

Swallowing Disorders in Older Adults

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Why do we eat?

- Nutrition
- Hydration
- Enjoyment
- Where can it go wrong

What is swallowing?

- ‘Deglutition’ is the act or process of swallowing. It includes 4 steps:
 - Oral preparation
 - Oral transit
 - Pharyngeal transit
 - Esophageal transit
- Swallowing is a biomechanical pressure event.

Oral preparation

- Dentition (your teeth)
 - There is a high relationship between chewing capability, the number of chewing strokes required, and a person's age.
 - Poor dentition or dentures lead to even more chewing strokes, which can lead to jaw joint problems (TMJ). This can lead to fatigue when chewing, which leads to eating failure. This, in turn, can lead to:
 - Loss of weight
 - Dehydration
 - Loss of thinking power - memory, judgment, etc.

Oral preparation can be affected by:

- An altered sense of taste from taking certain medications.
- Dry Mouth, which might also be caused by certain medications.
- Diminished oral sensory capacity. These senses include:
 - Tactile – being able to feel the food in your mouth.
 - Taste, which is also affected by the sense of smell.
 - Thirst.

Taste can be affected by

- Loss of sensations.
- Some drugs that affect taste include:
 - Tetracycline (antibiotic)
 - Lithium carbonate (antipsychotic)
 - Penicillamine (antiarthritic)
 - Catopril (antihypertensive)

Oral preparation

- Some of the effects on oral preparation that are associated with aging are:
 - Loss of efficiency, which can result in
 - Increased meal time
 - Decreased calorie intake
 - Elimination of certain foods from diet
 - Loss of some social aspects of eating
 - Pleasure
 - Elimination of certain social contexts for eating

Oral transit

Problems that can affect oral transit include:

- Dry mouth (Xerostomia)
- Decreased sensation, especially touch
- Increased oral movement times
- Late onset of movement
- Respiratory or cardiovascular disorders
 - A person must stop breathing in order to swallow, which is difficult for people with certain cardiac or pulmonary conditions.
 - The results of cancer of the larynx also affect one's ability to swallow.

Oral transit

- The effects on oral transit associated with aging include:
 - Decreased efficiency of eating, which results in
 - Weight loss
 - Avoidance of certain foods
 - Elimination of certain social contexts for eating
 - Swallows that are too weak
 - Loss of food control with entry into throat
 - Swallows that are initiated late

Pharyngeal transit

- The effects on pharyngeal transit associated with aging include:
 - Increased residue in throat
 - Increased number of swallows per bite
 - Decreased efficiency of eating
 - Increased likelihood of getting food into airway
 - Longer eating times with subsequent issues
 - Social aspects of eating
 - Reduced calorie intake and weight loss or dehydration
 - Loss of reserve, which makes it easier for decompensation to occur

Esophageal transit

- Esophageal function declines with age. This decline can result in:
 - Longer transit times
 - GERD (gastroesophageal reflux disease)
 - Structural anomalies, including:
 - Zenker's diverticulum
 - "Twisted" esophagus
 - Hiatal hernia
 - Blockages
 - Strictures (narrowing of passages)
 - Achalasia (failure of the esophagus and stomach sphincter to move food into the stomach)

Esophageal transit

- The effects on esophageal transit associated with aging include:
 - GERD
 - Decreased efficiency of eating
 - Longer eating times and its complications
 - Expectoration at unexpected times

What do clinicians say?

- GERD
- Palliative care
 - Living wills
 - End-of-life issues
 - Paradigm shifts
 - Dangerous assumptions
 - Quality of life issues
- Endurance and level of alertness

- Oral care deficiencies
 - Dependence
 - Lack of training for care givers
 - Lack of concern by care givers
- Diminished taste and sensitivity for thirst and hunger
- Progressive diseases
- Ethics and standards of practice
 - Patient's rights
 - Family rights
 - State's rights
 - 3rd party rights

What do clinicians say?

- Feeding tubes
 - “Catch 22” in some states
 - Weight loss unacceptable
 - Conflicts with patient’s desires
- Avoidable versus unavoidable weight loss
- Documentation
- “Comfort care highway”

Clinical Exam: Elderly & Dementia

(Miller, R. 1999, Florida Dysphagia Institute, July)

- Warning signs for dysphagia, which is the clinical term for a difficulty in swallowing or an inability to swallow:
 - Impaired consciousness
 - Cognitive impairments
 - Dependence for feeding
 - Oral hygiene problems
 - Aspiration history
 - COPD or other pulmonary concerns
 - Gastroesophageal disease or reflux
 - Clumsy speech (speech sound errors)
 - Wet voice or upper airway congestion
 - Breathy voice
 - Coughing or choking
 - Drooling
 - Needing suction for secretions

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- Problems with dysphagia:
 - Weight loss
 - Dehydration
 - Complaints of pain when swallowing
 - Complaints of obstruction
 - Feeding tube
 - Tracheostomy tube
 - Pocketing food

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- Associated symptoms of dysphagia:
 - Obstruction
 - Mouth or throat pain
 - Mouth odor
 - NP regurgitation
 - Pneumonia history
 - Other respiratory symptoms
 - GE reflux
 - Chest pain

Clinical Exam: Elderly & Dementia

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- Symptoms of GE reflux
 - Heartburn
 - Acid or sour taste
 - “Globus” sensation
 - Hiccups
 - Halitosis
 - Dry throat
 - Lingual or throat pain
 - Chronic pharyngitis
 - Hoarseness
 - Loss of dental enamel
 - Laryngeal mucosal irritation

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- Signs of dehydration
 - Mucosa dryness
 - Turgidity of tongue
 - Sunken eyes
 - Elevated temperature
 - Hypotension
 - Decreased urine output
 - Constipation
 - Nausea / vomiting
 - Confusion
 - Fatigue / weakness