Dysphagia, oral care & hydration

Anita Lopes, RD
David Beattie, SLP

Swallowing phases

Oral preparation: chewing, moistening, formation and control of bolus
Swallowing phases

Oral propulsive: transit of bolus to posterior oral cavity

Pharyngeal: airway protection, propulsion of bolus into esophagus

Esophageal: transit to the stomach by peristalsis
Normal Swallow

https://www.youtube.com/watch?v=PwVrehfTKBw

Dysphagia

Oral
Pharyngeal
Esophageal

Signs of dysphagia

Oral stage
Not managing secretions
Loss of food/fluid from the mouth
Unable to form bolus
Food residue in cheeks, on tongue or roof of mouth
Signs of dysphagia

**Pharyngeal stage**
- Frequent throat clearing
- Coughing, choking
- Gurgling or wet voice
- Nasal or oral regurgitation
- Food “stuck in throat”
- Absent swallow

Aspiration...
...can be silent.

A present or absent gag...
...does not predict or rule out dysphagia or aspiration.
Dysphagia—negative outcomes

- Dehydration
- Malnutrition
- Skin breakdown
- Delayed rehab
- ↓ independence
- ↓ QOL
- Aspiration pneumonia
- Death

Dysphagia & stroke

50% of stroke patients have dysphagia in the first few days after the stroke.

Of these, 1/3 have swallowing difficulties that persist beyond 3 months post-onset.

Dysphagia & stroke

- Bilateral, subcortical or brainstem stroke: 60-70%
- Unilateral hemisphere stroke: 15%
Dysphagia & pneumonia

33% of patients with dysphagia develop pneumonia requiring treatment.

Stroke & pneumonia

35% of post-stroke deaths are caused by pneumonia.

Aspiration on videofluoroscopy

http://www.youtube.com/watch?v=1sFNMc87558
**Aspiration**

Dysphagia  \[ \downarrow \]
Poor secretion  Aspiration
Management

**Aspiration**

Aspiration & Poor oral hygiene  \[ \downarrow \]
Pneumonia
Why oral care?

Pathogens that cause aspiration pneumonia (as well as VAP) can colonize the oropharynx of critically ill patients within 48 hours of admission.

Where does oropharyngeal bacteria end up?
Why oral care?

Most bacterial nosocomial pneumonia is caused by aspiration of bacteria from the oropharynx or upper GI tract.

Why oral care?

Nosocomial pneumonia accounts for 10-15% of all hospital acquired infections.

Why oral care?

Treatment with oral hygiene alone can reduce occurrence of pneumonia in older adults in nursing homes by 30%.
Why oral care?

Patients who have swallowing difficulties are at risk for poor oral hygiene and aspiration.

Oral Care

Screen stroke patients on admission for obvious signs of dental disease, level of oral care, and appliances.

Oral care—considerations

Independent?

Needs help?

Dependent?
Oral care—considerations

Cognition & LOC
Activity tolerance
UE function
Handedness
Oral motor function
Severity of dysphagia

NPO?

Patients who cannot eat or drink have the highest oral care needs.

What to do?
Swabs

...are for moisture and relief—not for cleaning teeth.

Suction at bedside
Suction toothbrush

H₂O
Dentures need cleaning too.

Best practice guidelines

...final comment...
Thickened fluids

...not a panacea...