech evaluation
- Imaging of head and neck
- Neurology referral if no obvious cause
  - ALS, Multiple Sclerosis, Parkinson’s, Stroke
  - CNS tumors
Patient Scenario

An 82 year old male presents with a 3 month history of difficulty swallowing.

- Some solid food dysphagia
- Feels a gurgling in his neck
- Presses the left side of his neck when he swallows, which seems to help
- Terrible halitosis
- Once vomited up 7 day old corn

Zenker’s Diverticulum

- Best diagnosed with barium esophagram
- Can be missed on endoscopy, and can be perforated in endoscopy
Globus

Persistent feeling of a lump in the throat that persists between swallows without identifiable anatomic or manometric abnormality

- Once believed to be a result of or to be associated with anxiety
- Classified as a functional disorder
- Can present with or without reflux symptoms

Management

- Consider a trial of PPI
- Neuromodulators, such as TCA, gabapentin

When to refer for EGD?

- History of rings, stenosis, response of symptoms to dilation, erosive esophagitis, or esophageal surgery
- Classic solid food dysphagia that progresses
- Patient aged 50+
- Unintentional weight loss
- Odynophagia
What if it’s not obvious?

- **Imaging**
  - What’s the pre-test probability of finding something?
  - If history and symptoms STRONGLY suggest a diagnosis, would you trust a negative study?

- **Barium Swallow**
  - Ring, stenosis, or obvious motility disorders
  - Beware of diagnosis of “reflux”
    - Very poor specificity for clinically significant esophageal reflux

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**PPI Trial for Dysphagia**

- Reflux and reflux esophagitis can induce esophageal dysmotility
- Trial of PPI at a moderate dose, for up to 8 weeks
  - Consider if patient below age 50, recent onset of symptoms, and if classic reflux symptoms or if patient at high risk for reflux
  - Erosive esophagitis generally requires long-term PPI therapy
  - If recurrence of swallowing difficulty once PPIs stopped, may be worth EGD to guide long-term management
Do you refer to GI or order the EGD?

- What will we do?
- EGD if warranted, with dilation if needed
- Esophageal manometry
  - Achalasia, scleroderma, jackhammer esophagus
  - Non-specific motility disorder
- Upper esophageal sphincter dysfunction
- Treat functional disorders
  - Globus
  - Esophageal hypersensitivity
  - Functional dysphagia

Patient Scenario

An 82 year old male presents with a 2 year history of difficulty swallowing.

- Has progressed over years
- Has problems with solids and liquids
- Complains of coughing up lots of frothy sputum, especially in the morning
- When food seems to stick, he finds that it helps if he puts his arms over his head
- Has been treated for GERD symptoms of pyrosis and chest pain
- In the last month or two, he has occasionally regurgitated food eaten days ago
- EGD was normal
Primary Achalasia

- Inflammatory degeneration of the ganglion cells in the myenteric plexuses in the esophageal wall
- Loss of ganglion cells in the body of the esophagus leads to loss of peristalsis of the esophagus
- EGD findings:
  - Often normal
  - Retained food in distal esophagus
  - Dilated esophagus
- Diagnosis: Esophageal manometry reveals incomplete relaxation of LES with variable contractility patterns

Treatments

- Speech therapy
- Dilation
- Proton pump inhibitors
- Myotomy
- Steroids, 6-food elimination diets
- Metal stents
Take home points

- Get a detailed history!
  - When?
  - What foods?
  - Trouble initiating swallow or getting stuck in the chest?
  - Where is food getting stuck?
  - Trouble with solids, liquids or both?
- If it really sounds like solid food dysphagia, refer for EGD
- If the problem is coughing or sputtering with attempts to swallow liquids, consider modified barium swallow first, then if negative GI consultation

Which patient does not need an EGD as the first test?

- 50 year old male complaining of difficulty swallowing breads and meats.
- 33 year old female bone marrow transplant patient complaining of burning pain in the chest when she swallows.
- 83 year old male who begins coughing whenever he tries to drink water.
- 62 year old male with a history of esophageal stenosis who reports a recent episode of a piece of steak seeming to stick at his suprasternal notch.
Which symptom set will most likely improve following an EGD with dilation?

- Coughing that occurs with drinking liquids.
- Sense of “sticking” at area of supra-sternal notch when eating meat.
- Constant sense of “fullness” or that “something is there” at the back of the throat.
- Coughing up frothy sputum in the morning, with increasing frequency of vomiting up liquid and solid food eaten the day before.

Which of the following could cause esophageal dysphagia?

- Globus
- Zenker’s diverticulum
- Parkinson’s Disease
- GERD
Thank you!

References

• ACG Overview of Dysphagia [https://gi.org/topics/dysphagia/](https://gi.org/topics/dysphagia/)
• AGA DDSEP8