Dysphagia Management in Stroke: Bedside and Beyond

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Disclosures

- NECC/AHA Mini Grant Receipt for the 2018-2019 cycle

Objectives

- Review dysphagia statistics related to stroke
- Discuss screening and assessment options
- Review clinical decision-making

Dysphagia Statistics

Dysphagia is estimated to occur in 42%–60% of acute stroke patients within a median of 3 days following stroke (Mann & Hankey, 2001)

MBS performed within a median of 10 days from stroke diagnosis have been reported to detect swallowing abnormalities in 55%–72% of acute stroke patients (Mann & Hankey, 2001)

Falsetti and colleagues (2009) found that dysphagia occurs in over one third of patients admitted to stroke rehab units

Aspiration

- Aspiration has been reported to occur in 38%–70% of acute stroke patients . (Daniels et al., 1998; Horner & Massey, 1988; Horner, Massey, Riski, Lathrop, & Chase, 1988; Linden & Siebens, 1983).
- Silent aspiration is estimated to occur in 15%– 39% of subacute dysphagic stroke patients. (Ramsey et al., 2005).
- Silent laryngeal penetration and aspiration of liquids are reported to be more common in right hemisphere than in left hemisphere cortical strokes. (Robbins, Levine, Maser, Rosenbek, & Kempster, 1993).
- There is an increased relative risk of pneumonia in stroke patients with dysphagia (3.17 vs. individuals without dysphagia).

What is a *swallowing screening?*

The term *swallowing screening* is generally used to refer to a minimally invasive evaluation that provides quick determination of

1. the likelihood that dysphagia exists
2. whether the patient requires referral for further assessment
3. whether it is safe to feed the patient orally

What questions can a screening procedure answer with respect to swallowing?

- a known history of dysphagia
- a medical diagnosis that frequently involves swallowing impairment (e.g. stroke)
- reduced level of consciousness/ cognitive function
- overt signs of aspiration
- overt complaints of difficulty swallowing

Dysphagia Screening Tools

- Standardized Swallowing Assessment
- Massey Bedside Swallowing Screen
- Dysphagia Screen Tool
- Acute Stroke Dysphagia Screen
- Yale Swallow Protocol (3 Oz. Water Swallow Challenge)

What are the different models of swallowing screening that might be considered for use?

Model A	The SLP trains nursing staff to conduct swallowing screenings. Nursing staff perform swallowing screenings and refer patients to SLP who fail screen
Model B	The physician performs swallowing screening in the course of his or her regular medical evaluation.
Model C	Model A or B followed by an automatic referral within a specific timeframe (24– 48 hours) for swallowing assessment by SLP for all patients admitted to the acute stroke unit or with a specific diagnosis.
Model D	All patients are automatically referred to speech-language pathology for swallowing screening or assessment.
Model E	Nursing staff contact the SLP on an on-call basis to request screening for patients who have presented to the emergency room with conditions that are recognized to pose a possible risk of dysphagia.

Failed Screen…What's Next?

- **Instrumental evaluation** of swallowing is recommended for stroke patients with suspected dysphagia to confirm presence/absence of aspiration, find the physiological reasons for dysphagia, and assist with establishing a treatment plan
  - MBS/VFSS or FEES
- Results of instrumental study can be used to guide next steps such as NGT, PEG, modified diet, etc.

Considerations

AGE

RESPIRATORY STATUS

COGNITIVE STATUS

QUALITY OF LIFE/ PATIENT'S WISHES

ORAL HYGIENE

COMORBIDITIES

In the real world…

- How accessible are instrumental evaluations?
- How can we promote safety and best practice if we don’t have access to instrumental studies?
- How can we advocate for more accessibility?

Swallowing Treatment

- Swallowing treatment should incorporate the principles of neuroplasticity for adults with stroke-induced dysphagia
  - It should incorporate specific oropharyngeal impairments related to tone and mobility
- Behavioral swallowing interventions are recommended as a component of treatment for adults with stroke-induced dysphagia
- Oral hygiene protocols are recommended for patients with dysphagia to reduce the risk of aspiration pneumonia post stroke

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