# Medication for the Terminal Patient Who Can’t Swallow

**Annette T. Carron, DO**

**Director Geriatrics & Palliative Care**

**Botsford Hospital**

# Disclosure

**I have no financial relationships to disclose**

**Route and medication list not all inclusive**

**Annette Carron, DO**

# Why This Topic

- **All Internists care for patients with dysphagia and /or terminal patients**
- **Addressing medications in all care settings for patient with dysphagia often not done well**
  - **ESPECIALLY THE HOSPITAL!! – “NPO”**
- **More patients may be able go home to die**
- **Call nationally for appropriate opioid dosing**

# Dysphagia

- Definition – difficulty in swallowing that may include oropharyngeal or esophageal problems
- Eating is one of the most basic human needs/pleasure – difficulty is swallowing can cause social/emotional isolation
- May or may not be inherent in aging, but common in the elderly
- Incidence
  - 15 % in community-dwelling elderly
  - 50-75% in nursing home population

# Dysphagia

**Risk Factors in the elderly**

- **Medications and dysphagia**
  - **Xerostomia**
    - —Anticholinergic drugs (tricyclic, antipsychotics, antihistamines, antispasmodics, antiemetic, antihypertensives)
  - **Esophageal/Laryngeal peristalsis**
    - —Antihypertensives, antianginal
  - **Delayed neuromuscular responses**
    - —Delirium causing, extrapyramidal side effects
  - **Esophageal injury/inflammation**
    - —CCB, Nitrates relax lower esophageal sphincture
    - —Large pills

# Dysphagia

**Assessment**

- **Primary care screening for the elderly**
  - **Example tool – Dysphagia screening form- University of Wisconsin and Madison GRECC**
  - **One question test – "Do you have difficulty swallowing food?"**
  - **Correlate symptoms of weight loss, cough and SOB**
- **Bedside clinician evaluation**
  - **3 oz water swallow test, auscultate over trachea before and after water swallowed; eval for cough, choking change in breath sounds**

# Dysphagia

## Assessment and Diagnosis

- **Physical Exam**
  - **Subtle voice changes (hoarseness, wet, hypernasal, dysarthria)**
  - **Absent or poor dentition**
  - **Tongue strength/oral control**
  - **Palate exam – symmetry, mass**
  - **Head and neck**
  - **Gag reflex poor indicator of dysphagia**

# Disorders Associated with Dysphagia

- Neuromuscular – affect the central control over muscles and nerves involved in swallowing (i.e. Parkinsons, CVA, ALS, Myasthenia gravis, MS)
- Rheumatologic – (i.e. Polymyositis, Dermatomyositis, Inclusion body myositis)
- Head and neck oncologic – Oropharyngeal cancer
- Pharyngeal structural – Zenkers
- Gastrointestinal – tumors, GERD, Schatzki ring (primarily esophageal but cause symptoms radiating to pharynx)
- Diminished cough

# Dysphagia

**Treatment**

**Goal – optimize safety of swallow, maintain adequate nutrition and hydration, improve oral hygiene**

- **Swallow therapy**
  - **Postural adjustments**
  - **Food and liquid rate and amounts (time to eat, small amounts, concentrate, alternate food and liquid, stronger side of mouth, sauces)**
  - **Adaptive Equipment**
  - **Diet modification**

# Dysphagia

## Treatment

- Dietary modifications (watch for dehydration)
- Aggressive oral care
- Modify eating environment
- Oral Hygiene
  - Also reduce risk of aspiration
- Consider palliative care

## Interdisciplinary

- Speech pathologist, dietician, OT, PT, nurse, oral hygienist, dentist, PCP, Caregivers, SW, family

# Dysphagia

**Consequences**

- **Social isolation (embarrassment)**
- **Physical discomfort**
- **Dehydration**
- **Malnutrition**
- **Overt aspiration**
- **Silent Aspiration – a bolus comprising saliva, food, liquid, meds or any foreign material enters the airway below the vocal cords without triggering overt symptoms**
- **Pneumonia, death**

# Dysphagia in Long-Term Care

- **Common 50-75%**
  - **Aspiration leading cause of death in nursing home patients**
  - **Can stress nursing assistants with difficult feeding patients**
    - —Place food in non-impaired side of mouth
    - —Limit use of straws
    - —Adaptive feeding equipment
    - —Restrictive diets

# Dysphagia

**The non-fixable dysphagia**

- **Goal is enhanced quality of life**
- **Tube Feeding**
  - **Not essential in all patients who aspirate**
  - **No data to suggest TF in pts with advanced dementia prevented aspiration pneumonia, prolonged survival or improved function (aspiration pneumonia is the most common cause of death in PEG tube patients)**
  - **Short term TF indicated if improvement in swallow likely to improve**
  - **Pt autonomy, self-respect, dignity and QOL**

