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## The Dysphagia Patient

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## Objectives

1. Define dysphagia.
2. State the impact that dysphagia can have on a patient's overall health.
3. Identify Nursing/Physician role in dysphagia and when to refer to speech.
4. Explain speech therapy assessment and intervention with the dysphagia patient.
5. Explain National Dysphagia Diet (NDD) verses International Dysphagia Diet Standardisation Initiative (IDDSI)

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## What is dysphagia?

The American Speech Language and Hearing Association defines dysphagia as "a swallowing disorder involving the oral cavity, pharynx, esophagus, or gastroesophageal junction."

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## Dysphagia's Impact on Health of a Patient

Increased risk for:

- Aspiration pneumonia
- Malnutrition
- Dehydration
- Compromised general health
- Chronic lung disease
- Choking



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## When should Speech Therapy get involved?

**RIGHT AWAY!**

There are signs and symptoms to monitor for including:

- Poor secretion management
  - Includes drooling or patient may require suctioning
- Anterior bolus loss
- Oral residue
- Coughing OR throat clearing during/after eating or drinking
  - Wait up to a minute, this sign is missed **FREQUENTLY**
- Wet or gurgled voice after eating or drinking
- Pain with swallow
- Complaints of food sticking in throat or "it won't go down"
- Difficulty coordinating breathing and swallowing



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## Nursing Swallow Screen

Every facility will have a different protocol in place.

- 3 Ounce Water Protocol
  - Exclusions (e.g., NPO for other procedure, unable to remain alert, pre-existing dysphagia, trach tube present)
  - Brief Cognitive Screen
  - Brief Oral Mechanism Examination
  - Provide the patient 3 ounces of water and instruct them to drink the water "slow and steady without stopping"
  - Pass/Fail

Nursing will contact doctor to place an order for Speech Therapy consultation.

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## Speech Therapy Intervention: Evaluation

- Bedside Swallow Evaluation (BSE)
- Modified Barium Swallow Study (MBS)/Videofluoroscopic Swallow Study (VFSS)
- Fiberoptic Endoscopic Examination of the Swallow (FEES)

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## Speech Therapy Intervention: Evaluation

Bedside Swallow Evaluation

- Chart Review
- Interview patient/family/staff
- Oral Motor Examination
- Analyze trials of varying viscosities of liquids and textures of foods
- Develop POC for dysphagia treatment and make recommendations
- Place diet order

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## Speech Therapy Intervention: Evaluation

Modified Barium Swallow Study (MBS)

- Chart Review
- Interview patient/family/staff
- Oral Motor Examination
- Modified Barium Swallow Impairment Profile (MBSImP)
- Develop POC for dysphagia treatment and make recommendations
- Place diet order



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## Speech Therapy Intervention: Evaluation

Fiberoptic Endoscopic Examination of the Swallow

- Chart Review
- Interview patient/family/staff
- Oral Motor Examination
- Some facilities have developed own protocol, administration is very similar to BSE, but we can visualize with a scope
- Develop POC for dysphagia treatment and make recommendations
- Place diet order



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## Speech Therapy Intervention: Evaluation

<p><b>MBS</b></p> <ul style="list-style-type: none"> <li>• Can visualize the entire swallow process on radiograph</li> <li>• Can see material entering airway as it happens</li> <li>• Can trial various compensatory strategies to determine if they improve swallow function or impede during the swallow</li> <li>• Risk:             <ul style="list-style-type: none"> <li>- Limited amounts of trials d/t necessity to limit exposure to radiation</li> </ul> </li> </ul>	<p><b>FEES</b></p> <ul style="list-style-type: none"> <li>• Can see color picture of anatomy to determine irritation/swelling</li> <li>• Can complete as many trials as necessary d/t no exposure to radiation</li> <li>• Can visualize secretion management</li> <li>• Risk:             <ul style="list-style-type: none"> <li>- Strobe being in the patient's nasal cavity is often times uncomfortable</li> <li>- Cannot see entirety of swallow process only remaining residue and this increases chance of missing aspiration</li> </ul> </li> </ul>
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## Speech Therapy Intervention: Treatment

Treatment depends on deficits present, and will look different for each patient.

- Diet Modifications
- Compensatory Strategies
- Oral Motor Exercises
- Laryngeal/Pharyngeal Exercises
- Respiratory Muscle Training
- Sensory Stimulation

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## Speech Therapy Intervention: Diet Modification

Not all patients will need to be placed on a modified diet, this is individualized based on deficits noted during evaluation.

