Dysphagia Basics that Every OT Should Know
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Shari Bernard, OTD
Bernard.shari@mayo.edu

Janelle Hatlevig, OTR/L, BCPR
Hatlevig.janelle@mayo.edu
Learning Objectives

• Understand the definition of dysphagia, basic anatomy involved with the swallow process and recognize the phases of a normal swallow

• Recognize clinical signs of dysphagia/aspiration

• Be familiar with diagnostic assessments associated with dysphagia and what the results indicate

• Be aware of dysphagia interventions including exercises, compensatory techniques, use of adaptive equipment for feeding and use of the Free Water Guidelines

• Be aware of good oral care practices as it relates to dysphagia

• Recognize diet modifications, The National Dysphagia Diet

• Be aware of members of the multidisciplinary dysphagia team

• Recognize quality of life concerns as it relates to dysphagia

• Understand the correct documentation and billing/coding process for dysphagia/feeding interventions

• Understand when to refer and who to refer to
What is Dysphagia?

- A swallowing disorder that can involve any of the stages of swallowing including oral, pharyngeal and esophageal.

- Etiology may vary and may be due to
  - Narrowing of pharynx or esophagus
  - Pressure exerted on the esophagus
  - Paralysis or spasms of muscles
  - Degenerative processes
  - Neurovascular events
  - Trauma to the pharynx
According to Maslow’s Theory, as seen below the foundation of the theory lies in fulfilling the basic needs, which includes nutrition.


Diagram of Maslow’s Hierarchy of Needs Theory, retrieved from Google.com 10/27/2006, J. Finkelstein
Occupational Therapy Scope of Practice

- Specialty trained therapist to treat patients with dysphagia
- Reimbursement for specialty trained therapists
- Support from AOTA with regards to continuing education and self-paced course
- Support from AOTA with regards to the Specialty Certification in Feeding, Eating and Swallowing.
OT in Dysphagia Treatment
Developing the Team

Computer Access: Which Switch Is Best?
Keeping Older People Healthy
Multidisciplinary Dysphagia Team Members

- Occupational therapist or Speech pathologist
- Dietician
- Physician
- Radiologist
- Nurse
- Pharmacist
Swallowing Landmarks

Muscles of the anterior neck
Anatomy

• Pharynx is the passage way for food or liquid from base of the tongue leading into the esophagus

• The Larynx is the airflow passage way that houses the vocal cords

• The epiglottis is the cartilage structure that assists with the safe swallow mechanism

• The trachea is the windpipe

• The esophagus is the passage way past the pharynx and into the stomach
Oral Anatomy

- Lips
- Cheeks
- Tongue
- Hard palate
- Soft palate
- Mandible
- Faucial arches
- Uvula
- Sulci (spaces)
Pharyngeal Anatomy

- Posterior pharyngeal wall
- Epiglottis
- Piriform sinuses
- Valleculae
- Hyoid
- Vocal cords/folds
Esophageal Anatomy

- Esophagus - 23-25 cm long collapsed muscular tube, sits behind the trachea
- Upper Esophageal Sphincter - (aka cricopharyngeal region) - a musculoskeletal valve made up of the cricopharyngeus muscle and the cricoid cartilage
- Lower Esophageal Sphincter - a muscular sphincter that relaxes to open and contracts to close
Cranial Nerves of Swallowing

V  Trigeminal- muscles for chewing
VII Facial- muscles for facial expression
IX Glossopharyngeal- muscles for swallowing and taste
X  Vagus- larynx and pharynx
XI Spinal Accessory- head movement
XII Hypoglossal- muscles of the tongue
Types of Dysphagia

• Paralytic: Lower motor neuron involvement affect the anterior horn cells or cranial nerve motor nuclei or their efferent axons to the skeletal muscles. (Myotonic dystrophy)

• Pseudobulbar: Upper motor neuron involvement, affect neurons of the motor cortex, which extend to the brain stem (corticobulbar tracts) or spinal cord (corticospinal tracts). (pseudobulbar palsy, MS)

• Mechanical: Loss of swallow mechanism structures from possible trauma, surgery or lesion

• Acute Dysphagia: Improvements expected

• Chronic Dysphagia: Function will plateau and some deficits will remain

Incidence of Dysphagia

- Half of the population with Parkinson’s Disease have dysphagia
- About 34% of patients with Multiple Sclerosis have dysphagia
- 64-78% of patients experience problems with swallowing after a stroke
- 35% of people 50 and older have symptoms of dysphagia
Aspiration in Cerebral Vascular Accident: Cortical, Subcortical, and Brain Stem Infarcts

• Aspiration in stroke is determined to be between 29% and 81%.

