

# Are you hungry? The research and rationale of a Nursing Swallow Screen

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## Objectives

Participants will:

- Review the research and rationale supporting swallow screens for stroke patients
- Understand how strokes can affect swallowing function
- Be able to identify signs and symptoms of potential silent aspiration
- Recognize the difference between a Nursing Swallow Screen and an SLP Swallow Evaluation

# Thank you!

## Definitions

- Dysphagia – difficulty swallowing
- Penetration – material entering laryngeal vestibule, but not going below vocal cords
- Aspiration – material going below vocal cords
- Silent aspiration – aspiration that doesn’t elicit a cough or visible sign of difficulty

## Definitions (continued)

- Screening – “Swallowing screening is a pass/fail procedure to identify individuals who require a comprehensive assessment of swallowing function or a referral for other professional and/or medical services” (ASHA, 2004)
- Sensitivity – does the screening tool capture the patients it’s intended to capture (those at risk for dysphagia/aspiration)?
- Specificity – does the screening tool rule out patients who don’t have the problem (dysphagia/aspiration)?

## Statistics

- Aspiration pneumonia (AP) is 5<sup>th</sup> leading cause of death in US
- 4<sup>th</sup> most frequent cause of death in the elderly
- Not all patients who aspirate develop AP – aspiration is necessary, but not solely sufficient to cause AP
- Aspiration of small amounts of saliva occurs during sleep in almost half of normal subjects

## Statistics (continued)

- 42-67% of patients present with dysphagia within 3 days of CVA
- 30-50% of these patients aspirate
- 1/3 - 1/2 of aspirators are silent aspirators
- 1/3 of patients who aspirate develop pneumonia that requires treatment
- Swallowing abnormality is associated with a three-fold increase in mortality rate

## Risk Factors for Aspiration post CVA

- Brainstem stroke
- Difficulty managing oral secretions
- Coughing/throat clearing
- Wet, gurgly vocal quality
- Weak voice (dysphonia)
- Recurrent lower respiratory infections
- Low-grade fever
- Lower lobe congestion
- Immunocompromised state

## JCAHO

In 2010 JCAHO removed swallow screening from their “Get with the Guidelines” for stroke center certification, as no standards existed for what constituted a valid screening tool.

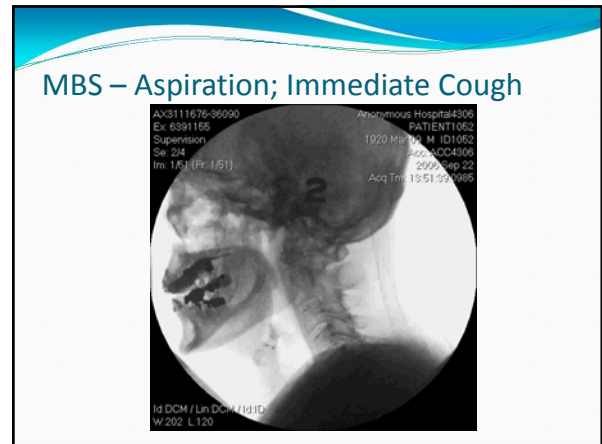
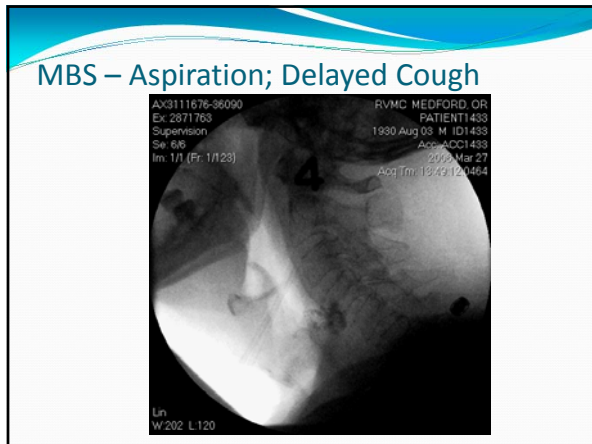
There is concern that hospitals will omit dysphagia screening, leading to worse patient outcomes. The lack of a standard, however, has not prevented the search for an effective screening tool.

## Influencing factors

Statistically significant influencing factors in the development of AP include:

- Poor mobility
- Nil per os (NPO) status
- Age
- Dependency for feeding
- Number of medications
- COPD
- Number of medical conditions/co-morbidities
- Stroke
- ETOH abuse
- + in UK: Dysphagia, only oral intake, bedfast, male





### Cautionary tales

- Aspiration can't be distinguished from penetration bedside – both can elicit cough
- Absence of cough cannot guarantee no aspiration (silent aspiration)
- Presence or absence of gag reflex may or may not be significant (up to 30% of healthy younger adults & 44% of healthy older adults may have unilateral or bilateral absent gag)

### How can you tell?

Potential s/s of aspiration (silent, as well):

- Cough after swallow, immediate or delayed
- Wet, gurgly vocal quality
- Runny nose or eyes
- Sneezing
- Distress with breathing

### Benefits of NSS

- More staff available more hours/days
- More opportunities to observe the patient
- Patients with less severe CVA s/s are more likely to safely receive p.o. sooner
- Have a basis for withholding p.o. with more severe CVA patients
- Can be repeated as patient condition changes (hopefully improves)
- Helps with patient and physician satisfaction
- Provides nutritional support for patient healing
- Helps reduce LOS, costs

### SLP perspective

- There are a lot fewer of us than of nurses
- We can't possibly see all patients as soon as they are admitted
- The NSS gives us a preview of the patient

Thanks again

Questions?

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