Considerations when Providing Nutrition Care to the Stroke Patient

Shirley Williams SLP

Sue Desjardins RD

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To understand the following:

- Dysphagia and its complications
- Diets for dysphagia
- Enteral feeding in the Rehab patient
- Transitioning from enteral feeds to an oral diet

- Patient is admitted with a stroke
- NPO until bedside swallowing screening by Nurse
- If failed swallowing screening, patient is made NPO
- CAT scan is done
- tPA may be given for ischemic stroke
- SLP referral
- SLP assessment is conducted
- RD referral for enteral feed assessment, if needed

- A term that refers to ANY physiological or anatomical condition that interferes with the successful function of the swallow.

Swallowing Anatomy/Physiology

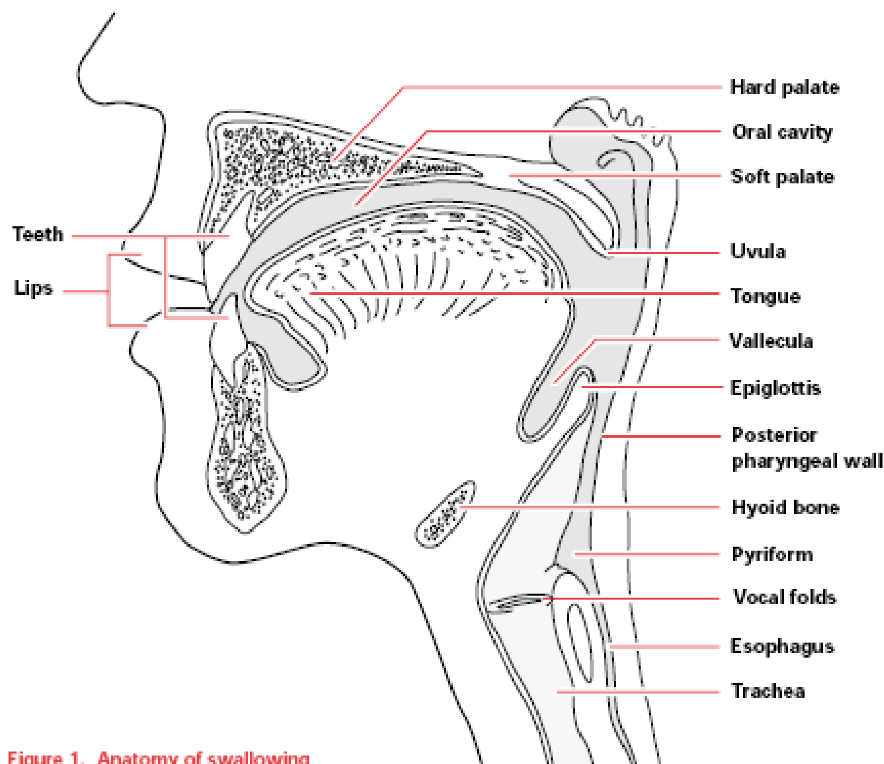
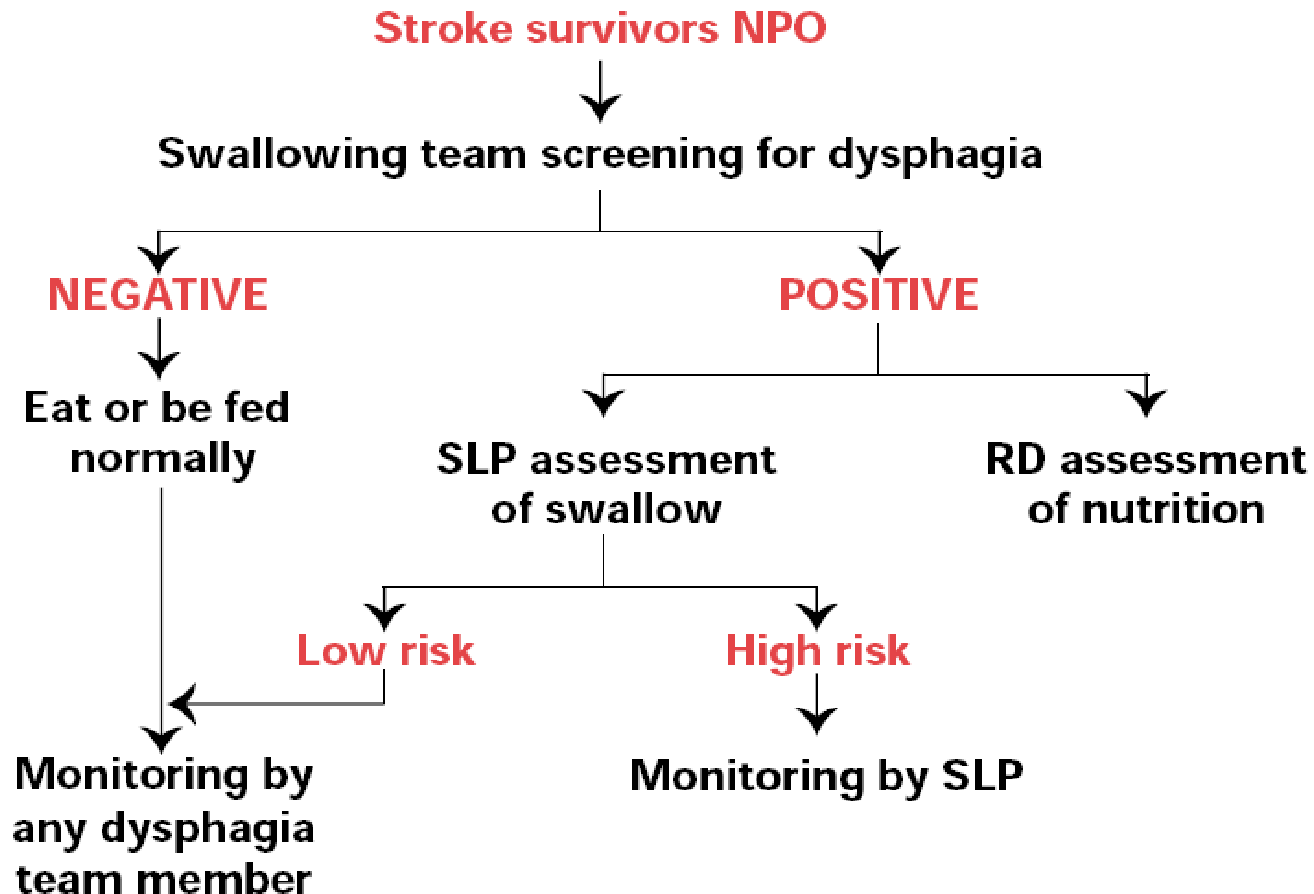


