5 – 5:45 pm

Dysphagia: Approach and Management

SPEAKER

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Presenter Disclosure Information

The following relationships exist related to this presentation:

- John Erik Pandolfino, MD, MSCI: Speaker for AstraZeneca; Sandhill; and Medtronic, Inc. Consultant for Ironwood; Sandhill; and Medtronic, Inc.

Off-Label/Investigational Discussion

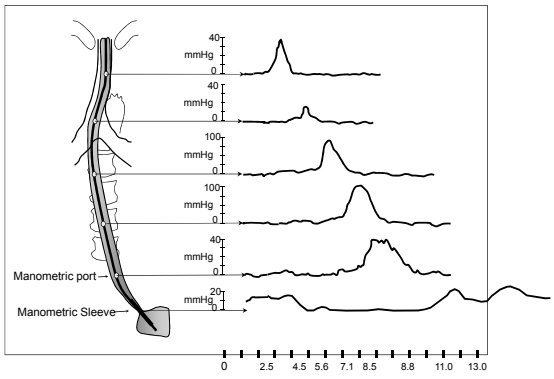
- In accordance with pmiCME policy, faculty have been asked to disclose discussion of unlabeled or unapproved use(s) of drugs or devices during the course of their presentations.

Dysphagia

- Definition:
  - *Dys= Disturbed or Disordered*
  - *phagia= to eat*
- Impaired transit of food from the mouth to the stomach
  - *Oropharyngeal*
  - *Esophageal*

Functional Imaging of Esophageal Peristalsis

MANOMETRY



NU IRB

Functional Elements of a Swallow
Oral and Pharyngeal

a Nasopharyngeal closure
b Laryngeal vestibule closure
c UES opening
d Bolus propulsion
e Pharyngeal clearance
f Return to airway

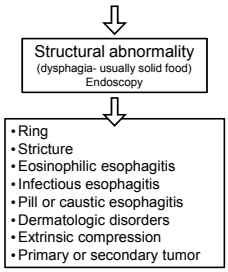
GI Motility online (May 2006) doi:10.1038/gimo2

Mechanical Element	Biomechanical Mechanism	Evidence of Dysfunction	Typical Diseases
Nasopharyngeal closure	Soft palate elevation	Nasopharyngeal regurgitation Nasal voice	Myasthenia Gravis
Laryngeal closure	Laryngeal elevation Arytenoid tilt Vocal fold closure	Aspiration during bolus transit	CVA Head Trauma
UES opening	UES relaxation Laryngeal elevation Anterior hyoid traction Sphincter distension	Dysphagia Post-swallow residue/aspiration Diverticulum formation	Cricopharyngeal Bar CVA Parkinson's
Tongue loading & Bolus propulsion	Lingual sensation and control	Sluggish, misdirected bolus	Parkinson's Surgical defects Cerebral palsy
Pharyngeal clearance	Pharyngeal shortening Pharyngeal contraction Epiglottic flip	Post-swallow residue/aspiration	Polio Post-polio Oculopharyngeal dystrophy, CVA

Esophageal Symptoms

- Symptoms
  - *Transit related- Antegrade and Retrograde*
    - Food impaction
    - Regurgitation
    - Aspiration
    - Malnutrition
  - *Perception related*
    - Discomfort
      - Chest pain / pressure
      - Heartburn
      - Thermal

Etiologies of Esophageal Symptoms



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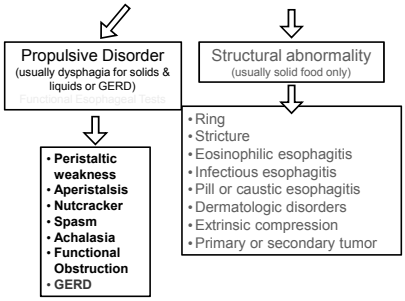
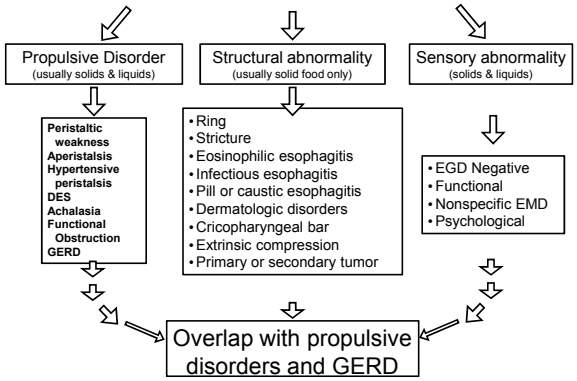
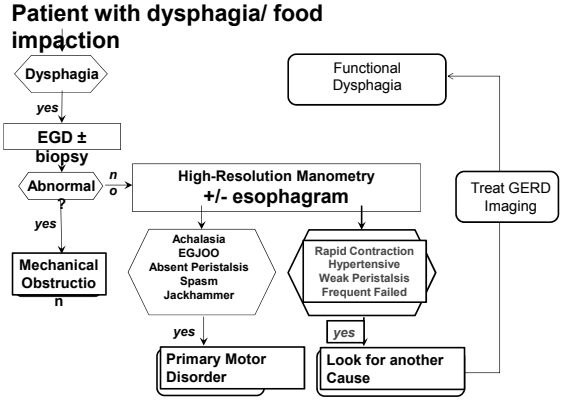