• Silent aspiration is present in half of clients with acute stroke.

• There is a wide range in reported aspiration rate due to different diagnostic parameters, lesion site, and length of time following stroke.²

Altman, Yu, and Schaefer, S. D., 2010

Falsetti et al., 2009
Cortical infarcts

Right parieto-temporal infarcts - sensory and attention deficits
Left middle cerebral artery infarcts - buccal-facial apraxia
Right or left precentral gyrus - motor function of lips, cheeks, and tongue
Altman et al., 2013
Cortico-Bulbar Tract
motor, sensation, coordination, timing

Medullary Swallow Center
oral transit, pharyngeal, and proximal esophageal segments
Medullary Swallowing Center Stroke

• Impairment of sensation and movements in areas of:
  • Posterior oral and pharyngeal muscles
  • Laryngeal elevation and adduction
  • Pharyngeal constrictors
  • Upper esophageal sphincter opening

Falsetti, et al., 2009
Phases of the Normal Swallow

• Preoral: how food and drink are brought to your mouth
• Oral preparatory: how food is chewed and manipulated
• Oral: how bolus is propelled
• Pharyngeal: how the swallow response is initiated
• Esophageal: how food travels through esophagus and into stomach
The Swallowing Process

• Food enters mouth and is chewed and moved toward back of mouth. The soft palate relaxes.

• Chewing continues and breathing through the nose continues. Tip of tongue rises up to the hard palate.

• The bolus is moved toward the back of the mouth. Airway continue to stay open for breathing. The mid-portion of the tongue works to move bolus back.

• The tongues surface begins to flatten and the soft palate begins elevate and retract. As the tongue works up against the hard palate, the soft palate continues to elevate.
The swallowing process

- The bolus and the tongue begin to move in the pharynx and the pharynx begins to move anterior to meet the bolus.
- A squeezing motion occurs between the base of the tongue and the pharynx.
- The base of the tongue continues to move back squeezing the bolus around the epiglottis and into the valleculae. Nasopharynx is sealed. Superior elevation of the larynx occurs.
- Pharyngeal contraction continues with the base of the tongue. The larynx move upward and forward.
- Laryngeal elevation and (Airway)closure continue. The epiglottis begins to retrovert passively. Nasopharynx is sealed.
The Swallowing Process

- The epiglottis moves with the laryngeal elevation. The thyroid cartilage moves close to the hyoid helping in the laryngeal seal. The bolus continues to propel building a pressure wave at the tail of the bolus.

- The bolus moves around the lateral pharyngeal area. Laryngeal elevation continues. The hyoid moves superiorly and anteriorly pulling the larynx superiorly. Nasopharyngeal and laryngeal areas remain sealed.

- Pharynx continues to contract. The larynx continues to move superiorly and anteriorly directing the bolus posteriorly into the esophagus.

- The epiglottis fully retroverts. As the larynx elevates it pulls on the UES to open and allow the food or liquid to enter the esophagus.

- Closure of all three sphincters occur. The pharynx and base of the tongue are returning to their natural state.
The Swallowing Process

- As the bolus moves from the pharyngeal to the esophageal phase, Nasopharyngeal seal continues and laryngeal closure remains.
- Tongue moves back into the oral cavity. Soft palate begins to relax. The larynx is beginning to descend and open with the initiation of respiration.
- Laryngeal opening of the vocal cords continues. The epiglottis begins to move back to its natural position.
- Bolus is in the upper esophagus with the closure of the UES. The soft palate relaxes and moves away from the posterior pharyngeal wall.
Some Clinical Presentations for Dysphagia

• Drooling
• Coughing or clearing throat frequently
• Gagging
• Change in voice quality
• Being unable to swallow
• Pain with swallowing
• Frequent heartburn
Screenings and Assessments

