

A Holistic Approach to the Management of Adults with Swallowing Disorders

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Introduction

This poster session will address the management of adults with dysphagia from a holistic perspective. Within the constraints of our current healthcare system, there can be a tendency for specialists, from all fields, to compartmentalize treatment. This can result in treatment of the disease rather of the person as a whole. This seminar is intended to promote a more holistic approach to management of the patient with dysphagia. Attention will be given to integrating the patient's goals, abilities, medical condition and prognosis, nutritional status, and social support system into the dysphagia management program.

Summary

If dysphagia management consisted only of determining the patient's ability to swallow, our jobs would be much less complex. Holistic dysphagia management, for which we would argue, should be the standard of care, includes much more than treatment of the swallow mechanism. Listed are variables to consider in holistic management of the patient with dysphagia. Questions follow each variable to facilitate consideration of each area.

1. Individual Patient Variables

a. Prior Level of Function

- i. What is the patient's medical history? Is there a history of recurrent pneumonia?
- ii. What was the level of independence in activities of daily living prior to this hospitalization?

b. Prior and Current Medical Status

- i. What are the primary and secondary diagnoses?
- ii. What is the prognosis for recovery? *Consider degenerative disease vs. acute, reversible process.*
- iii. What is the patient's nutritional status? *See dietician's report, history of weight loss, current percentage of intake, and labs (albumin and pre-albumin)*
- iv. What are the patient's caloric needs? *This can be affected by burns, wounds, respiratory status, and other body systems.*
- v. Is the patient medically stable and consistently alert enough to eat regular meals? Does he/she have an appetite?
- vi. Is the patient on enteral or parenteral feeding? For how long? Why?
- vii. Is gastrointestinal tract functioning properly (reflux, nausea, constipation, esophageal dysmotility, stricture, obstruction)? *Stomach acid is highly toxic to lung tissue. Reflux aspiration results in pneumonitis.*
- viii. Does the patient currently have pneumonia? Is there a history of recurrent pneumonia? *Right lower lobe infiltrates/ pneumonia can be aspiration related.*
- ix. Does the patient have COPD/CHF, other respiratory disease? Is he/she trach/vent dependent? Why? For how long? What is the prognosis for weaning?

c. Dentition and Oral Hygiene

- i. What is the condition of the patient's mouth? Is the oral mucosa dry? *This is an indication of dehydration. It can also be a side-effect of medication.*
- ii. Are there unfilled cavities? Excessive plaque? *This is breeding ground for oral bacteria. Dirty and/or dry mouths build more bacteria that, if aspirated, can lead to pneumonia (especially for patients that are NPO because they are not swallowing as frequently to wash away the bacteria).*

d. Cognitive Status

- i. Is the patient alert? If so, is he/she consistently alert throughout the day? *Patients with fluctuating levels of alertness are at risk for aspiration, even if not dysphagic when fully alert. If not, why? Is it an effect of medication (sedation, pain management) or due to acute, reversible processes (metabolic encephalopathy, toxicity, etc.)?*
- ii. If cognitive status is currently impaired, is it anticipated to improve, decline, or remain constant? *See the evidence on PEG tube feeding in patients with advanced dementia.*
- iii. Is the patient aware of the dysphagia?
- iv. Is he/she able to actively participate in therapy?
- v. Is he/she able to follow instructions for use of swallow strategies/maneuvers?
- vi. Does he/she understand the need for and compliance with diet consistency restrictions?
- vii. If enteral nutrition is warranted, will the patient need to be restrained to prevent pulling out the tube feeding? *If the need for tube feeding is anticipated to be long-term, and restraints are necessary, this will greatly affect the quality of life and should be in important consideration before the PEG is placed.*

e. Psychosocial Factors

- i. Is the patient motivated to eat? Is he/she motivated to participate in swallowing therapy?
- ii. Is the person depressed? *This will affect motivation and progress in therapy.*
- iii. Is family involved? Are there other support systems?

f. Advance Directives and Power of Attorney for Health Care

- i. Has the person previously expressed his/her desires/wishes regarding the intensity of medical intervention, including tube feeding? (Advance Directive)
- ii. Has he designated someone to speak for him regarding these issues? (Durable Power of Attorney for Health Care, DPAHC)

2. Dysphagia

a. Etiology

- i. What is the cause of the dysphagia? Is it a symptom of a larger problem? (Dementia, GERD, CVA, Guillen Barre, etc.)
- ii. Is the patient's dysphagia acute or chronic?
- iii. What symptoms are reported by the patient and/or family? Have they gotten better/worse over time? What have they done to compensate for the dysphagia?

b. Type

- i. Is the dysphagia oral, oropharyngeal or esophageal?

c. Severity

- i. How severe is the dysphagia? Does it prevent oral intake?

