Dysphagia in Older Adults: Clinical Review

Geriatric Fellow Trainee Presentation
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Disclosure

• I have no actual or potential conflict of interest in relation to this program/presentation
• I have no financial interests or relationships to disclose
• I will not be discussing “off-label” uses of medications

Objectives

• Understand the aging effects on swallowing
• Describe diagnostic modalities in dysphagia management
• Compare therapeutic strategies for older adults

Dysphagia

• 15%-37% older adults vs 3% general population
  • hospital 30%, NH: 68%, indep: 13%-38%
• 6 million >65 years old at risk
• Associated with morbidity, mortality

2. Sura, L. Clinical interventions in aging, 2012
Aging Effects on Swallowing

- Poor denture
- ↓ oral moisture, taste, smell acuity
- ↓ muscle mass/strength
- ↓ chewing efficiency, ↓ swallow speed
- ↓ penetration into upper airway
- ↑ post-swallow residue
- Malnutrition, pneumonia, dehydration

Taking a History

- Difficulty swallowing pills, solids, liquids
- Trouble chewing
- Duration, frequency, associated symptoms

Physical Exam

- HEENT
  - Denture fitting, tongue fasciculation
  - Mucous membrane, facial muscles, lymph nodes
- Abdomen
  - Timing of gurgling sound associated with swallow
- Neuro
  - Cranial nerves, speech, gait, weakness
- Other
  - Cachexia, weight loss
  - Sclerodactyly, telangiectasia, shawl sign

Oral Dysphagia

- Mechanics: voluntary, attention, coordination
- Process: mastication, bolus mouth to pharynx
- Symptoms: trouble chewing, food in mouth, drool
- Causes: stroke, dementia, medications
Pharyngeal Dysphagia

- **Process:**
  - swallow reflex, pharynx to esophagus

- **Symptoms:**
  - difficulty to initiate swallow, choking, dysphonia, nasal regurgitation

- **Causes:**
  - Neurogenic, myopathic, structural

Evaluation

- Trained nurse: warning signs
- Speech pathologist, occupational therapist
  - bedside evaluation
    - observe oral swallow mechanism

Diagnostic Tests

- Videofluoroscopic swallow study (play video)
  - Neuromuscular disease (ie: stroke, dementia)
  - Degree of dysfunction, severity of aspiration
  - Observe dietary modifications

- Fiberoptic Endoscopic Evaluation of Swallowing (FEES)
  - Nonsystemic disease (ie: structural lesion)
  - No radiation; office or clinic; quick, safe
  - Laryngeal/pharyngeal structures
  - “Whiteout” during swallow phase

Therapeutic Options

- **Behavioral**
  - Modify amount/rate/consistency of food
  - Eat slowly, mindful swallow
  - Caregiver training

- **Compensatory (low, variable evidence)**
  - Posture: upright posture, chin tuck; oral care
  - Swallowing maneuvers (ie: supraglottic swallow)
  - Dietary modifications
**Therapeutic Options**

- **Dietary Modifications**
  - Liquids: thin, nectar, honey, pudding
  - Foods: pureed, mechanically altered, advanced, regular
  - ↓ acceptability → ↓ adherence/intake → ↓ nutrition
- **Swallow Rehabilitation**
  - Better swallow function, improved nutritional status, reduction of pneumonia
  - ie: expiratory muscle strength training (EMST)

**Esophageal Dysphagia**

- **Mechanics**: peristalsis
- **Process**: no cranial nerves; intrinsic innervation
- **Symptoms**: mid-late meal, dysphagia to solids/liquids, heartburn, halitosis
- **Causes**: motility, inflammatory, infectious, structural

**Diagnostic Tests**
- EGD, esophagram, manometry

**Conclusion**
- Dysphagia = risk of malnutrition, pneumonia, dehydration
  - pursue behavioral, compensatory, rehabilitation
  - consider quality of life with therapeutic interventions
References