Dysphagia Management Across Settings and Patient Populations

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Speech Language Pathologists(SLP's) work in a variety of settings including:

- School settings including university settings (~56%)
- Hospitals (including acute care, inpatient rehabilitation centers, LTAC (long term acute cares hospital) i.e. Vibra Hospital), outpatient
- Skilled nursing facilities
- Home health
- Private Practice
- Other residential rehab facilities i.e. Fraser Care Center, QLI

SLP Roles in Various Settings

- Assessment and treatment of speech, language, cognitive, voice and swallowing disorders.
- SLP's in schools generally do not do dysphagia evaluations or therapy however will help to carry out recommendations made by medical SLP when appropriate i.e. at lunch time
- Medical SLP's assess (clinical exam, videofluoroscopy, FEES) and treat dysphagia in patients (inpatient and outpatient) with acute and/or chronic changes to their swallowing status i.e. stroke, head injury or other trauma, head and neck surgeries, neurological disorders, etc.
- Home health/private practice/skilled nursing facility SLP's may evaluate patients swallow clinically and employ treatment strategies/exercises or may follow medical SLP's recommendations after patient has a videofluoroscopy/FEES.

What is dysphagia?

Dysphagia, or difficulty swallowing, is defined as the abnormal transfer of liquids or solids from the mouth to the stomach. Dysphagia is a common condition that affects people for a variety of reasons. Swallowing problems may lead to poor nutrition and respiratory issues. Abnormal movement of food or liquid into the trachea (aspiration) or the inability to eat or drink safely may also result from swallowing problems and lead to significant medical issues (dehydration, pneumonia, diabetic concerns, kidney problems, etc).

Facts-

~20% of the general population have dysphagia (oral/pharyngeal or esophageal) increasing to almost ~30% over age 76.

~50% or more of patients who suffer a stroke will have dysphagia

~60-75% of patients who have head and neck cancer will have some degree of oral or pharyngeal dysphagia due to location of tumor or as a result of their treatment (surgery and/or radiation or chemo-radiation).

Signs and Symptoms of Dysphagia include:

- -Drooling
- -Difficulty chewing
- -Pocketing (food remaining in the mouth)
- -Choking
- -Coughing
- -Sensation of food getting stuck
- -Wet or “gurgly” sounding voice during or after eating or drinking
- -Recurring pneumonia or chest congestion after eating

Patient populations that often have dysphagia

- Stroke
- Brain tumors/trauma
- Head and neck cancer
- Patients who have a tracheostomy
- Patients who are intubated on ventilator
- Weakness caused by variety of neurological disorders (MS, ALS, MD, Parkinson's)
- Spinal cord injury
- Developmental disabilities

- ANY condition that weakens or damages the muscles and nerves used for swallowing may cause dysphagia. Other conditions may affect the coordination of the swallowing muscles or limit sensation in the mouth and throat. Sometimes swallow difficulty is caused by not being able to start the swallowing reflex or because of overall generalized weakness.

How do we assess dysphagia?

- Clinical dysphagia evaluation- Refers to evaluation completed at the patients bedside or in the clinic setting. The clinician completes an oral motor evaluation and provides the patient with a variety of solid and liquid textures to determine safest, least restrictive diet textures based on clinical findings (signs and symptoms of aspiration, needing to use a double swallow, oral posture, etc). If the SLP is unsure of clinical findings or diet recommendations, they may refer the patient for an instrumental exam.

- Instrumental exams- Videofluoroscopy (VFSS) and Fiberendoscopic evaluation of Swallow (FEES)
  - The VFSS is performed on patients of all ages. The SLP can assess the oral, pharyngeal and occasionally upper esophageal function of the swallow. It is completed in conjunction with a radiologist who assists with reading the study. The patient is seated in a special chair that fits into the fluoroscopy machine and the study shows swallowing in real time motion. The patient is given various textures of solids and liquids which contain barium to eat and drink. The therapist may try various strategies or maneuvers i.e. chin tuck/head turn with the patient while under fluoroscopy to see if it is helpful to reduce risk of aspiration.

