



Safe to swallow? Assessment of the dysphagic and dysphasic patient

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Introduction

Dysphagia is a common consequence of acute stroke with a reported incidence of 47% in the most recent national audit. Adverse events associated with early, inappropriate reintroduction of swallowing include aspiration pneumonia, dehydration and malnutrition. Whilst early assessment of stroke patients by a speech pathologist is a state-wide key performance indicator within NSW Health, it is recognised that many patients are admitted after-hours or on weekends to wards with limited speech pathology services. It is imperative nursing and medical staff are familiar with the swallowing difficulties experienced by acute stroke patients and feel comfortable screening patients for early re-introduction of food and fluid.

Case – You have a new patient, an 84-year-old female newly admitted with a dense right hemiplegia secondary to a stroke. A nurse on the ward is asking if she can eat and drink?

1. Initial Assessment of the patient

- Use the ASSIST (Acute Screening of Swallow in Stroke/TIA) to screen swallow function – this will stratify whether the patient requires a formal Speech Pathology assessment of swallow function
- The first 3 questions of the ASSIST tool are:
 - Can the patient maintain alertness for 20 minutes?
 - Can they maintain posture/positioning in upright sitting?
 - Can they hold their head erect?
 - If the answer is 'No' to any of these questions, make them nil by mouth
- If the patient can do all 3, check for facial weakness, drooling, weak or absent cough as per the ASSIST tool. Please note specific training is required for the ASSIST.

2. Outline your assessment approach by the bedside

- **History**
 - Is this a new problem or do they have any underlying progressive neurological issue?
 - Parkinson's Disease or Multiple Sclerosis may impart an impairment exacerbated by acute stroke
 - Previous cognitive decline or dementia process?
 - Slurred or dysarthric speech?
 - Previous diet modifications in the past and current dietary adequacy?
 - Previous aspiration pneumonia events?
 - Previous head and neck surgery?
 - Been on a ventilator?
 - General patient factors?
 - Is the patient mobile or confined to bed?
 - Have they required opioids or other sedatives frequently?
 - Are they elderly?
 - Are they on any other drugs with anticholinergic properties that may contribute to dry mouth?
 - What type of oral care do they have currently?
- **Examination**
 - Broad approach
 - Cranial nerves exam – particularly assessing quality of cough, tongue etc
 - Oral cavity examination – dry mouth, poorly fitted dentures etc
 - Management of oral secretions

3. Investigations for Dysphagia

- Video fluoroscopy (modified barium swallow) – gives objective view of oral to pharyngeal phase
- Nasendoscope / Fibro-optic endoscopic evaluation of swallowing (FEES) – view of pharyngeal/laryngeal structures

4. How are swallowing difficulties treated?

- Dehydration is common after stroke due to swallowing impairment, immobility and communication difficulties and leads to poor outcomes
- Malnutrition is also common; with Australian data indicating that 16% – 19% of admitted stroke patients are also suffering from malnutrition
- Patients therefore require the most minimal fluid thickening necessary that is safe, whilst optimising patient tolerability
 - Thin fluids – normal fluids
 - Mildly thick – nectar consistency
 - Moderately thick – honey consistency
 - Extremely thick – pudding consistency

5. Dysphagia management for an acute stroke patient

- Early speech pathology assessment
- Compensatory strategies such as positioning, therapeutic manoeuvres or modification of food and fluids to facilitate safe swallowing for people with dysphagia based on specific impairments identified during comprehensive swallow assessment
- One or more of the following methods can be provided to facilitate resolution of dysphagia:
 - Positional changes targeting specific muscle groups (e.g. ‘Shaker’)
 - Thermo-tactile stimulation
 - Electrical stimulation, if delivered by clinicians experienced with this intervention, applied according to published parameters and employing a research or quality framework
- Dysphagic patients on modified diets should have their intake and tolerance to diet monitored – the need for continued modified diet should be regularly reviewed
- Patients with persistent weight loss and recurrent chest infections should be urgently reviewed
- All staff and carers involved in feeding patients should receive appropriate training in feeding and swallowing technique

The patient spends a month in hospital, and despite strict adherence to a diet of extremely thickened fluids, she develops aspiration pneumonia. Eventually she is discharged to a nursing home with very poor mobility and requires a hoist for transfer. She is admitted to hospital several months later with another aspiration pneumonia.

6. Dysphagia management for a patient with chronic swallowing impairment

- Eliminating and/or minimising aspiration risk – this would include diet modification, good feeding management/techniques and good oral hygiene
- At times, a patient may decide to eat and drink for Quality of Life – this is a patient led decision accepting the risks of aspiration where diet modification is unable to eliminate aspiration risks; this should be clearly documented in the medical notes
- Nasogastric Tube
 - If patient NBM whilst receiving active treatment
 - Typically short-term in nature – up to 1 month
- Percutaneous Endoscopic Gastrostomy (PEG) Tube
 - Typically a longer-term solution, reserved for patients whose dysphagia is unlikely to resolve
 - Not necessarily permanent (e.g. Head and Neck Cancer patients undergoing upper GI/head and neck radiotherapy)
 - Typically managed by dietitians who decide nutrition requirements, caloric intake, quality and quantity of food etc

7. Take home messages

- Swallowing difficulties can:
 - Occur secondary to an acute event, such as a stroke
 - Be progressive due to chronic conditions
- Use the ASSIST tool to assess swallowing at the bedside (stroke patients only)
- Early speech therapy assessment is usually a good idea
- Think of swallowing problems as a cause of respiratory distress
- Swallowing problems may improve or worsen, so reassessment is important

References

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Clinical Guidelines for Stroke Management 2010

(Available at: https://www.pedro.org.au/wp-content/uploads/CPG_stroke.pdf)

ASSIST tool – Acute Screening of Swallow in Stroke/TIA

(Available at: https://www.aci.health.nsw.gov.au/_data/assets/pdf_file/0007/251089/ASSIST_screening_tool.pdf)

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