





Aspiration/Reflux and Mycobacteria

How could they be related???



#### The Basics



# Swallowing



## Aspiration Who is Involved?

- Many specialists and practitioners may be involved along with pulmonologists and primary care
  - Including but not limited to:
    - Oral specialists/dentistry
    - Otolaryngologists (ENT)
    - Swallow center specialists
    - Gastroenterologists
      - Esophageal/motility specialists

#### Structure Of The Esophagus





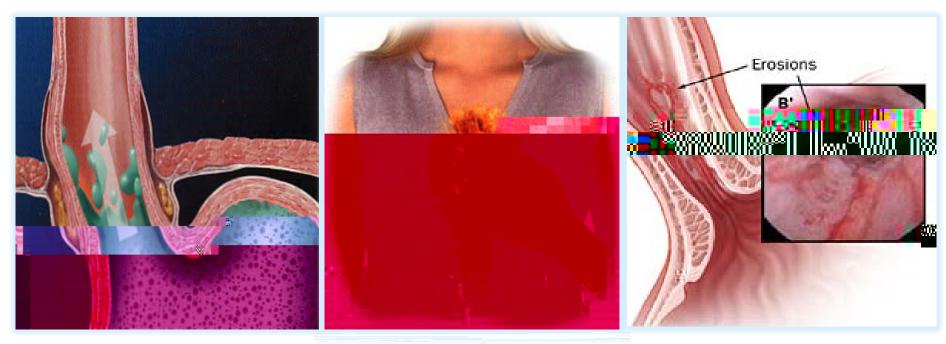
## Swallowing Disorders

- An oropharyngeal disorder
  - Could be due to a problem in throat or larynx, may need ENT practitioner involved
  - Could be due to a neuromuscular problem in this area, may need swallow therapist involved and particular swallow xrays
- An esophageal motility (neuromuscular) disorder: problem with pushing food and/or liquid through esophagus into stomach
  - Examples
    - EDC 3 152.u Tm (E)6.6his ar/MCID2his mnv-82(s2.u T (E)6.a2.u Tm)3.44TJ .78 (nv3 15h)]TJ.6h



### Esophageal Disease

- Gastroesophageal Reflux Disease (GERD)
  - Definition: a condition that develops when the reflux of stomach contents causes troublesome symptoms and/or complications



Gastroesophageal reflux

**Symptoms** 

Damage



## Symptoms

#### Typical symptoms

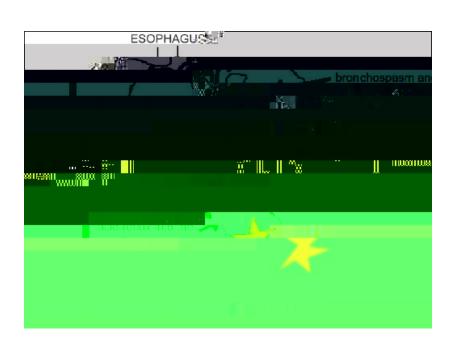
- Postprandial heartburn
- Effortless regurgitation

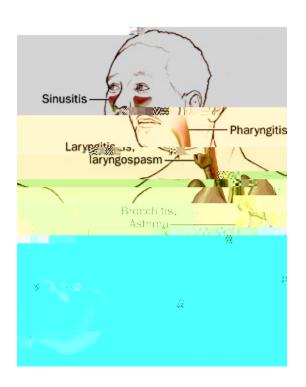
#### Atypical symptoms

- Potentially due to GERD
- Includes trouble swallowing, chest pain, cough, hoarseness, excessive throat clearing, wheezing, feeling of a lump in the throat



## Potential Complications







## Treating GERD

Often a PPI is chosen

#### Potential side effects of PPIs

- Low quality evidence or conflicting: dementia, cardiovascular events and stroke, kidney disease, calcium and bone problems, pneumonia
- Certain vitamin deficiencies (magnesium and B12) appear rare or are treatable and reversible

#### However

- Understand if need to be on this type of drug long-term
- \*Weigh risks versus benefits\*



## Questions Needing Answers

- Does GERD predispose a patient to develop NTM?
- Can GERD make NTM worse?
- If GERD is involved, is the problem from acid, bile, or any type of reflux?
- How should we treat GERD in patients with NTM?
- Could an esophageal motility or swallowing problem complicate the picture?
- \*The answers to these questions remain very individualized\*



#### Procedures to Help

- pH study #1: wireless pH capsule
  - Small capsule placed on endoscopy
  - Transmits acid data to recorder on outside of body for 48-96 hours
  - Capsule falls off on own and does not need another procedure to retrieve
  - Recorder returned by patient





## Procedures to Help

- Esophageal manometry
  - Deciphers if there is a motility problem in esophagus



#### **GOAL**

Utilize specialty swallowing and esophageal testing to identify and appropriately treat esophageal disorders in our patients with NTM



#### Thank You

Contact Information:

