

# Dysphagia, Aspiration, and Choking

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## Speaker Introduction



Jean Herrick, M.A., OTR/L is an occupational therapist who currently works with the REACH Clinic in the Northeast Region.

Jean has over 35 years of experience working with DDS clients. Her expertise is in evaluating and developing programs for individuals with dysphagia. She participates in numerous statewide task groups to develop trainings and implementation strategies for direct support professionals to understand dysphagia and provide optimal care.

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## Today's Agenda

- Overview of dysphagia, aspiration, & choking
- Risk Factors
- Signs and Symptoms
- Intervention and Prevention Strategies
- Case Study
- Questions

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### What is Dysphagia?

- **Dysphagia:** Trouble with chewing and swallowing. Food and saliva may go into the lungs instead of the stomach
- **Aspiration:** Food goes into the airway but the person can still breathe; person may cough
  - Silent aspiration = no coughing
- **Choking:** Food is lodged in the airway and blocks airflow



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### Coughing True or False?

- Coughing is used to clear the airway **True**
- You can see if someone is aspirating **False**
- A change in coughing frequency or type may indicate a bigger problem **True**



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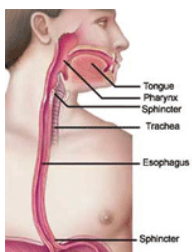
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### How do people swallow?



- Pre-Oral: anticipation and preparation to eat
- Oral: food is chewed/processed in mouth and swallowed
- Food moves into throat and esophagus
- What goes wrong with choking and aspiration?



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### When a person has dysphagia...

- Poor food & fluid intake
- Malnutrition & Dehydration
  - Urinary tract infections
  - Renal failure
- Respiratory infections
- Aspiration pneumonia
- Skin infections/ pressure ulcers

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### ER Visits and Mortality

Top 15 diagnoses for Emergency Room visits\*

Rank	Diagnosis	Oct 2011- Sept 2012	
		# Incidents	% of diagnoses
1.	Physical injuries (non-burn)	2129	31.0%
2.	Seizures	482	7.0%
3.	Respiratory infections	452	6.6%
4.	Urinary Tract Infection	365	5.3%
5.	Gly-tube related	243	3.5%
6.	Skin Infections	196	2.7%
7.	Cardiovascular Symptoms	179	2.6%
8.	Infection (systemic)	172	2.5%
9.	Psychiatric	144	2.1%
10.	Gastroenteritis & Other Gastro	141	2.1%
11.	Dehydration	127	1.8%
12.	Constipation	122	1.8%
13.	Choking/Aspiration	86	1.3%
14.	Diabetes-related	74	1.1%
15.	Anxiety	56	0.8%

- 434 hospital visits due to Aspiration, Choking or Aspiration Pneumonia in 2012.
- Each year, about 10% of all deaths are due to Choking, Aspiration or Aspiration Pneumonia.

\*Adults receiving DDS services and whose incident information is recorded in HCSIS.

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### Risk Factors & Symptoms



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### What increases a person's risk for dysphagia?

- Medication side effects
  - Relaxed muscle tone
  - Increase salivation
  - Cause dry mouth
  - Sedating
- Neurological Conditions: Parkinson's, multiple sclerosis, seizure disorders, Dementia, Cerebral Palsy
- Age
- GERD
- Poor Oral hygiene



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### Risk factors for choking

- Incorrect food texture
- Medication intervention or supplemental medication
- Eating too fast/not chewing adequately
- Easily distracted at meal time
- Pica
- Behavioral issues – grab food and run
- No texture “holidays”



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### Risk Factors - Aspiration

- Poor positioning
- Guzzling, gulping air
- Poor airway protection
- Poor coordination of breathing and swallowing



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### 5 most common reasons a person is referred for a swallowing evaluation

- 1) Frequent coughing
- 2) A change in coughing frequency or type
- 3) Loss of interest in certain foods or textures
- 4) Losing weight or are dehydrated/malnutrition
- 5) Reoccurring pneumonia



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### Other signs you might not notice

- Tired all the time
- Looks like they have a running nose all the time
- Increased agitation – pushing, throwing food
- Sounds like they have a cold or they get lots of colds
- Blinking and watering of the eyes



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### Clinical Signs

- Cyanosis (blue discoloration of the skin)
- Chest or throat discomfort, especially when g-e reflux is present
- Anemia, low hemoglobin and hematocrit
- Low grade fever or spiking temperature, even as soon as 30 minutes to 1 hour after eating



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## What are some prevention and intervention strategies you might try?