  - The Fiber optic Endoscopic Evaluation of Swallowing (FEES) is a procedure used by speech-language pathologists to evaluate the pharyngeal stages of swallowing. This assessment also allows the SLP to evaluate secretions and pharyngeal structures that are not viewed in VFSS. This portable study uses a flexible fiberoptic laryngoscope which is passed transnasally into the hypopharynx. The scope hangs above the epiglottis and does not pass between the vocal folds. Patients are seated in a functional feeding position and are offered a variety of food consistencies while the swallow is viewed on a TV monitor/computer screen. The SLP coats the foods/liquids with a green dye so that they are easier to see. The study is recorded and pictures can be left in the medical chart.

Dysphagia Management

- Change diet textures

  Solids-make them easier to manage or chew (softer, chopped, pureed)

  Liquids- can make thicker or thinner depending on the type of dysphagia identified (thickened liquids stay together better and allow patient to control the liquids easier when the patient has oral weakness, however, thinner liquids may clear better when the patient has weak pharyngeal musculature or esophageal dysphagia)
- Change the size of bites/sips (may need assistance to do this/cues)
- Change rate that someone eats, change placement of food in mouth (i.e. after oral surgery), change position of body while eating (gravity assist)
- Use Strategies (chin tuck, alternate liquids and solids, no straws, double swallow, supraglottic swallow maneuver)

Dysphagia in special populations

- Head and Neck Cancer-
  - ~60-75% of patients who have head and neck cancer will have dysphagia, however the type of dysphagia will vary based on location of tumor and how invasive it is i.e. someone with a tumor of the epiglottis may require removal of their epiglottis so will have to use strategies for airway protection (supraglottic swallow maneuver) after surgery vs a patient with oral cancer where they may need a hemi-glossectomy and tissue graft so may need to alter placement of foods/liquids in the mouth or even need to tilt head slightly back to have gravity help with posterior movement
  - Patients undergoing radiation or chemo-radiation are likely to develop dysphagia (minimal to severe) as they go through their treatment due to pain, sores in the mouth/throat or neck as well as significant inflammation which can reduce the ability of the muscles involved with swallowing to work. Patients generally tolerate the first few weeks of treatment without much difficulty, however, struggle with swallowing/intake the last 3 weeks of treatment. This can persist for 3-6 months or longer post-treatment.
  - SLP is generally involved from time of diagnosis to assess swallow function before starting their treatment (radiation/chemo-radiation and/or surgery) and provide prophylactic exercises and education about what to expect as they go through treatment from a swallow perspective. SLP will follow up indirectly or directly as needed during the course of their treatment.
  - Prehab- new program!

Special populations continued…

- Amyotrophic Lateral Sclerosis (ALS)
  - SLP often gets referral from treating neurologist early in diagnosis (often first sign can be dysphagia) to evaluate and make appropriate recommendations or just to establish a baseline
  - Patients are seen at many points throughout their disease as swallowing changes occur so diet/safety can be assessed and managed appropriately
  - Some patients will need or may want a feeding tube for safety concerns or to maximize intake, others choose not to for quality of life reasons
- Myesthenia Gravis (MG)
  - Dysphagia may be one of the initial symptoms as well as weight loss, speech changes, muscle weakness, significant fatigue with any sort of activity
  - Can be treated with medications which can significantly improve the patients ability to swallow, speak and overall quality of life, however, they may still need to use strategies such as taking in smaller meals more often, avoiding difficult foods, alternating solids and liquids and monitoring for fatigue at mealtimes to prevent aspiration/choking/pharyngeal stasis

Videos of Procedures

https://www.youtube.com/watch?v=T1WozzYMWDc

https://www.youtube.com/watch?v=JvDhkgeET-k

Questions????