3. Prognosis

a. Overall Medical Prognosis: Acute, Chronic, or Progressive

- i. Will the patient get better? Or worse? What influence will the medical condition have on swallowing?

b. Prognosis To Recover Functional Swallowing Ability:

- i. Prior level of function
- ii. Medical status, prognosis, and complications including aspiration
- iii. Age
- iv. Motivation
- v. Family/caregiver support
- vi. Severity of dysphagia
- vii. Cognitive/linguistic status
- viii. Awareness of deficits
- ix. Mobility
- x. Endurance

4. Management of Dysphagia

a. Oral Nutrition and Hydration

- i. What individual patient variables (immuno-competence, respiratory status, mobility, dependent for feeding, dependent for oral care, multiple medications, multiple medical diagnoses, etc) increase or decrease this patient's risk of developing aspiration pneumonia?
- ii. Will diet consistency adjustments, swallowing maneuvers, postures, or use of swallowing strategies allow safe swallowing while continuing an oral diet?
- iii. What is the **least restrictive** diet that will maintain the person's health? *Puree diet with thickened liquids is commonly thought of as "safest" but is not always necessary and frequently reduces oral intake. It is unappetizing! If absolutely necessary, it should be used for as short a time as possible before upgrading the diet consistency. Monitor intake closely, and consider supplements to boost caloric intake.*
- iv. Is the patient able to feed himself? *Dependent for feeding is a factor that is correlated with development of aspiration pneumonia. Encourage self feeding or hand-over-hand assisted feeding.*

b. Dysphagia Therapy Exercises, Maneuvers, Postures

- i. Can the patient do a maneuver, or use a posture, in order to be on the least restrictive diet consistency? Will strengthening of the swallowing musculature through exercises allow for advancement of diet consistency in the near future?
- ii. Can the patient with dysphagia that prevents oral nutrition be on ice chips, (after oral care) to keep the patient swallowing and therefore "exercising" the swallowing musculature? *Ice chips moisten the mouth, increase the frequency of swallowing, and therefore reduce the amount of oral bacteria.*

c. Oral Care

- i. Can the patient brush his/her own teeth? Is he/she doing so routinely and adequately?
- ii. If the patient is dependent on others for oral care, is it being done? *Educate families and staff about the importance of good oral care. **A clean mouth can prevent aspiration pneumonia even if the patient aspirates!***

d. Alternative Nutrition And Hydration (ANH)

- i. **Types and uses:**
 1. Nasogastric tube (NGT) Used for short-term ANH. Consider that NG tubes are uncomfortable and increase the risk of reflux aspiration, but can be useful for short periods of time when the patient is not alert enough to eat/drink safely.
 2. Percutaneous endoscopic gastrostomy (PEG). PEG tube feeding does not prevent aspiration. The literature on this is worth your time. Share with referring MDs.

3. Total parenteral nutrition/ partial parenteral nutrition (TPN/PPN). Typically used when the gut is not functioning properly. Very expensive (can be over \$1,000/day) and is difficult for the liver to process.

ii. Benefits vs. Burdens

1. What are the potential benefits of ANH? Will it be temporary or long-term? What are the potential burdens? Do the benefits outweigh the burdens? Do the patient and family understand the benefits and burdens of ANH in order to give informed consent? Will the presence of a PEG change the discharge destination? Will the patient need to be restrained to prevent self-removal of the tube?

iii. ANH and Oral Gratification

1. If a patient needs tube feeding for primary nutrition, can a limited oral diet be allowed for oral gratification? *Offering restricted, small amounts of food or liquid can greatly increase pleasure for the patient and satisfaction for the family that views feeding as nurturing a sick loved one.*

5. Discharge Considerations

- a. Compliance with safe swallowing strategies
 - i. Is there family support to facilitate compliance with swallowing recommendations? Is there staff support/compliance with swallowing recommendations?
- b. Quality of Life
 - i. Will restraints be required to prevent pulling out the tube? How will this affect the patient's quality of life? Will the tube feeding increase isolation? Will the patient be able to participate in social gatherings, many of which involve food? Does that patient desire to eat/drink?
- c. Discharge Destination
 - i. Will tube feeding change the discharge destination? Has the patient resided at a home that he will not be able to return to because of the presence of the PEG tube?
- d. Follow-up
 - i. Is follow-up by speech pathology available to work toward weaning from the PEG, if/when possible?

Remember, the goal is adequate, safe nutrition that is the least restrictive and provides the highest quality of life for our patients.

Myths vs. Facts about the Relationship between Aspiration and Pneumonia

Myth #1: Aspiration will result in pneumonia

Facts:

1. Normal adults aspirate during sleep but do not develop pneumonia
2. The amount and type of aspiration that results in pneumonia is not well understood
3. Individual tolerances for aspiration vary, and probably depend on:
 - a. Frequency of aspiration
 - b. Volume of aspiration
 - c. Character of the aspirate
 - d. The patient's:
 - i. immuno-competence
 - ii. level of alertness
 - iii. prior history of aspiration
 - iv. mobility

(Groher, 1994)

Myth #2: Tube feeding will prevent aspiration pneumonia

Fact: Tube feeding is a significant predictor of aspiration pneumonia

1. Other predictors are:
 - a. Dependent for feeding
 - b. Dependent for oral care
 - c. Number of decayed teeth
 - d. More than one medical diagnosis
 - e. Number of medications
 - f. Smoking

“Dysphagia was concluded to be an important risk for aspiration pneumonia, but generally not sufficient to cause pneumonia unless other risk factors are present as well” (Langmore, 1998)

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