Choosing Wisely Campaign:
Ten Clinical Pearls of Geriatric Care

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Christiana Care Health System
An initiative of the ABIM Foundation

• *Choosing Wisely®* aims to promote conversations between physicians and patients to help patients choose care that is:
  - Evidence-based
  - Not duplicative
  - Low risk
  - Truly necessary
PEG tubes

Question: For patients with advanced dementia, a PEG tube is recommended because it:

A. Prevents aspiration pneumonia
B. Prolongs life
C. Will improve functional status
D. Improve patient’s comfort
E. All of the above
F. None of the above. You should not recommend PEG placement for patients with advanced dementia.
Demographics

• One in eight persons aged 65 and older (13 percent) have Alzheimer’s disease
• The prevalence of Alzheimer’s dementia is nearly 50% in those aged 85 and over
• Every 70 seconds, someone in America develops Alzheimer’s disease.
• By mid-century, someone will develop Alzheimer’s every 33 seconds
As Dementia Progresses

- Unable to walk
- Incontinent
- Aphasic
- Incapable of having relationships with others
- **Unable to feed themselves**
  - Hallmark of the final stages of dementia
Bourdel-Marchasson et al. (1997)

<table>
<thead>
<tr>
<th></th>
<th>PEG Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 58 (%)</td>
<td>8/58</td>
<td>6/50</td>
</tr>
<tr>
<td>Aspiration (%)</td>
<td>(13.8%)</td>
<td>(12.0%)</td>
</tr>
<tr>
<td>Pneumonia</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Causes of Aspiration

• Aspiration of the patient’s own oropharyngeal secretions
  • PEG or PEJ would not alter the aspiration of the oropharyngeal secretions
• Gastroesophageal Reflux
  • lower esophageal sphincter tone
  • delayed gastric emptying
# Mortality Rate in Patients with Dementia after PEG

<table>
<thead>
<tr>
<th>Author</th>
<th>Mortality (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 Mos</td>
</tr>
<tr>
<td>Murphy and Lipman (2003)</td>
<td>85</td>
</tr>
<tr>
<td>Sanders et al. (2000)</td>
<td>30</td>
</tr>
<tr>
<td>Grant et al. (1998)</td>
<td>81</td>
</tr>
<tr>
<td>Mitchell et al. (1997)</td>
<td>10</td>
</tr>
</tbody>
</table>
Why the high mortality rate?

• Survival is more determined by the severity of the patient’s underlying condition

• PEGs are placed in elderly patients whose life expectancy is extremely limited
Choosing Wisely Pearl #1

Do Not recommend PEG placement in patients with advance dementia, instead offer oral assisted feeding

• Tube feeding Do Not Improve:
  – Aspiration pneumonia
  – Pressure sores
  – Nutritional status
  – Comfort
  – Functional status
  – Survival
Antipsychotic use for Behavioral Issues in Dementia

Question: The increased risk of mortality in elderly patients receiving atypical antipsychotic drugs to treat dementia-related psychosis in patients with dementia is 1.6 times higher when compared to the placebo group. The cause of death is from:

A. Heart Failure
B. Sudden Death
C. Pneumonia
D. All of the above
Choosing Wisely Pearl #2

Do Not use Antipsychotics as first choice to treat behavioral and psychological symptoms of dementia

– Use of these drugs need to be limited to cases where non-pharmacologic measures have failed

– OR where patient pose an imminent threat to themselves or to others
Diabetes in the Elderly

Question: What is the appropriate Hgba1c goal in most healthy adults aged 65 and older with a long life expectancy?

A. 7%
B. 7.5%
C. 8%
D. 8.5%
E. 9%
Choosing Wisely Pearl #3

Avoid Using Medications to achieve HgbA1c <7.5% in most adults age 65 and older, moderate control is better

- Goal of < 7% demonstrated HIGHER mortality rates
- Goal of 7.5-8% in those with moderate comorbidity and a life expectancy of < 10 years
- Goal of 8-9% in those with multiple morbidities and shorter life expectancy
Question: If you are to use a Benzodiazepine in the elderly, which class is the best to use?

A. Short Half Life (e.g. Xanax)
B. Medium Half Life (e.g. Ativan)
C. Long Half Life (e.g. Valium)
D. None of the Above, they are on the “NEVER To Use” medication in the Elderly!
Choosing Wisely Pearl #4

Do Not use Benzodiazepines or other sedative-hypnotics in older adults as first choice for insomnia, agitations or delirium

- Risk of MVA, Falls, & Hip Fractures more than DOUBLE in older adults taking BDZ and other sedative-hypnotics
Urinary Tract

Question: True or False:

One should always treat Asymptomatic Bacteriuria
ASB is common in older adults

<table>
<thead>
<tr>
<th>Population</th>
<th>ASB Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community women &gt;70</td>
<td>11% – 16%</td>
</tr>
<tr>
<td>Community men &gt;70</td>
<td>4% – 19%</td>
</tr>
<tr>
<td>Long-term care overall</td>
<td>15% – 50%</td>
</tr>
<tr>
<td>LTC men</td>
<td>15% – 40%</td>
</tr>
<tr>
<td>LTC women</td>
<td>25% – 50%</td>
</tr>
<tr>
<td>Chronic indwelling catheter</td>
<td>100%</td>
</tr>
</tbody>
</table>
Treating ASB in older adults

5 randomized controlled trials conducted with community-dwelling and institutionalized elders show no benefit in mortality, infectious morbidity, or incontinence when asymptomatic bacteriuria is treated with antibiotics.