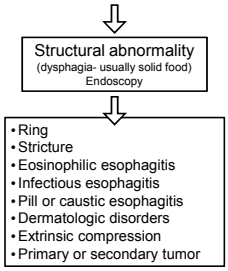
Etiologies of Esophageal Symptoms



Patient with dysphagia/ food impaction



Etiologies of Esophageal Symptoms



Strictures

- The most common cause of benign stricture (70-80%) is peptic.
- Aggressive anti-reflux therapy will reduce symptoms and need for dilation.
- Endoscopy more cost-effective than Fluoroscopy.

ASGE Gastrointestinal Endoscopy 2006;63:755-760.
Esfandyari et al. AJG 2002;97:2733

Eosinophilic Esophagitis

- "Allergic esophagus" – infiltrative eosinophilia
- Increasing incidence vs underrecognized
- Signs/symptoms:
  - *Dysphagia, food impaction, abdominal/chest pain, vomiting, regurgitation*
- Clinical characteristics
  - *Male predominance (70%-80% of cases)*
  - *Family or personal history of allergy/atopy*
    - Asthma, rhinitis, eczema, food allergy

Arora AS, et al. *Clin Gastroenterol Hepatol*. 2004;2:523-530.
Liacouras CA, et al. *Clin Gastroenterol Hepatol*. 2005;3:1198-1206.

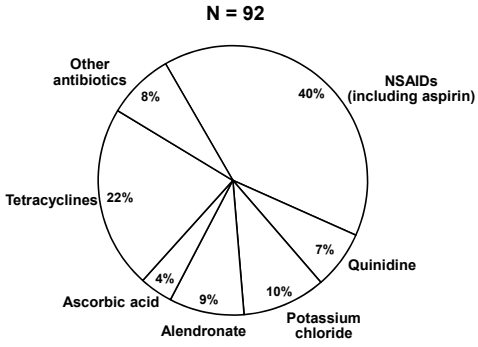
Management of Eosinophilic Esophagitis

- Medical therapy can lead to resolution of symptoms and stricture
- Treatment
  - *PPI*
  - *Steroids (fluticasone, prednisone)*
  - *Diet (wheat, egg, soy, milk, peanuts, and/or seafood)*
  - *Allergy evaluation?*
  - *Dilation*

Dilation therapy

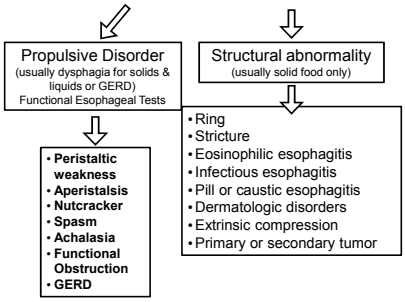
Attwood SE, et al. *Dig Dis Sci.* 1993;38:109-116.
Liacouras CA, et al. *Clin Gastroenterol Hepatol.* 2005;3:1198-1206.

Distribution of Medications Associated With Esophageal Injury



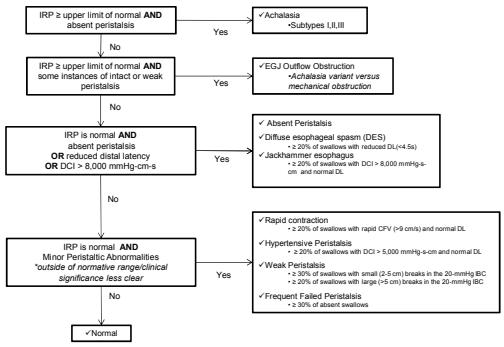
Abid S. et al. *Endoscopy*. 2005;37:740-744.

Etiologies of Esophageal Symptoms



Pressure Topography of Esophageal Motility

The Chicago Classification



Neurogastroenterology and Motility, Vol 24; (Supplement 1) March 2012.