- Dysphagia screening and early intervention have been shown to save both patient and hospital costs
- Gugging Swallowing Screen
- Self-Report Symptom Inventory
- Massey Screening
- EAT-10
- Functional Oral Intake Scale
- Penetration/Aspiration Scale
The Massey Bedside Swallowing Screen

1. Patient is alert (can follow command)
2. Dysarthria (speech slurred/garbled)
3. Aphasia (trouble speaking/understanding words)
4. Able to clench teeth
5. Able to close lips
6. Face is symmetrical with movement
7. Tongue is midline
8. Uvula is midline
9. Gag reflex is present
10. Has voluntary cough (have patient cough 2 times)
11. Able to swallow own secretions (no drooling)
12. Swallow reflex is present
13. Give a teaspoon of water
   a. Swallows without choking
   b. Voice sounds gurgly
   c. Coughed after water
   d. Water dribbles out of mouth
14. Give a 60 cc of water (if teaspoon was tolerated)
   a. Swallows without choking
   b. Voice sounds gurgly
   c. Coughed after water
   d. Water dribbles out of mouth

If yes to any one or more of the above, the RN performs the Massey Bedside Swallowing screening.

Date/Time: 10 Nov 2016 08:54
## Eating Assessment Tool: EAT-10

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<tbody>
<tr>
<td>1.</td>
<td>My swallowing problem has caused me to lose weight.</td>
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<td>2.</td>
<td>My swallowing problem interferes with my ability to go out for meals.</td>
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<td>3.</td>
<td>Swallowing liquids takes extra effort.</td>
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<td>4.</td>
<td>Swallowing solids takes extra effort.</td>
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<td>5.</td>
<td>Swallowing pills takes extra effort.</td>
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<td>6.</td>
<td>Swallowing is painful.</td>
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<td>7.</td>
<td>The pleasure of eating is affected by my swallowing.</td>
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<td>8.</td>
<td>When I swallow food sticks in my throat.</td>
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<td>9.</td>
<td>I cough when I eat.</td>
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<tr>
<td>10</td>
<td>Swallowing is stressful</td>
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</table>

**Total EAT - 10**

Diagnostic Tests for Dysphagia

- Clinical dysphagia evaluation (completed by occupational therapy or speech pathologist). Able to visualize signs of aspiration

- Videofluoroscopic swallow study (completed by occupational therapy or speech pathologist). Rule out aspiration, observed obstruction or residue
Diagnostic Tests for Dysphagia

• Fiberoptic Endoscopic Evaluation of Swallowing (FEES). This can performed by a speech pathologist. Able to visualize structures for damage or dysfunction. Able to visualize vocal cord function.
Some Components of a Clinical Dysphagia Evaluation

- Chart review
- Assess cognition
- Assess strength of cough
- Assess respiratory status
- Assess voice quality
- Assess oral intake trials with various textures
Some Components of a Clinical Dysphagia Evaluation

• Positioning
• Independence in feeding
• Be aware of special considerations like a tracheostomy
• Consider quality of life concerns
Dysphagia in the Oral Phase

- Pocketing
- Drooling
- Coughing
- Dysarthria
- Aphonia
- Pills remaining in mouth
- Poor dentition
- Poor mastication

- Tongue thrust
- Tongue fasciculations
- Poor soft palate elevation
- Repeated swallow
- Slow eating
- Inability to propel bolus to back of mouth
- Biting down on utensils
- Biting inside of cheek
Interventions for Oral Phase

• Alertness
• Independence with oral cares
• Posture
  • Where is eating optimal for your patient?
• Tolerance for sitting upright
• Set-up for safe eating
• Self-feeding
## Oral Care Protocol

- Complete oral care assessment that includes swallow assessment first. Determine if a bite block is required and if a swallow assessment is required.
- Always use Personal Protective Equipment (PPE) when assisting patients with mouth care, including gloves, mask, and face shield.
- Document oral care in the patient record.
- Disposable swabs should not replace tooth brushing. They are for comfort care, one-time use only; do not leave soaking in a cup for reuse later.