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## Conduct a swallowing evaluation

- Experienced Occupational Therapist or Speech Pathologist
- Modified barium swallow study (MBSS)
- Helps identify safest food and beverage textures and dining strategies
- Communicate changes or concerns
- Direct support staff and other caregivers crucial for success: They are the first and last link in chain of care!



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## Modify Food Textures



- **Regular:** Food served in a whole form.
- **Cut-Up:** Food is in bite-size pieces.
- **Chopped:** Food chopped to pea size, and is very soft.
- **Ground:** Small pieces of each food item that has been processed down to the size of an apple seed. It includes enough liquid to moisten the food and/or bind food items together.
- **Pureed:** Foods processed to a pureed consistency. It is smooth, moist, pudding-like and contains no lumps. All food items should drop off the spoon in globs when the spoon is tilted. They should not run off in a steady stream, or be dry and pasty.



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### Food Textures Continued

- Ensure medication is consistent with diet orders
- Considerations when going out to a restaurant:
  - Many restaurants will texturize the food if you ask
  - May bring a manual food grinder just in case



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### Modify Diet

- A Registered Dietitian can make recommendations for foods for specialized diets e.g. GERD
- Avoid high risk foods that may cause problems
  - Sticky foods like peanut butter
  - Particle foods like popcorn or nuts
  - Stringy foods like fried eggs or celery
  - Foods that increase/thicken saliva like milk or yogurt



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### Thicken Beverages

- Best determined by MBSS
- Increases weight for better sensory perception
- Slows flow
- Gives time to help organize and trigger a swallow.
- If necessary, look for low calorie thickener if a concern,
- Correct mixing
- Water for good hydration



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### Positioning

- Provide support so individual can focus on dining and swallowing
- Consider body and head alignment
- Consider table height
- Wheelchair modifications
- Remain upright after meals 30-45 min.
- Elevate head of bed



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### Meal Strategies

- Pacing
  - Cue levels
  - Divided plate,
  - Plating small amounts of food
  - May need to spoon feed for slow pace
- Alternate food/beverage
- Utilize the second/dry swallow
- Increase sensory input
- Cups and Utensils
  - Small utensils
  - Nosey cups
  - Sippy cups
  - Pro-Val cup
  - Spout cups
  - Travel mugs

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### Environmental Strategies

- Quiet, focused meals that minimize distractions
- Be aware of access to kitchen and food (staff food too)
- In the community, be aware of helpful third parties, i.e. civic events or parties with many volunteers
- Light physical activity to aid digestion



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### An important word on oral care

- Thorough oral care can eliminate bacteria; mouth care needed at end of meal and after evening medications
- Tooth brushing
  - Increases salivation
  - Individual may be on thickened fluids
  - Head position
  - Use of toothpaste, peridex
- Suggestions: good positioning; minimal toothpaste, use cloth or toothette to absorb saliva; toothette or cloth to wipe gums/gum line



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### Final Thoughts

- Emergency protocols are in place for choking – check with your agency
- Early recognition of signs and symptoms of dysphagia can prevent aspiration
- Consider g/j tubes as alternate feeding
- Direct care staff and others who provide assistance are the last – and most important – link in the chain of care



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### Case Study

- 35 year old male with recurrent pneumonia
- Medical History:
  - Multiple hospitalizations due to recurrent pneumonia
  - Uses oxygen 24/7
  - The MBSS showed normal swallow
  - He is currently on a mechanical soft diet and thin liquids
- Dining evaluation
  - Eats rapidly
  - Takes large bites
  - Gulps beverages
  - Enjoys extra large iced coffees using a large straw



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### The plan



- Maintain his mechanical soft diet and thin liquids
- Pacing program for food and beverages
- Accurate food texture
- Very close supervision
- Beverages in small sips, small straw or covered travel cup
- Low distraction setting at meals



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### The Outcomes

Re-evaluated after one year:

- Off the oxygen
- No further pneumonia
- Support staff continue with the pacing plan



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### For more information

- Contact the Occupational Therapist or Speech Pathologist for further evaluation, in-services, or assistance with implementing MBSS recommendations.
- Contact the Area Office nurse for info on local resources.
- MA DDS fact sheets and risk management guidelines available on the DDS website <http://www.mass.gov/dds/> by searching for aspiration, dysphagia, or choking in the search box.



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**Coming Soon...**

**Quality Is No Accident**

Massachusetts DDS - Quality & Risk Management Brief - Mar 2014 Issue #11

Did You Know? Aspiration & Dysphagia

Coming in April, the next Quality Is No Accident (QINA) Brief focusing on Dysphagia and Aspiration.

Will contain additional resources and prevention strategies



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**Thank you!**

- Questions and Answers



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