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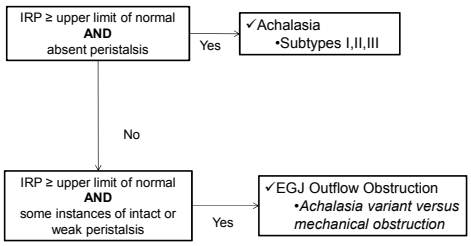

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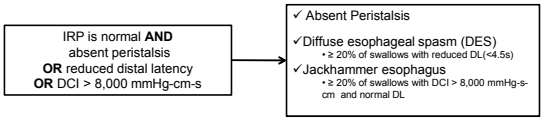

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Case: Chest Pain

- 23 year old female with severe chest pain for 6 months.
  - *Episodes are associated with eating but can occur between meals*
  - *Can last greater than hours*
  - *No response to PPI*
  - *Being treated for depression and on narcotics*

Conclusion: Hypertensive Contractility

- There is no clear discriminator of symptomatic hypercontractility.
  - *Propagation can appear normal*
  - *Therapy focused on reducing peristaltic amplitude in altering symptoms is extremely limited.*
    - Smooth muscle relaxants
    - BoToX
  - *Many patients may respond to treating visceral sensitivity*

Conclusions: Spasm

- There is a difference between rapid contractions and spastic contractions.
  - Does the contraction occur too early [latency]?
  - Should consider whether contraction is altered by deglutitive inhibition.
  - *Revising criteria may improve treatment outcomes.*

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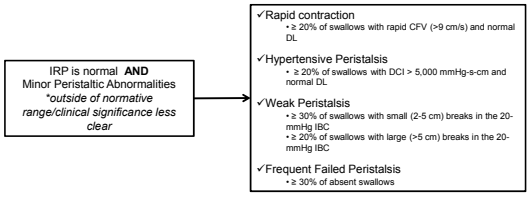

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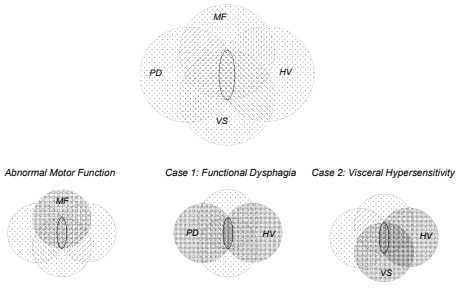
Case:Dysphagia

- 56 year old female with multiple medical problems: CFS/Fibromyalgia, severe DJD, asthma and dysphagia.
  - Main complaint is solid food dysphagia and pill dysphagia.
  - *She has had multiple evaluations for dysphagia:*
    - EGD- negative
    - Manometry was normal

Case:Dysphagia

- Resolution
  - Reassurance
  - *Dietary advice*
  - *Switched formulations of medications*
  - *Continues to do well with no need for motility agents.*
    - Would consider Hypnosis or SSRI

Model for Symptom Generation in UGI Disorders



Medical Management

NOT FDA APPROVED

- Anti-depressants
  - *amitriptyline, nortriptyline, desipramine*
    - 10 to 25 mmg at bedtime with escalation of 10 to 25 mg increments to a target of 50-75 mg
  - *Trazadone*
    - 25mg QHs up to 100 mgHg
  - *SSRIs*
- 5HT agonists-antagonists- not currently available

Gut-directed Hypnotherapy

Are you getting sleepy?

- Deep physical relaxation and deep mental concentration
- Alters focus of attention, changes meaning about sensations arising from the gut and encourages body to restore itself to a healthier state
- Shown to produce cognitive change and improve pain tolerance
- Modifies physiological arousal and hypersensitivity over long-term
- Initially performed in a doctors office but can eventually be self-guided
- The most scientifically supported non-drug treatment for Functional GI disorders

Approach to Patients with Dysphagia

- Key Clinical Take Home Points:
  - *Most of these disorders can be managed by a careful systematic evaluation that focuses on ruling out the most dangerous causes first and then focusing on the most likely cause.*
  - *Dysphagia can have a number of overlapping etiologies and the interaction between organic and functional influence should not be ignored.*
  - *Diagnose and treat in parallel.*

Approach to Patients with Dysphagia

- Learning objectives:
  - *Determine how to differentiate oropharyngeal and esophageal dysphagia.*
  - *Define the most appropriate diagnostic algorithm for oropharyngeal and esophageal dysphagia.*
  - *Develop appropriate treatment strategies for patients with dysphagia.*