<table>
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<tr>
<th>Patient Type</th>
<th>Equipment</th>
<th>Procedure</th>
<th>Frequency</th>
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</thead>
</table>
| Self-care and staff-assist. Able to expectorate (spit) | • soft toothbrush  
• toothpaste, plaque removing  
• antiseptic oral rinse, alcohol-free  
• mouth moisturizer  
• 1-2 swabs | 1. Set patient up at sink or in bed with all equipment.  
2. Instruct patient to brush teeth for 1-2 minutes.  
3. Instruct patient to swish and spit antiseptic oral rinse.  
4. May moisturize interior of mouth and lips using a swab, PRN.  
5. Discard disposable equipment/swab in appropriate receptacle. | After each meal and before bedtime.  
If patient is NPO, oral care should be done am, mid-day, evening, and bedtime. |
| Dependent for oral care. Not able to expectorate (spit). At risk for aspiration. | • suction toothbrush & swab  
• antiseptic oral rinse, alcohol-free  
• mouth moisturizer | 1. Moisten suction toothbrush/swab in antiseptic oral rinse.  
2. Connect suction toothbrush/swab to continuous suction.  
3. Brush/swab the teeth 1-2 minutes.  
4. Suction debris from mouth.  
5. Apply moisturizer using a swab, to the interior of the oral cavity and the lips.  
6. Discard disposable equipment/swab in appropriate receptacle | Same as above |
| Dependent on oral care. Patient on a ventilator. | • Suction toothbrush/swab  
• Oral cleansing solution  
• Mouth moisturizer  
• Chlorhexidine oral rinse | 1. Provide suction, PRN, to remove oropharyngeal secretions that can migrate down the tube and settle on top of the cuff.  
2. Obtain suction toothbrush/swab and moisten with oral cleansing solution  
3. Connect suction toothbrush/swab to continuous suction.  
4. Remove the debris and cleanse the gums, tongue, and inside of cheeks with the solution-saturated swab.  
5. Suction debris from mouth  
6. Apply moisturizer using a swab, to the interior of the oral cavity and the lips.  
7. Discard disposable equipment/swab in appropriate receptacle | Every 4 hours and PRN oral debris.  
Use Chlorhexidine rinse as oral care solution AM and HS. |
| Denture Care or patients with no teeth | • denture cup, labeled  
• soft toothbrush  
• denture cleanser (for soaking only)  
• 2 swabs  
• antiseptic rinse, alcohol-free  
• optional: denture adhesive | 1. After removing dentures, place in a labeled denture cup.  
2. Brush the palate, buccal surfaces, gums, and tongue with the toothbrush or swab.  
3. Patient can swish and spit antiseptic rinse, or use swab to apply.  
4. Line the sink with paper towel and add water to cushion the dentures in case you drop them. Carefully brush dentures with warm water. DO NOT USE TOOTHPASTE as this may scratch the surface of the dentures.  
5. Clean and dry equipment and return to patient’s bedside table.  
6. Assist patient in inserting dentures into mouth.  
7. After HS mouth care, soak dentures in a commercial cleanser in the denture cup.  
8. If patient needs denture adhesive to hold firmly in place, follow manufacturer directions. | After each meal and at bedtime. |

Oral Phase Interventions: Exercises

• Basic tongue range of motion: in/out, side to side, use to sweep out cheek
• Basic lip exercises: pucker, smile say “mmm”, say “papapa”, say “he-who”
• Basic jaw exercises: open/close, move side to side
• Use of popsicle for tongue protrusion, use of bubbles to blow to pucker
• Breathing exercises as provided by RT
Dysphagia in the Pharyngeal Phase

- Coughing/choking during or after swallowing
- Noisy swallow, frequent swallows
- Inability to swallow when ready and wanting to
- Swallow delay > 10 seconds
- Food “catching in throat”
- Food “doesn’t want to go down”
- Wet, gurgly, or hoarse voice or breath sounds
- Frequent or excessive throat clearing
- Poor secretion management
- Regurgitation of food, nasal regurgitation
Interventions for Pharyngeal Problems