# Dysphagia

**Goal is enhanced quality of life**

- **Tube Feeding**
  - **OK not to put in PEG**
  - **Do not need to put in PEG for meds**
  - **Does patient want to go home?**
  - **can family manage patient at home with PEG?**
  - **Is PEG being put in for reversible dysphagia/disease process- if no, need goals of care discussion**
  - **Consider prognosis, palliative care consult**
    - —More and more available in hospitals and outpatient (including nursing homes)

# Decreasing appetite / food intake

**Thirst**

- **66% has thirst either initially or until death – all relieved with voluntary liquids or mouth care**
- **Only one patient had calculated intake of food or fluids >75% of requirements**
- **9 patients had symptoms from eating encouraged by family**

# Arguments for Artificial Hydration

**Delirium is common in dying patient**

**Hydration may improve the delirium**

- **Lawlor PG Support Care Cancer 2002**
- **Bruera E et al. Support Care Center 1996**

# Alternate Routes of Administration

- **Allow adjustment to patient's changing needs**
- **Transdermal**
- **Transmucosal**
- **Rectal opioids**
- **Parenteral: Intravenous or Subcutaneous**
- **Spinal infusions: Intrathecal or Epidural**

Abrahm JL.*A Physician's Guide to Pain and Symptom Management in Cancer Patients*. 2000.

# Medication Philosophy in General for the Dysphagia Patient

**Limit to essential medications**

**Choose less invasive route of administration**

- **buccal mucosal or oral first**
- **topical**
- **subcutaneous, intravenous rarely**
- **rectal**
- **intramuscular almost never**

# Medications for the non-terminal patient with Dysphagia

## When NPO

- **NPO except medications?**
- **Write order “may hold po meds if unable to swallow”**
- **Review medications and stop non-essential ones, change essential ones to IV, topical, sublingual, subcutaneous or rectal**
- **Example – catapres, nitropaste for HTN; rectal aspirin in stroke patient;**
- **Good time to evaluate if patient really needs med**

# Medication evaluation in the patient where dysphagia improving

**Pureed diet, thickened liquids**

- **Still very guarded prognosis**
- **Address goals of care**
- **Review medications and stop non-essential ones**
- **Example – cholesterol meds, vitamins**
- **Good time to evaluate if patient really needs med**

# Nasogastric Tube

**Closely evaluate why put in**

- **? For meds – are medications necessary, ?alternate route available**
- **? For feedings**
  - —Evaluate when patient will be able to eat and if patient will meet caloric needs
  - —Likely proceed directly to PEG if meets goals of care
- **Poor prognostic sign and high risk of complications**

# Subcutaneous route

**Subcutaneous route**

- **Button**
- **Butterfly needle**
- **Abdomen, thigh, upper arm**

**Hypodermoclysis**

- **subcutaneous infusion fluids**
- **Max 1-2 ml/min**
- **Often used in nursing home**

# Subcutaneous Medications

**Pain**

- **Dilaudid, Morphine, Fentanyl**
- **For Morphine 1:1 IV/SQ**
- **Subcutaneous infusion**

**Anti-inflammatory**

- **Decadron**

**Agitation/Restlessness**

- **Ativan, Haldol, Phenobarbitol**

**Shortness of Breath**

- **Morphine**

# Subcutaneous Medications

**Nausea**

- **Compazine**
- **Haldol**

**Terminal congestion**

- **Scopolamine**

**Subcutaneous Infusion**

**Morphine, Dilaudid**

# Topical medications

**Anti-hypertensive**

- **Catapres**

**Pain**

- **Fentanyl**
- **Lidoderm**
- **Over the counter topical creams**
- **Compounded NSAIDS**

**Restlessness**

**Ativan Gel**

**Compounding Pharmacies**

# Additional medication routes to consider

**Rectal**

- **Many medications can be given rectally**
- **Long acting Rx will become immediate release**

**Intrathecal**

**Nerve Blocks**

**Epidural**

# Treatment in last days of life

**Loss of gag reflex**

**Xerostomia – mouth care/swabbing**

**Buildup of saliva, secretions**

- **scopolamine to dry secretions**
- **Levsin sublingual**
- **Atropine drops given sublingual**
- **postural drainage**
- **positioning**
- **Suctioning**

# Take Home Points

- **Pause when writing an NPO order**
- **Pause when writing pureed diet or thickened liquid**
- **Pause in patient with anorexia**
- **Don’t forget topical, rectal, sublingual and subcutaneous route**
- **Consult hospice when needed for info**
- **Consult pharmacy**
- **Consult interventional pain specialist**