Choosing Wisely Pearl #5

Do Not use antimicrobials to treat bacteriuria in older adults unless specific urinary tract symptoms are present
Cholinesterase Inhibitors

Question: True or False
Acetylcholinesterase inhibitors such as Donepezil (Aricept) reverses Dementia
Evidence Review

• There is evidence that donepezil has efficacy against the three major domains of Alzheimer’s disease symptoms:
  – Functional ability
  – Behavior
  – Cognition

• The strongest evidence is for improvement or less deterioration in global outcomes and cognition in the short to medium term

www.ncbi.nlm.nih.gov › Journal List › Core Evid › v.1(3); 2006
Evidence Review

Donepezil is not as impactful on:

– Quality on Life
– Caregiver Burden
– Delays to Institutionalization
Net cost of care per Alzheimer’s disease patient over 3 years in France

What about disease stabilization?

12. CLINICAL PHARMACOLOGY
12.1. Mechanism of Action
Current theories on the pathogenesis of the cognitive signs and symptoms of Alzheimer’s disease attribute some of them to a deficiency of cholinergic neurotransmission.

Donepezil hydrochloride is postulated to exert its therapeutic effect by enhancing cholinergic function. This is accomplished by increasing the concentration of acetylcholine through reversible inhibition of its hydrolysis by acetylcholinesterase. There is no evidence that donepezil alters the course of the underlying dementing process.
What about disease stabilization?

• Despite intensive laboratory and clinical research over three decades, an effective treatment to delay the onset and progression of Alzheimer's disease is not at hand.

Selkoe  Science 2012
Choosing Wisely Pearl #6

Do Not prescribe cholinesterase inhibitors for dementia without periodic assessments

Check on:
- cognitive, behavior and functional effects
- adverse gastrointestinal effects

Remember: This medication is NOT A CURE for Dementia
Cancer screening

Question: Mrs. Smith is a 72 year old patient who has CHF (LVEF 20%), COPD requiring oxygen, Type II DM requiring insulin, severe arthritis in both knees, and has right hemiparesis as she recently suffered a stroke. She comes to your office today for a check-up. You should recommend the following cancer screening:

• A. Mammogram
• B. Pap smear
• C. Colonoscopy
• D. None of the above
Breast Cancer Screening

• Breast Cancer, Mammography, Women 50 and 74
  – **Recommend**s biennial screening mammography for women aged 50 to 74 years. (2016)

• Breast Cancer, Mammography, Women 75 years and older
  – **Concludes that the current evidence is insufficient** to assess the balance of benefits and harms of screening mammography in women aged 75 years or older. (2016)

  United States Preventive Services Task Force (USPSTF)
  (http://www.uspreventiveservicestaskforce.org).
Cervical and Prostate Cancer Screening

- *Recommends against* screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer.

- *Recommends against* using prostate-specific antigen (PSA)-based screening for prostate cancer.
Colon Cancer Screening

- **Recommends** screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy, in adults, beginning at age 50 years and continuing until age 75 years. 2008
- **Recommends against** routine screening for colorectal cancer in adults age 76 to 85 years. There may be considerations that support colorectal cancer screening in an individual patient.
- **Recommends against** screening for colorectal cancer in adults older than age 85 years. (2008)
There’s an app for that!

- **ePrognosis: Cancer screening**
- **Available for iPhone/iPad for free on App Store**
- **Asks users to input data to calculate life expectancy**
- **Compares life expectancy to time to benefit (10 years) for cancer screening**
Choosing Wisely Pearl #7

Do Not recommend screening for breast, cervical, colorectal, nor prostate cancer without considering life expectancy and the risks of testing, overdiagnosis and overtreatment
Anorexia

Question: You have been following Mr. Dodd’s weight for the last few months. You notice a trend that he is slowly losing weight. He weighed 200 lbs a year ago, 191 lbs six months ago, and today he is 180 lbs. You recommend all of the following, except:

A. Liberalize Diet
B. Megestrol Acetate (Megace)
C. Mirtazapine (Remeron)
D. Identify Social Factors
Time to stop using megestrol acetate for unintentional weight loss

**Megestrol acetate for treatment of anorexia-cachexia syndrome (Review)**

Ruiz Garcia V, López-Briz E, Carbonell Sanchis R, Gonzalvez Perales JL, Bort-Martí S