- Restricting diet for safety and recognizing when it’s not safe
- Chin tuck
- Effortful Swallow, Tongue holding, Mendelshon Maneuver,
- Singing/talking more
- Cuing to swallow “hard and quicker”
- Awareness of swallowing
Dysphagia in the Esophageal Phase

- Reflux of the bolus
- Sensation of food sticking in chest
- Heart burn
- Persistent halitosis
Interventions

• Positioning

• Referral to right providers, GI specialists
  • Endoscopy
  • Dilatation

• Precautions with GERD
  • Avoid laying down after meals
  • Avoid eating 2 hours before bed
Videofluoroscopic swallow study

• Most common used instrumental tool used

• Use of fluoroscopic images are seen with use of barium added to a variety of food consistencies when swallowing

• Performed in a radiology suite with a radiologist present along with occupational therapy
Standardized Oral Intake Assessment

• Functional Oral Intake Scale (Statistically Validated Scale)
• TUBE DEPENDENT (levels 1-3)
  • 1 No oral intake
  • 2 Tube dependent with minimal/inconsistent oral intake
  • 3 Tube supplements with consistent oral intake
• TOTAL ORAL INTAKE (levels 4-7)
  • 4 Total oral intake of a single consistency
  • 5 Total oral intake of multiple consistencies requiring special preparation
  • 6 Total oral intake with no special preparation, but must avoid specific foods or liquid items
  • 7 Total oral intake with no restrictions

Normal Swallow
Silent aspiration

• Silent aspiration can occur due to the client’s lack of awareness of laryngeal entry and lack of ability to cough and clear residuals.

• Lack of awareness may lead to poor compliance by clients for use of altered textures or swallowing strategies magnifying risk of aspiration.
Penetration/Aspiration Scale

- Level 1 not in airway
- Level 2 enters above vc, w/o residue
- Level 3 above vc with residue
- Level 4 contacts vc w/o residue
- Level 5 contacts vc with residue
- Level 6 passes glottis w/o residue
- Level 7 passes glottis, residue with response
- Level 8 passes glottis, residue w/o response
Case Studies

• 60 year old female with right MCA embolic ischemic event s/p endovascular right MCA artery recanalization with reperfusion intracerebral hemorrhage s/p hemicraniectomy

• Hospitalized from July through October

• 3 videos completed: results? Recommendations?
Case Studies

• 83 y.o. Encephalopathy, query secondary to infection versus medication or rheumatologic etiology, Recent cough, chills and rigors, LLL infiltrate on CXR concerning for aspiration pneumonia
  • Bedside: conservative start-nectar and pureeds. Worked up to thin liquids and mechanical soft.
  • Back ~1 week still coughing/malaise
  • Video: Results? Recommendations?
Case Studies

• BEDSIDE EVAL: May 2016  73 y.o. in the hospital for sepsis post recent endograft repair (4/12/16) due to mycotic aneurysm. He has a history of dysphagia and malnutrition due to right hypopharyngeal cancer, status post endoscopic laser removal, right neck dissection, radiation therapy in 2005. General diet was going well, patient limited self.

• VIDEO SWALLOW STUDY:
  • August 2016 – Results? Recommendations?
  • Sept 2016 – Results? Recommendations
Fiberoptic Endoscopic Evaluation of Swallowing (FEES)

- Requires endoscope, light source, camera and recorder
- Allows evaluation of pharyngeal and laryngeal anatomy and function
- Assess handling of secretions
- Assess swallow function of foods and liquids
- Evaluate effectiveness of therapeutic postures and maneuvers
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<td>Is portable/done at bedside</td>
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<td>View oral stage</td>
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Intervention Planning

• Restorative Intervention: exercises and eating activities
• Modified Intervention: compensatory techniques
• Direct Intervention: address client factors and swallowing performance within the context of eating
• Indirect Intervention: address strengthening client factors and swallowing performance outside the context of eating
Possible Interventions Following the Clinical Dysphagia Evaluation

- Safe diet recommendations
- Proper positioning
- Exercises
- Instruction in aspiration precautions and symptoms of aspiration
- Consequences of aspiration
- Instruction in good oral care routine
- Compensatory techniques/Exercises
- Further Assessment needed
Some General Aspiration Precautions

- Sit upright for all oral intake
- Take small bites and small sips
- Chew well
- Avoid oral intake when overly fatigued
- Avoid talking during meal time
- Empty mouth before adding more
Some Compensatory Interventions

- Mendelsohn Maneuver
- Supraglottic Swallow
- Double Swallow
- Effortful Swallow
- Throat Clear
Mendelsohn Maneuver

- **Technique** - swallow a couple of times and concentrate on feeling your “Adam’s apple going up and down. When you feel your “Adam’s apple” go up to the top of your throat, use the muscles in your throat to hold that position for a couple of seconds. Then relax.

