Common Practices of Assessing and Managing Dysphagia for Persons with Dementia

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12 October 2018

Dysphagia

- Dysphagia means difficulty in swallowing.
- Any abnormality in the swallowing process can be defined as dysphagia.

Swallowing

- Food/liquid → mouth → pharynx → stomach

Dementia

- A syndrome caused by a number of progressive disorders that affect memory, thinking, behavior, and ***the ability to perform activities of daily living*** (World Alzheimer's Report, 2010).

- Prevalence in Hong Kong (aged 65+): 7.2% (Wu et al., 2018)

Dementia & dysphagia

- Common in moderate dementia (Garon, Sierzant et al. 2009, Suh, Kim et al. 2009, Humbert, McLaren et al. 2010)

- Eating problem: hallmark of end-stage dementia [the ability to eat independently is generally the last activity of daily activity to be lost (Mitchell, et al., 2009)]

- As dementia progresses, dysphagia becomes more pronounced [the result of behavior (cognition), sensory, motor problems (or combination)].

Seven stages of dementia

- **Global Deterioration Scale for Assessment of Primary Degenerative Dementia (GDS)/Reisberg Scale** (Reisberg, et al., 1982)

Stages	Diagnosis
1: no cognitive decline	---
2: very mild cognitive decline	Forgetfulness/age related memory decline
3: mild cognitive decline	Early confusional/mild cognitive impairment
4: moderate cognitive decline	Late confusional
5: moderately severe cognitive decline	early dementia
6: severe cognitive decline (Middle dementia)	Middle dementia
7: very severe cognitive decline (late dementia)	Late dementia

Dementia & dysphagia

Early dementia: (stage 5 to stage 6)

- Taste & smell dysfunction, medication/depression → ↓appetite (Morris & Volicer, 2001)

Advanced dementia: (stage 6 to stage 7)

- Problem with self-feeding and dysphagia (Volicer, et al., 1989)

Consequence:

- Eating problem with dysphagia → malnutrition, weight loss & aspiration pneumonia (Mitchell et al. 2009; Hoffer, 2006)
- Need to decide: ***careful hand feeding vs tube feeding***

Prevalence of Dysphagia in Dementia

- Moderate to severe AD: 84% - 93% (Affoo, Foley et al. 2013)

Signs of dysphagia

- Choking
- Drooling/cannot tolerate oral secretion
- Pocking of food in cheeks
- Delay swallow
- Effortful swallow
- Multiple swallow for each mouthful
- Complaint of food sticking in throat
- Prolonged mealtime
- Refuse oral feeding
- On & off low grade fever
- Lots of sputum
- Weight loss
- Repeated pneumonia

Dementia & dysphagia

Most frequent feeding problem/dysphagia

- Tactile agnosia for food – failure to recognize food as something to swallow in the mouth
- Absent or continuous chewing
- Pocketing of food
- Spitting food
- Multiple swallow
- Food refusal
- Delayed and impaired pharyngeal swallow

Management of dysphagia

Speech therapist is responsible for:

- Determine presence or absence of dysphagia
- Determine underlying causes
- Assess severity
- Make recommendations, design and implement rehabilitation plan
- ***Need to achieve a balance between aspiration risk and QOL***

Assessment of swallowing

- Bedside swallowing examination
- Instrumental examination:
  - FEES/FEESST
  - VFSS

Bedside swallowing examination

- Case/medical history taking
- Communication ability/cognitive status screening
- Oro-motor structures & functions examination
- Swallowing ability with
  - Different consistencies
  - Different compensatory strategies
  - Different delivery system

Information from bedside examination

- Risk of aspiration/silent aspiration
- Signs of swallowing dysfunction
- Suspected underlying physiology
- Means of feeding
- Feeding precautions

Instrumental examination

Purposes:

- Objective measures of presence of aspiration
- Determine pathophysiology of swallowing
- Guide management and rehabilitation
- Patients/relatives/staff education

FEES/FEESST

Fiberoptic Endoscopic Evaluation of Swallowing (with Sensory Testing)

FEES/FEESST

FEES/FEESST

- photo

FEES/FEESST

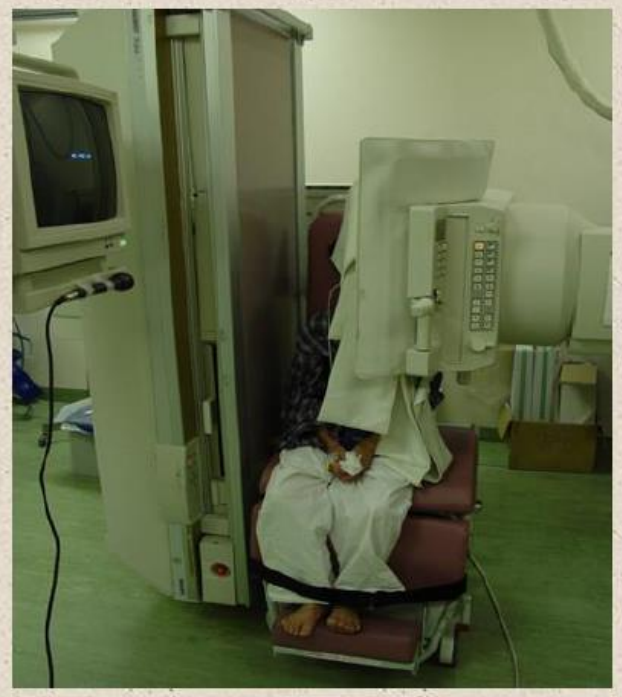
- video

VFSS

Videofluoroscopic Studies of Swallowing

- photo

VFSS



VFSS

- video

Recommendations

- Mode of feeding
- Feeding precautions
- Swallowing therapy (early stage dementia)
- Refer to other specialties if needed