Figure 1. Anatomy of swallowing

Source: Heart & Stroke Foundation (2006) Management of dysphagia in acute stroke: an educational manual for the dysphagia screening professional, p. 8

Dysphagia Algorithm



Source: Heart & Stroke Foundation (2006) Management of Dysphagia in Acute Stroke: An Educational Manual for the Dysphagia Screening Professional, 18

Possible Signs/Symptoms of Dysphagia

- Coughing/choking
- Drooling/poor lip closure
- Pocketing of food
- Difficulty swallowing pills
- Poor intake/appetite
- Rate of eating (slow to swallow)
- Wet gurgly voice
- Frequent chest infections
- Report of "tight throat" or "food sticking"
- repeated swallows

Dysphagia Assessment - SLP

- Determines the site of structural or physical involvement and degree of impairment
- Various types of assessment:
  - Clinical Bedside
  - Instrumental
    - Video fluoroscopy, Modified Barium Swallow, Cookie Swallow
    - Ultrasound
    - Endoscopy (FEES – Fibre Optic Endoscopic Evaluation of Swallowing)

Cookie Swallow Clip

Health Issues:

- Emotional impact
- Aspiration pneumonia
- Malnutrition
- Dehydration
- Mortality

Health Care Costs:

- Increased Length of Stay (treatment, medication, staffing)

Dysphagia Management

- Oral hygiene
- Patient specific diet textures
  - Dysphagic strict, puree, minced, dental
  - Thickened liquids
- Feeding strategies
- Ongoing education and counseling for stroke survivors and families

Feeding Strategies

- Eye level. **Never** feed from above.
- Monitor / cue rate (slowly)
- Small amounts of food – one level **teaspoon** at a time
- Ensure swallow completed before proceeding.
- Place food on the stronger side of mouth
- Remain upright at least 30 minutes after meal
- Napkin/cloth for drooling
- One pill at a time (crush, whole with apple sauce/water…)
- Do not deviate from recommended diet
- Avoid mixed consistencies
- Cue multiple swallow
- Avoid straws unless prescribed
- Use wide-mouthed cups or nosey cups
- SLP directed strategies

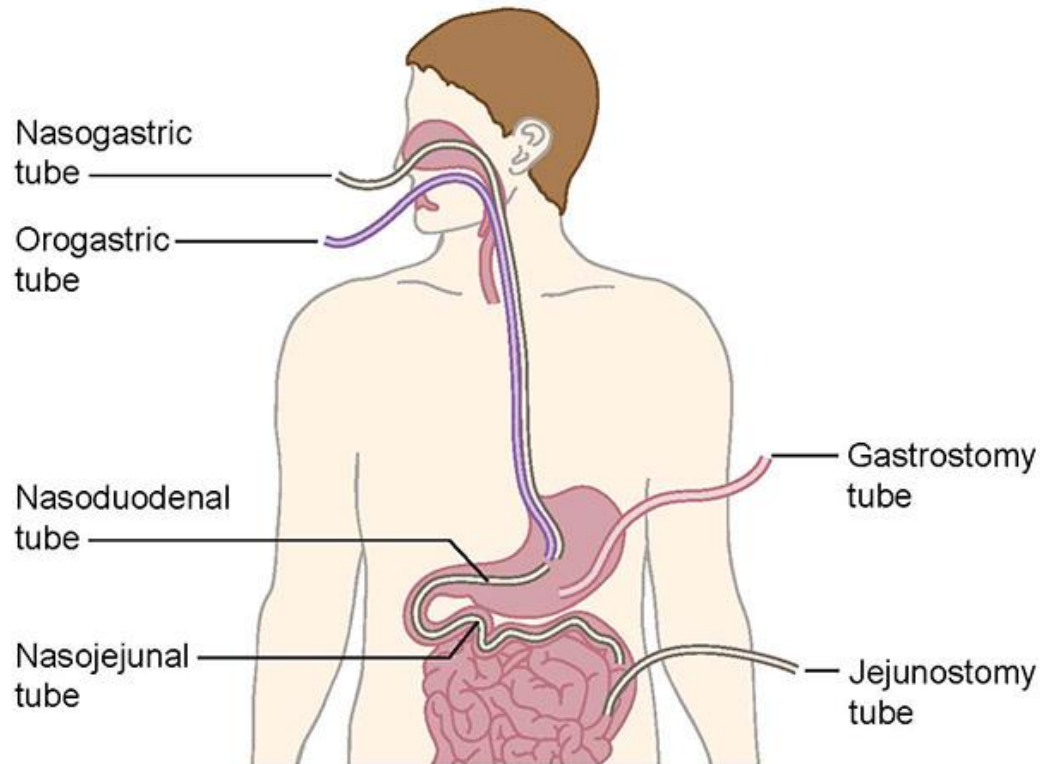
When to Implement Enteral Feeds?

