SWALLOWING DISORDERS:
USING A PATIENT CENTERED APPROACH IN ASSESSMENT AND TREATMENT
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OBJECTIVES
• Increase knowledge of assessment methods and importance of comprehensive dysphagia evaluation.
• Increase understanding of individualized treatment considerations.
• Increase knowledge of risks and benefits of modified diets and thickened liquids.

ROLE OF SLP AND DYSPHAGIA
• Screen at-risk patients
• Complete clinical swallow assessments
• Refer for or perform instrumental assessment (MBS/FEES)
• Complete swallow therapy
• Educate the patient and caregivers
• Work with MD, NP, PA, nursing, CNAs, dietician, dietary aids and other relevant staff members to improve outcomes and carryover of skills
• Make appropriate physician referrals

CLINICAL SWALLOW EVALUATION
• Thorough case history
  • Predictors of aspiration pneumonia
    • Aspiration pneumonia will only develop within the context of a primary and serious illness
PREDICTORS OF ASPIRATION PNEUMONIA

- Dependent for oral care
- Dependent for feeding
- Number of medications
- Smoking
- Multiple medical diagnoses (especially history of CVA or other neurological disease, COPD, CHF, or GI condition)
- Number of decayed teeth
- Suctioning
- Bedfast
- Feeding tube
- Case mix index (highly complex patient)
- Indicators of delirium
- Weight loss
- Swallowing problem (including history of reflux)

CLINICAL SWALLOW EVALUATION

- Thorough case history
  - Predictors of aspiration pneumonia
- Oral mechanism examination
  - Cranial nerve examination
- Intake assessment of multiple consistencies
  - Refer to instrumental assessment if appropriate
- Clinical Swallow Evaluations cannot definitively indicate the presence or absence of dysphagia

INSTRUMENTAL ASSESSMENT

Modified Barium Swallow Study (MBS)
- Done in radiology
- Uses barium coated food/drink
- Limited in duration/radiation exposure
- Identifies deficits in the oral and pharyngeal stage
- Esophageal sweep can be performed
- GI referral
- Identifies aspiration
- Identifies the cause of aspiration based on the anatomy and physiology

Fiberoptic Endoscopic Evaluation of the Swallow (FEES)
INSTRUMENTAL ASSESSMENT

• Fiberoptic Endoscopic Evaluation of the Swallow (FEES)
  • Uses transnasal endoscope
  • Uses edible dye on foods/liquids for contrast
  • Not painful
  • 98% of patients say they would do the test again
  • Is portable
  • Bedridden, ICU, isolation, unable to leave facility
  • Can be in for an entire meal, if needed
  • Identifies pharyngeal stage deficits
  • ENT referral? GI referral?
  • Identifies aspiration
  • Identifies the cause of aspiration based on the anatomy and physiology

INSTRUMENTAL ASSESSMENT: DECISION MAKING PROCESS

• Major clinical indications to proceed with a MBS:
  • Oral stage concerns
  • Esophageal stage concerns
  • Specific anatomical changes that could attribute to dysphagia

INSTRUMENTAL ASSESSMENT: DECISION MAKING PROCESS

• Major clinical indications to proceed with a FEES:
  • Assess secretion management
  • Assess fatigue
  • Assess specific laryngeal or pharyngeal sensory or anatomical deficits
  • Dysphagia is concurrent with voice changes

INSTRUMENTAL ASSESSMENT: WHY DOES IT MATTER

• Identifies aspiration
• Drives diet recommendations
• Silent aspiration?
• Ensure the patient is not on an overly restrictive diet
• Identify effective compensatory strategies
• Identifies specific physiological impairments
• Drives rehabilitative exercises
TREATMENT

- Compensatory Strategies
- Exercises
- Diet Modifications

TREATMENT: COMPENSATORY STRATEGIES AND EXERCISES

- Customized compensatory strategies based on instrumental assessment
- Customized oropharyngeal exercises based on instrumental assessment
  - Base of tongue retraction
  - Hyolaryngeal elevation and excursion
  - Vocal fold adduction
  - Pharyngeal propulsion

TREATMENT: DIET MODIFICATIONS

CONSIDERATIONS FOR DIET DOWNGRADE

Risks

Benefits
CONSIDERATIONS FOR DIET DOWNGRADE

Risks:
• Decreased quality of life
• Increased risk for malnutrition
• Decreased palatability
• Increased risk for dehydration
• Increased risk for hospitalization or medical complications
• UTI
• Electrolyte imbalance
• Increased risk of pneumonia if thickened liquids are aspirated

CONSIDERATIONS FOR DIET DOWNGRADE

Benefits:
• Prevent aspiration
• Easier to control the food/liquids if there is difficulty coordinating mouth muscles
• May reduce uncomfortable coughing/sensation of foods/liquids going down “the wrong tube”

POPULATIONS AT RISK FOR DYSPHAGIA

Progressive Diseases
- Dementia
- Parkinson’s Disease
- ALS
- Multiple Sclerosis
- Many more!

Acute Neurologic
- CVA
- TBI

Other
- Cervical Spine Injury
- Head and Neck Cancer

SPECIAL CONSIDERATIONS: DEMENTIA

Treatment will vary based on stage of dementia.

Late stages:
• Facilitative vs rehabilitative
• Caregiver training
• Patient and family wishes are honored

Artificial nutrition does NOT increase longevity in this population.
**PREDICTORS OF ASPIRATION PNEUMONIA: DEMENTIA**

- Dependent for oral care
- Dependent for feeding
- Number of medications
- Smoking
- Multiple medical diagnoses (specifically history of CVA or other neurological disease, COPD, CHF, or GI condition)
- Number of decayed teeth
- Suctioning

**SPECIAL CONSIDERATIONS:**

**PROGRESSIVE DISEASES**

- Needs will change over time.
- May benefit from maintenance program to maintain swallow safety and functioning.

**SPECIAL CONSIDERATIONS:**

**ACUTE NEUROLOGIC**

- Increased risk of silent aspiration
- Requires high intensity of oropharyngeal exercises for physiological change

**NPO considerations**

- Get PO intake as soon as safely possible
- Prevent pharyngeal muscle atrophy from disuse

**HEAD AND NECK CANCER**

- Prehabilitation
  - Educate on what to expect in treatment
  - Exercises to maintain functioning
Compromised immune system
• Various underlying diseases and conditions, including aging

Poor oral health
• Biofilm of bacteria in plaque

Aspiration
• Identified per MBS/FEES

PILLARS OF ASPIRATION PNEUMONIA

ORAL CARES
Poor oral hygiene will cause dental plaque to form a dense bacterial biofilm.

If aspirated, the risk of developing pneumonia increases.

TOOTHETTE VS TOOTHBRUSH
• Foam swabs and toothettes are not successful in removing plaques and biofilm.

• Toothbrush and toothpaste is most effective!

ORAL CARES

• NPO
  • Are oral cares still necessary?

  YES!
  • For NPO patients, or pts who can’t expectorate, suctioning toothbrushes are available.
SIGNS TO REFER TO SPEECH THERAPY

- Difficulty chewing or pocketing food
- Coughing with PO intake
- Decreased PO intake
- Significant unwanted weight loss
- Trouble taking pills
- Wet/gurgly voice quality with meals

REFERENCES