<table>
<thead>
<tr>
<th>Clinical effect</th>
<th>Clinical impact</th>
</tr>
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<tbody>
<tr>
<td>MA improves appetite</td>
<td>NNT = 4</td>
</tr>
<tr>
<td>MA has a small effect on weight gain</td>
<td>NNT = 12</td>
</tr>
<tr>
<td>MA does NOT improve quality of life</td>
<td></td>
</tr>
<tr>
<td>MA increases VTE risk</td>
<td>NNH = 2 – 55</td>
</tr>
<tr>
<td>MA increases risk of dying</td>
<td>NNH = 23</td>
</tr>
</tbody>
</table>
Dronabinol

The medical use of cannabis for reducing morbidity and mortality in patients with HIV/AIDS (Review)

Lutge EE, Gray A, Siegfried N

- Orally active cannabinoid
- FDA-approved for anorexia with weight loss in AIDS
- Evidence for positive effects in patients with HIV/AIDS is limited and may be the effects of bias
- Longer-term data, and data showing a benefit in terms of survival, are lacking
- Not a very “geriatric-friendly” medication
Mirtazapine

• Mirtazapine
  • likely to cause weight gain or increased appetite when used to treat depression, but there is little evidence to support its use to promote appetite and weight gain in the ABSENCE of depression
Oral liquid nutrition supplements

• A multibillion-dollar expense to healthcare
• Main ingredients
  – Water
  – Sucrose (sugar)
  – Corn syrup (more sugar)
  – Maltodextrin (less sweet sugar)
  – Few oils, proteins (whey and soy), multivitamin
• Liquid candy bar with vitamins
• Distraction from real food?
Oral liquid supplement vs real food

<table>
<thead>
<tr>
<th></th>
<th>Boost</th>
<th>Ensure</th>
<th>Low-fat yogurt and orange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serving size</td>
<td>8 oz</td>
<td>8 oz</td>
<td>8 oz + 1 orange</td>
</tr>
<tr>
<td>Calories</td>
<td>240</td>
<td>250</td>
<td>206</td>
</tr>
<tr>
<td>Fiber</td>
<td>0 g</td>
<td>&lt; 1 g</td>
<td>3 g</td>
</tr>
<tr>
<td>1st two ingredients</td>
<td>Water</td>
<td>Water</td>
<td>Low-fat milk</td>
</tr>
<tr>
<td></td>
<td>Corn syrup solids</td>
<td>Corn syrup</td>
<td>Milk solids</td>
</tr>
<tr>
<td>Cost</td>
<td>$1.40</td>
<td>$1.43</td>
<td>$1.09</td>
</tr>
<tr>
<td>Taste</td>
<td>4</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

http://thedietchannel.com/scoopon.htm
Other Measures

• Liberalize Diet
  – Eat a Twinkie a Day
• Psychosocial and economic factors
  – Do they eat alone?
  – Who brings the food?
  – Who cooks the food?
  – Do they have money to buy food?
Choosing Wisely Pearl #8

- Avoid using prescription appetite stimulants or high-calorie supplements for treatment of anorexia or cachexia in older adults for treatment of anorexia or cachexia in older adults.
- Instead, optimize social supports, provide feeding assistance and clarify patient goals and expectations.
Polypharmacy

• Question: Which three medications account for ONE THIRD of all emergency department visits in older patients due to adverse drug events?

  - Warfarin
  - Hypoglycemic Medications
  - Digoxin
Polypharmacy

Question: The best intervention for medication adherence is:

A. Education through oral counseling
B. Education through written instruction
C. Teach – Back approach
D. Simplify medication dosing schedules
Answer: D

• Adherence drops from roughly 80% in patients taking once daily regimens to 50% in those taking four times per day regimens

• On average, community based older patients have 1 unnecessary drug per patient

• 44% of hospitalized older patients were discharged with at least 1 unnecessary medication
“Any Symptom in an elderly patient should be considered a drug side effect until proven otherwise”

- Gurwitz 1997
Choosing Wisely Pearl #9

Do Not prescribe a medication without conducting a thorough drug regimen review

• **Guidelines:**
  – Start Low and Go Slow
  – Justify each drug with a firm diagnosis
  – Avoid starting 2 drugs at the same time
  – Use one drug to treat 2 or more diseases
  – Go over medication changes with patient and caregiver
  – Get patient in the habit of bringing medications to all visits: **BROWN BAG**
Physical Restraints

Question: True or False:
Nurse Susan calls you in the middle of the night to alert you that one of your patients is climbing out of bed. She is at her wits end because she cannot be in the room all the time as she has 8 other patients she has to take care of. She asks you for a physical restraint order. You say:

_____ YES _____ No
Restraint use and falls

- Restraints (including bilateral side rails) have not been shown to lower risk of falls
- Restraint reduction practices have not resulted in increased fall rates in hospitalized older adults in general or in older adults with delirium
Choosing Wisely Pearl #10

Avoid Physical Restraints to manage behavioral symptoms of hospitalized adults with delirium

Instead:
– Look for underlying condition causing delirium
– Environmental modifications
– Redirection
– Family Support
Go Forth
Be Bold
Do Geri