- Patient is unsafe to take an oral diet
- Patient is unable to meet nutrient needs from an oral diet
- Functioning GI tract
- Decision makers are in agreement with enteral feeds

Enteral Feeding Process

- Feeding tube is inserted (usually NG-tube to start)
- Referral is sent to RD to assess nutrient and fluid needs
- RD recommends feeding rate and goal rate to meet nutrient needs
- RD recommends water flushes to meet fluid needs

Types of Enteral Feeding Tubes



Source: Nutrition Academy. Providing Nutrition Clinically. Baxter Healthcare Corp. 2013. Available at: http://www.nutritionacademy.com/ie/effective_nutrition/providing_nutrition_clinically.html#. Accessed on May 19, 2014.

Enteral Feeding RD Recommendations

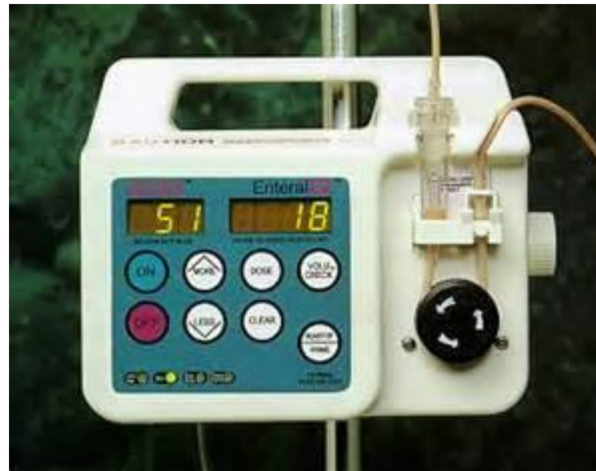
- Feeds are started at a continuous rate, usually (15-25 mL/hour)
- Feeds are increased by 15-25 mL every 6-8 hours to goal rate based on tolerance
- Water flushes are ~ 30 mL every 4 hours with **IV** or to meet fluid needs with **no IV**
- RD and Nurse monitor for signs of intolerance (vomiting, diarrhea, nausea, extreme GI discomfort)

Transitioning to Bolus Feeds

- Bolus feeds can be tried once stable on continuous feeds
- 1 box of feed at a rapid rate is often tried before progressing to bolus feeds
- Bolus feeds are usually given TID or QID via gravity
- Water flushes are often given after feeds i.e.100 mL after feeds

Cyclic (overnight) Feeds

- If unable to tolerate bolus feeds, feeds may be given overnight (often for 12 hours) via a feeding pump



Monitoring & Progression to Oral Diet

- Monitoring of enteral feeding tolerance is ongoing
- SLP will reassess swallowing and try fluids/food when appropriate
- Fluids/solids are introduced slowly
- Oral diet is indicated as per SLP

Monitoring & Progression to Oral Diet

- Bolus feeds are adjusted based on oral intake

  i.e. 50% of diet taken then reduce feeds by 50%
- Once oral intake is adequate, enteral feeds may be given as a back-up or discontinued altogether
- Oral diet then becomes the primary source of nutrition

Questions Related to Enteral Feeding

- Does sterile water have to be used when giving water flushes? ***No. Sterile water is only used for those patients who are very immunocompromised.***
- Can patients with *C. difficile* be enterally fed? ***Yes. It is often recommended to continue to feed patients with C. difficile if possible, to prevent decline of nutrition status.***
- Do patients with diabetes require a diabetic formula? ***Not always. A standard formula (Isosource HN with fibre) can often be used.***

Conclusion

- Goal is to progress to an oral diet if possible
- Slow progression to an oral diet may prevent risks associated with dysphagia ***i.e. aspiration***
- Early initiation of nutrition intervention is important to prevent malnutrition/dehydration

Thank You

- Questions