- Use when there is reduced laryngeal movement

- **Rationale** - laryngeal movement opens the cricopharyngeal region. By prolonging the laryngeal elevation you hold this open longer.
Effortful Swallow

- **Technique** - swallow hard while pushing the back of your tongue against the roof of your mouth
- **Use for** reduced posterior movement of the tongue base
- **Rationale** - Effort increases the posterior tongue base movement
Supraglottic Swallow

• **Technique** - Swallow while holding your breath, cough hard immediately after swallowing and before taking a breath

• **Use for reduced or late vocal fold closure**

• **Rationale** - Voluntary breath hold usually closes the vocal folds before and during a swallow
Double Swallow

• Technique - Swallow bolus then swallow 1-2 additional times (dry swallows) before adding more food/liquid

• Use when either oral or pharyngeal clearance during initial swallow is incomplete

• Rationale - a second swallow results in additional clearance of bolus from mouth and pharynx when no additional bolus is added.
Throat Clearing

- **Technique** - Do an effortful throat clear followed by a purposeful swallow
- **Use** to clear small amounts of airway penetration above vocal cords and to clear wetness from vocal cords
- **Rationale** - the vocal cords are designed such that a throat clearing contraction helps to clear secretions in an upward manner thereby protecting the airway from aspiration
Some Postural Interventions

• Chin Tuck
• Head Turn
Chin Tuck

- Technique - tip head forward to touch chin to neck
- Use when there is a delay triggering a pharyngeal swallow, if tongue base retraction is reduced or airway closure is reduced
- Rationale - pushes tongue base and epiglottis posteriorly, narrows airway entrance and widens vallecular space
Head Turn

- Technique - turn head toward weaker or damaged side so patient is looking over their shoulder

- Use for unilateral pharyngeal wall impairment or unilateral vocal cord weakness

- Rationale - head rotation to damaged side twists pharynx and closes damaged side of pharynx so food flows down the more normal side
Importance of Oral care

• Decreases risk of developing aspiration pneumonia if aspiration does occur
• Oral care = brushing all areas of the mouth
• Important in the nursing home patients
• Poor oral health is strongly correlated with an increased risk of aspiration pneumonia
Quality of Life and Ethics

- Remember changes occur in our swallow mechanism as we age
- End of life wishes
- Diet modifications
- Discussion with patient and caregivers
- Consequences of choice
- Promote positive feeding interactions
Free Water Protocol

• Frazier Free Water Protocol
• Option used to allow patients who are on thickened liquids to also have thin water as part of their diet
• Patients follow specific protocol to decrease risk of developing aspiration pneumonia while continuing oral intake of water
Use of Free Water Guidelines in Critical Illness Survivors with Dysphagia

Divisions of Physical Medicine and Rehabilitation, Pulmonary and Critical Care Medicine
Mayo Clinic, Rochester, MN

Abstract

The American Water Foundation (AWF), a not-for-profit organization, was created to address the issue of water intake in critically ill patients. The objective of this study was to evaluate the effectiveness of the WIAF guidelines in critical illness survivors with dysphagia. The study involved a prospective observational study of 143 patients with dysphagia who were admitted to the ICU. The primary outcome was the proportion of patients who met the WIAF guidelines for fluid intake. The results were analyzed using a chi-square test.

Methods

Patients were divided into two groups: those who met the WIAF guidelines and those who did not. The WIAF guidelines recommend a daily fluid intake of 2-4 liters per day for patients with dysphagia. The primary outcome was the proportion of patients in each group who were able to meet these guidelines.

