Dysphagia: It’s A Hard Pill to Swallow

ALICIA BRUCKS M.S., CCC-SLP
BAPTIST HEALTH MEDICAL CENTER- LITTLE ROCK, AR
Dysphagia is a medical disorder characterized by difficulty swallowing.

Common causes include:
- Stroke or other cerebral event
- Traumatic Brain Injury
- Prolonged intubation
- Tracheotomy
- Myasthenia Gravis
- Head and Neck Cancer
- SCI
- Multiple Sclerosis
- Trauma to neck or recent surgery
- Progressive Neurological Diseases
ASPIRATION
• When material passes through the vocal cords and enters the airway

ASPIRATION
• Associated with pneumonia, sepsis and death.
• Stroke patients are at a higher risk for aspiration

ASPIRATION
• Up to 1/3 of stroke patients suffer from pneumonia
• Second most common cause of mortality
ASPIRATION PNEUMONIA

- Patients with Dysphagia are at an increased risks to develop Aspiration Pneumonia
- Early detection may be the key to avoiding the the development of Aspiration Pneumonia with acute swallow changes in CVA patients
- Early intervention with swallowing therapy and modified diets have been shown to reduce the the risk for Pneumonia
Causes of Aspiration Pneumonia
Swallowing is a Complex Process

It’s NOT just a reflex
• Many people believe that if ALERT, you SHOULD be able to swallow

• Swallowing is actually one of the most complicated actions carried out by our nervous system

• Swallowing is a sophisticated process that involves a well orchestrated sequence both voluntary and involuntary actions that must occur in a precisely orchestrated three-part sequence involving multiple areas of the central nervous system.

• There are over 25 muscles and 6 cranial nerves that help move the bolus from the mouth, through the throat, into the esophagus and to the stomach
Stages of the Swallow

- Oral Prep Stage (voluntary) - Mouth is opened in response to stimulation, there is an active attempt to take a sip or bite into the mouth and the oral stage begins.

- Oral Stage (voluntary) - The food is chewed and mixed with saliva to form a cohesive bolus. The bolus is moved from the front of the mouth to the back of the mouth, primarily by the tongue.

- Pharyngeal Stage (involuntary) - The bolus reaches the back of the oral cavity and the swallow reflex triggers. The soft palate elevates to close off the nasal cavity. The larynx elevates and the epiglottis moves back and down to help close off the airway. The vocal cords shut during the swallow to help protect the airway and the upper esophageal sphincter muscle relaxes to empty the bolus into the esophagus.

- Esophageal Stage (involuntary) - The bolus moves through the esophagus and into the stomach.
Normal Swallow
Symptoms of Dysphagia

- Trouble initiating a swallow response
- Increased difficulty clearing oral cavity
- Excessive drooling or trouble managing secretions
- Throat clearing
- Coughing during or shortly after swallowing
- A “Wet/Gurgly” sounding vocal quality
- A weak voice or volitional cough
- Needing to swallow multiple times with single sips or bites
- Frequent gagging or regurgitation present
- Fever spikes especially shortly after meals
- Weight loss/malnutrition
Dysphagia related to Stroke

• Dysphagia affects 50-75% of hospitalized CVA patients (push to identify early in acute setting)

• Dysphagia with stroke is an important risk factor for aspiration pneumonia and malnutrition (push to avoid in acute setting)

• Studies have shown that many stroke patients will not perceive that they have a swallowing problem (to not go on patient report alone)

• Stroke patients have been shown to have a higher risk for SILENT aspiration. Some studies have predicted that up to 40% may have SILENT aspiration (need to look at big picture)

• Brainstem Strokes tend to have most severe cases of dysphagia (Need to PEG sooner due to slower recovery)
Abnormal Swallow
Management of Dysphagia

- Swallow screening on admission (RN involvement)
- Routine Speech Pathology Consult for acute CVA patients
- Formal swallow studies as recommended by SLP (OPV/modified barium swallow studies, FEES study)
- Diet modifications and aspiration precautions to decrease risks for aspiration as recommended by SLP
- Training staff and family on risks for aspiration, diet modifications and aspiration precautions recommended by SLP
- Swallowing exercises and techniques to improve swallow function
- Alternative means of nutrition/hydration for high aspiration risk patients (NGT vs. PEG)
- Reassessment of swallow function by SLP to assist with discharge needs
- Good oral care to decrease risks for aspiration of bacteria
Recovery of Dysphagia after CVA

• Some studies have shown that dysphagia may improve within first week of CVA (50-80% of stroke patients)
• First 10 weeks post stroke- 50-80% improve swallow function
• 35% of stroke patients with dysphagia still have difficulties after 3 months
• Many stroke patients return to normal diet within 6 months
• Brainstem strokes may take up to a year or longer to return to some form of oral diet
Predicting Prolonged Dysphagia

➢ Brainstem CVA
➢ History of CVAs
➢ Progressive neuromuscular disease and acute CVA
➢ Advanced Age (70+)
➢ Higher initial NIH scale
➢ Cognitive impairment or varied alertness/mentation
➢ Prolonged intubation or need for repeat intubations
➢ Failed formal swallow study and no change seen on follow-up exam with SLP
Acute Hospitalization - When to PEG?

- Challenges arise due to shorter lengths of stay
- PEG may be needed for discharge placement
- Consider predictors/risk factors for prolonged dysphagia
- Consider PEG with trach if trouble weaning from ventilator (likelihood of prolonged period before able to swallow)
- Educate family that PEG can be removed once able to swallow
- Educate family that PEG may be necessary to ensure nutritional needs are met during rehab process
In conclusion……..

• Swallowing is a complex process - more than a reflex
• Dysphagia is common after CVA
• CVA patients are at a higher risk to develop Aspiration Pneumonia
• Early identification in acute care is important
• Diet modifications, aspiration precautions and good oral hygiene can reduce aspiration risks
• Swallow therapy can help improve swallow function