Mode of feeding

- Oral feeding (diet types)
- Non-oral feeding
- Partial oral feeding
- ***Careful hand feeding/comfort feeding***

American Geriatrics Society Feeding Tubes in Advanced Dementia Position Statement (2014)

- Feeding tubes are not recommended for older adults with dementia. Careful hand feeding should be offered.
- Efforts to enhance oral feeding by altering the environment and creating individual centered approaches to feeding should be part of usual care for older adults with advanced dementia.
- Tube feeding is a medical therapy that an individual's surrogate decision-maker can decline or accept in accordance with advance directives, previously stated wishes, or what is thought to individual would want.

American Geriatrics Society Feeding Tubes in Advanced Dementia Position Statement (2014)

- It is the responsibility of all members of the healthcare team caring for the residents in long-term care settings to understand any previous expressed wishes of the individual.

- Institutions should promote choice, endorse shared and informed decision-making, and honor individuals' preferences regarding tube feeding.

Careful hand feeding/Comfort feeding

Definition (2 folds)

- Feeding so long as it is not distressing
- Goals of feeding are:
  - Comfort oriented
  - Least invasive
  - Potentially most satisfying way of *attempting* to maintain nutrition through careful hand feeding.

Careful hand feeding

- Feeding precautions
- Flexibility in feeding
- Promote comfort rather than adding pain

Feeding precautions

- Before feeding:
- oral hygiene ✓
- dentures ✓
- diet types/thickened liquid ✓
- feeding utensils ✓

Feeding precautions

- Before feeding:
- proper position ✓

Feeding precautions

- During careful hand feeding: (Li 2002, DiBartolo 2006)
  - Reminders to swallow
  - Use of cueing, environment modification and minimizing distraction
  - Multiple swallows
  - Gentle cough after swallow
  - Bolus size < 1 tsp
  - Judicious use of thickener
  - Avoid distraction
  - Observe for food pocketing
  - Observe for aspiration signs

Feeding precautions

- After feeding:
  - Clear food residue
  - Sit-up x 30min after feeding
  - Maintain good oral hygiene

3 hand feeding techniques

- Direct hand feeding (DH)
- Over hand feeding (OH)
- Under hand feeding (UH)

3 hand feeding techniques

- Which is better?
  - Time spent during meal: similar
  - DH & UH produced greater intake with less feeding behaviors observed.

Feeding technique to promote oral feeding/maintain nutrition

- Provide sensory stimulation over the oromotor area before and during meal with the use of iced cotton swab or spoon pressing on tongue
- Apply gum massage to normalize sensation for those with oral defensiveness
- Assist lip closure during feeding to avoid food spillage and facilitate oral food manipulation
- Use of syringe feeding for those with poor mouth opening for feeding in order to facilitate food delivery to mouth

Feeding technique to promote oral feeding/maintain nutrition

- Apply light touch to calm down patient's emotion during feeding
- Alternate feeding of meal with favourite food taste
- Provide patients with their favourite food and taste
- Small amount and frequent meals
- Provide high calorie food

Dementia feeding program in Shatin Hospital

- A multidisciplinary feeding program for advanced dementia patients
- Collaboration of Doctors, Nurses, Dietitians, Speech Therapists, and Carers
- Team members:
  - Doctor
  - Nurse
  - Dietitian
  - Speech Therapist

Role of Speech Therapist

- Feeding & swallowing assessment, recommend feeding mode and diet type, advise on feeding techniques/feeding utensils
- Identify patient's food preference
- Regular review on patient progress
- Share information among the team
- Provide caregivers/families education
- Weekly team meeting for case management

Findings:

- 70 patients recruited (mid-2016 to mid-2018)
- Subjects: advanced dementia patients with <50% usual intake for 3 days
- Results:
  - Most patients maintain oral feeding upon discharge (2 resume tube-feeding)
  - Improved nutrition (calorie, protein & fluid)
  - >90% patient's families/caregivers satisfied with the feeding Mx (satisfaction survey)

Conclusions:

- Dementia patients are prone to have dysphagia.
- Besides oral, non-oral & partial oral feeding, comfort feeding/careful hand feeding can be considered in suitable patients.
- Dysphagia management should be patient centered and a team decision making.
- The decision-making process regarding oral and non-oral feeding provokes difficult ethical decisions for professionals and patients.

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Thank you!!