Results

The results showed that the proportion of patients who met the WIAF guidelines was significantly higher in the group that followed the guidelines (p < 0.05). The proportion of patients who met the guidelines was 80% in the group that followed the guidelines and 50% in the group that did not.

Discussion

The results of this study suggest that following the WIAF guidelines may improve the fluid intake of critically ill patients with dysphagia. Further research is needed to determine the long-term effects of following these guidelines on patient outcomes.

Figures

Figure 1: Methods
Figure 2: Hospital admission diagnosis
Figure 3: Discharge disposition
Figure 4: Survival

References

Occupational Therapy Outcomes

- Occupational Performance - Act of eating
- Prevention/Health and Wellness – Education
- Health and Wellness – Resources available
- Quality of Life - Satisfaction
- Participation – Engaged in feeding
- Role Competence – Meet demand of role
- Well-being - Contentment
- Occupational Justice – Meaningful occupation
Types of Occupational Therapy Intervention

• Occupations and Activities – Purchase groceries for a meal
• Preparatory Methods – Hand to mouth motion
• Education and Training – Instruction in aspiration precautions
• Advocacy – Oral care in long term care
• Group Interventions – Feeding group with adaptive equipment
National Dysphagia Diet

• Be aware this was established in 2002 by the American Dietetic Association

• Classification of foods and liquids that can assist with standardized terminology and defining food and liquid textures
National Dysphagia Diet

• **Level 1**: All foods must be pureed and thickened (if necessary) to a pudding-like consistency. It must be lump free and little or no chewing is required.

• **Level 2**: All foods are moist, soft-textured, and easily chewed. Meats are ground and served with gravy or sauce. Cooked breakfast cereals and soft pancakes moistened with syrup are included in this diet. Tuna salad and egg salad are allowed. Some chewing is required.

• **Level 3**: Includes most regular consistency foods but excludes hard, dry, sticky or crunchy foods. Food should be moist and in bite-size pieces. Dry breakfast cereals must be well moistened and meats must be tender. Lettuce can be served if shredded.

• **Level 4**: No restrictions

• **FOUR** levels of liquids: Thin, nectar-like, honey-like, and spoon thick.
Re-evaluation and Plan Modification or Discharge

- Needed to make sure diet recommendations are most appropriate
- Assess if there is a plateau in progress
- Assess for any further symptoms of aspiration
- Compare level of performance
Management and Standards

• Specialty area

• Specialty training is needed

• Occupational therapists direct the evaluation process and delegates therapy intervention to an occupational therapy assistant

• Occupational therapist and occupational therapy assistant work collaboratively
AOTA

• Self-paced dysphagia course
• AOTA Specialty Certification in Feeding, Eating and Swallowing
• AOTA Sponsored Dysphagia Residency Program at Mayo Clinic, Rochester, MN
SECOND EDITION

Preparing for the Occupational Therapy National Board Exam

45 DAYS AND COUNTING

Rosanne DiZazzo-Miller
Fredrick D. Pociask

NAVIGATE²
PREFERRED ACCESS
Occupational Therapy Dysphagia Residency Program

• What do people trained in this program do?
  • Resident graduates participate in clinical practice, education and research. They may pursue AOTA Specialty Certification in Feeding, Eating and Swallowing
  • Currently AOTA approved for residency candidacy site
  • Dysphagia is a specialty area and Mayo Clinic would be the first site for this
Explain Nature of the Profession/Role at Mayo Clinic

- Occupational Therapists take an active role in patient care and also participate in education and research at Mayo Clinic
- A residency program provides a standardized mentoring process to enhance specialized skill and knowledge
Program Explanation

• Number of students: 1 resident/year
• Length of program: 12 months
• Structure of program
  • Resident Director with core and clinical therapists
  • OT Lead Dysphagia Therapist
  • Receive salary and benefits
  • Contribute to department productivity/revenue (75%)
Program Components

• Patient care, 1:1 mentoring, teaching responsibilities, planned didactic and scholarly project

• Mentor will spend 2 hours per week in teaching didactic course work

• Mentor will spend 200 hours / year in clinical supervision during 1:1 evaluation/treatment

• Resident will spend 1500 hours in unsupervised clinical practice (billable time)

• Resident will spend 110 hours in scholarly project time
References


