Any Way You Eat It

A Guide to Dysphagia Management Post Stroke

Who Am I?

Ashley Laudick M.A. CCC-SLP

BA 2007 in Communication Sciences and Disorders from UNI

MA 2009 in Speech Language Pathology from UNI

FEES trained 2016

Advanced FEES courses in Dallas, Nashville, and online

Worked in SNF level of care since 2010

LTACH and SNF since 2020

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Objectives

1.Explain the signs and symptoms, assessments, treatments and interventions for aspiration

2.Understand the importance of dysphagia/aspiration management for individuals post-stroke

3. Apply this knowledge toward improving SLP referrals and patient advocacy

Dysphagia

Affects between 55% and 78% of all stroke survivors (Daniels &Foundas 1999; Martino et al 2005)

Causes or contributes to sepsis, pneumonia, resp failure & death

Can include difficulty with feeding, chewing, and swallowing

Is **NOT** eliminated by the presence of a feeding tube.

Post-Stroke Pneumonia

“ Bacterial pneumonia is the most common cause of death in patients sustaining acute stroke and is believed to result from an increased aspiration.” (Braun, Dirnagel, Meiser & Meiser, 2006)

Stroke-induced immunodeficiency in mouse models - primarily caused from overactivation of the sympathetic nervous system

Only 200 colony-forming units of bacteria were required to induce pneumonia in experimental stroke, vs 200,000 colony-forming units of bacteria were required to induce pneumonia in healthy control

Clinical swallow evaluations

Clinical swallow evaluations - Performed at bedside with NO DIRECT visualization of the swallowing musculature. Recommendations based solely on what can be observed by just looking at the patient.

Possible signs/symptoms of dysphagia/aspiration include: Coughing, throat clearing, gagging, spitting out food, taking a long time to chew, shortness of breath, multiple swallows

Any of these can be an indicator that dysphagia may be present and an instrumented swallow exam is needed.

Silent Aspiration

Occurs in 40-70% in individuals following stroke (Zagaria, 2023)

Silent Aspiration - NO outward signs of aspiration. An absence of coughing, throat clearing, gagging, spitting out food, taking a long time to chew, shortness of breath, multiple swallows

- Clinical assessments CANNOT detect silent aspiration - you MUST have an instrumented swallow evaluation

Enteral Nutrition

Neither PEG nor NG tube eliminate the risk for aspiration

(Kumpf, Chessmank, 2005)

Swallow screens

Yale Swallow Protocol (Leder & Suiter, 2014)

1) Exclusion Criteria: Not for individuals with tracheostomy, HOB restrictions <30 degrees, pre-existing dysphagia, enteral feeding (NG or PEG) or with limited alertness

2) Brief Cog Screen: What is your name? Where are you? What is the year?

3) Oral Mechanism Exam: Labial closure, lingual ROM, and facial symmetry

Yale Swallow Protocol cont'd

4) **3oz water challenge:** Pt must sit upright as possible and drink 3oz of water from cup or straw without stopping.

5) **Pass Criteria** : Drink all 3oz without any overt s/x aspiration either during or immediately after completion

Fail Criteria: Inability to drink all 3oz of water, either starting and stopping, or demonstrating any overt s/x aspiration. **Failure of protocol triggers request for instrumented swallow evaluation**

- Validated with 3,000 pts - using FEES as instrumental measure, screen correctly predicted aspiration 96.5% of the time with a negative predictive value of 97.9% and a false positive rate of <2%

Instrumented Swallow Assessments

Modified Barium Swallow Study (MBSS)

AKA: OPMS, Video Swallow, Video Fluoroscopic Swallow Study, Cookie Swallow

Benefits: see full swallow in a lateral view, visualize structural abnormalities, visualize cervical spine, and esophageal sweep

Limitations: posture, secretion management, vocal fold adduction, some soft tissue/anatomical abnormalities

Flexible Endoscopic Evaluation of Swallow (FEES)

AKA: Fiberoptic Endoscopic Evaluation of Swallow

Benefits: Top-down view of swallow, visualize soft tissue, secretion management, portability

Limitations: “white out” period during the swallow, unable to visualize lower esophagus, unable to visualize hyoid movement

Questions?

Please feel free to follow up with any further questions.

You may email me at:

ashlyons84@gmail.com

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