- National Dysphagia Diet (NDD)
- International Dysphagia Diet Standardisation Initiative (IDDSI)

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## Speech Therapy Intervention: Diet Modification

### National Dysphagia Diet (NDD)

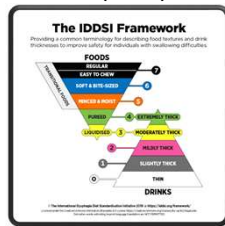
#### Drink Levels:

- Thin
- Nectar - Thick
- Honey - Thick
- Spoon - Thick

#### Food Levels:

- Regular
- Dysphagia Advanced
- Dysphagia Mechanically Altered
- Dysphagia Pureed

### International Dysphagia Diet Standardisation Initiative (IDDSI)




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## Speech Therapy Intervention: Diet Modification

### IDDSI Testing Methods

- Flow Test
- Spoon Tilt Test
- Fork Drip Test
- Fork Pressure Test

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## Speech Therapy Intervention: Diet Modification

### Flow Test



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## Speech Therapy Intervention: Diet Modification

### Spoon Tilt Test



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## Speech Therapy Intervention: Diet Modification

### Fork Drip Test



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## Speech Therapy Intervention: Diet Modification

Fork Pressure Test



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## Speech Therapy Intervention: Diet Modification

The NPO patient (no oral intake).

- Recommended with severe to profound dysphagia.
- There should be a discussion regarding risks/benefits of NPO status versus continued PO intake for quality of life, and goals of care.
  - Involves patient, family/DPOA, and care team (often includes MD, SLP, social work)
- If patient and family choose NPO status, there are alternative nutrition methods that can be put into place.

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## Speech Therapy Interventions: Compensatory Strategies

General Safe Swallow Strategies:

- Reduce distractions
- Upright at 90 degrees
- Small bites/sips
- Slow rate of eating/drinking
- Completing one swallow before taking another bite
- Good oral cares

Oral Swallow	Laryngeal Valve Closure	Esophageal System	Predicted Pneumonia %
1 Good	+ No Aspiration	+ Normal	= No Pneumonia
2 Poor	+ No Aspiration	+ Normal	= No Pneumonia
3 Poor	+ Aspiration	+ Normal	= No Pneumonia
4 Good	+ Aspiration	+ Normal	= No Pneumonia
5 Good	+ No Aspiration	+ Reduced	= No Pneumonia
6 Poor	+ No Aspiration	+ Reduced	= No Pneumonia
7 Good	+ Aspiration	+ Reduced	= Low Risk of Pneumonia
8 Poor	+ Aspiration	+ Reduced	= High Risk of Pneumonia

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## Speech Therapy Intervention: Compensatory Strategies

Strategies Specific to Dysphagia Patient:

- Method of liquid intake (i.e. "no straws", "teaspoon", "by straw")
- Method of pill intake (i.e. "crushed", "with puree", "whole")
- Placement of food on specific side (right versus left)
- Chin tuck
- Head tilt (right versus left)
- Head turn (right versus left)
- Hard swallow
- Alternate liquids and solids
- Checking for pocketing

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## Speech Therapy Intervention: Laryngeal/Pharyngeal Exercises

Indication for need of exercises:

- Reduced laryngeal elevation/excursion
- Incomplete epiglottic movement
- Incomplete laryngeal vestibular closure
- Decreased pharyngeal stripping wave

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## Speech Therapy Intervention: Respiratory Muscle Training

Exercise using a threshold device that is targeting the inspiratory and/or expiratory muscles utilized when breathing, speaking, and eating.

- Three types of RMT
  - Inspiratory Muscle Strength Training
  - Expiratory Muscle Strength Training
  - Both Combined



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## Speech Therapy Intervention: Sensory Stimulation

Sensory input during intake of liquids and solids is crucial for initiation of swallow, timing of swallow, and clearance of residue both orally and in pharyngeal cavity.

- Types of sensory input:
  - Chemically (Gustatory)
  - Physically (Thermal, Tactile)
  - Electrically (Vital Stim)

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## Speech Therapy Intervention: Sensory Stimulation

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## Speech Therapy Intervention: Counseling and Education

- Informational Counseling
- Personal Adjustment Counseling

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