CARE OF THE ELDERLY SURGICAL PATIENT

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WHY PAY SPECIAL ATTENTION TO THE ELDERLY?

• **Demographic imperative:** 55% of surg pts are 65+

• **Preoperative considerations:**
  - AHA pre-op guidelines, prognosis
  - Geriatric assessment

• **Perioperative management:**
  - Differences in clinical presentation of illness
  - Delirium—diagnosis and treatment
  - Periop management: meds, nutrition, etc.
GERIATRIC ASSESSMENT

• Functional
• Physical
• Mental
• Social

Assess patients, caregivers, and environment in order to plan care and prevent problems
PURPOSES OF STANDARDIZED SCREENING TOOLS

• Assess present status
• Assess what patient’s status was before becoming ill
• Identify increased risk
• Predict outcome
• Indicate need/potential for intervention
ADVANTAGES OF STANDARDIZED ASSESSMENT TOOLS

- Transferable
- Objective
- Demonstrable
- Performance can be followed over time
GERIATRIC ASSESSMENT: DOMAINS

• Functional
  ➢ ADLs and IADLs
  ➢ Mobility/falls
  ➢ Continence

• Mental
  ➢ Depression
  ➢ Cognition
  ➢ Competence

• Physical
  ➢ Medications
  ➢ Nutrition
  ➢ Alcohol
  ➢ Vision & hearing

• Social
  ➢ Support systems
  ➢ Advanced directives
GERIATRIC PRE-OP H&P: NEW TEMPLATES AND GOALS

• Geriatric Assessment — awareness, skills
  ➢ ADLs
  ➢ IADLs
  ➢ Depression screening tools (2Q screen, GDS)
  ➢ Cognitive screening tools (MMSE, Mini-Cog)
  ➢ Falls: balance, Get Up and Go Test

• Medications

• Knowledge & attitudes
PHYSICAL FUNCTION: ACTIVITIES OF DAILY LIVING (ADLs)

- Bathing
- Dressing
- Transferring (bed to chair)
- Toileting
- Grooming
- Feeding

First need for help: Bathing
PHYSICAL FUNCTION: INSTRUMENTAL ACTIVITIES OF DAILY LIVING (IADLs)

- Using the telephone
- Shopping
- Food preparation
- Housekeeping
- Doing laundry
- Utilization of transportation
- Ability to medicate
- Ability to handle finances
ADLs & IADLs

Ask
• “Can you dress yourself?”
• “Can you do your own shopping?”

Observe
• Corroborate responses with patient’s appearance
• Verify accuracy with family members

Intervene
• Determine and correct underlying cause of deficit

Refer
• Case management, PT, OT, social services, home environment
SCREENING TO ASSESS FUNCTION & FALL RISK

“Get Up and Go” Test

• Ask patient to rise from hard chair without using arms, walk 10 ft, turn, return, and sit back down

• Assess strength, balance, step height/length, pivot/shuffle on turn?

• Time > 10 sec → increased fall risk

• Time > 20 sec → consider therapy referral
MENTAL ASSESSMENT

• Depression
  - 2-question screen
  - Geriatric Depression Depression Scale (GDS)

• Cognitive impairment
  - Mini–Mental State Exam: 30-point screen
  - Mini-Cog: 3-item recall + clock test
SCREENING FOR DEPRESSION: 2 QUESTIONS

• “During the past month have you often been bothered by feeling down, depressed, or hopeless?”

• “During the past month have you often been bothered by little interest or pleasure in doing things?”

• Yes to either = positive test
 ➢ Sensitivity: 96%
 ➢ Specificity: 57%

DSM-IV CRITERIA: MAJOR DEPRESSIVE EPISODE

Five or more present for 2 weeks:

- Depressed mood \textit{must include one}
- Loss of interest \textit{or both}
- Weight change
- Sleep disturbance
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of worthlessness/guilt
- Loss of ability to concentrate
- Recurrent thoughts of death, suicidal ideation
DSM-IV CRITERIA: MINOR DEPRESSION & DYSTHYMIA

- **Minor**: 2 to 4 core symptoms for 2+ weeks
- **Dysthymia**: depressive sx most days × 2+ years
- **Not minor or subsyndromal in impact**:
  - ↓ functional status
  - Risk factor for ↑ M&M
  - Risk factor for major depression (5× ↑ risk)

Ann Intern Med. 2006;144:496.
COGNITIVE IMPAIRMENT

- ≥50% of cases are missed

- Screening tests are reasonably accurate
  - MMSE: 71%–92% sensitive, 56%–96% specific
  - Mini-Cog: 76% sensitive, 89% specific

- Screening results predict: ↑ delirium, length of hospital stay, other

- Tx available (non-pharm & meds)

MINI-COG AS A SCREEN FOR DEMENTIA

• Ask the patient to:
  - Remember 3 words: apple, table, penny
  - Draw a clock face, hands at 11:10
  - Recall the 3 words

• Sensitivity and specificity of Mini-Cog for dementia are comparable to conventional neuropsych testing
  - Mini-Cog: 76% sensitive, 89% specific
  - MMSE: 79% sensitive, 88% specific
  - Neuropsych test: 75% sensitive, 90% specific

JAGS. 2003;51:1451.
CLOCK 1
CLOCK 3
CLOCK 4
CLOCK 6

\[ \text{Diagram of a clock face with numbers 1 to 12 marked.} \]
**CASE PRESENTATION # 1**
**89-YEAR-OLD PATIENT**

<table>
<thead>
<tr>
<th>Medical Diagnoses</th>
<th>Meds</th>
<th>Functional status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SVT/A Fib</td>
<td>Coumadin</td>
<td>ADLs 1</td>
</tr>
<tr>
<td>TIA</td>
<td>Metoprolol</td>
<td>IADLs 1</td>
</tr>
<tr>
<td>Mod-severe pulm htn</td>
<td>Lisinopril</td>
<td>Falls (-)</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>Lipitor</td>
<td>Depr (-)</td>
</tr>
<tr>
<td>UTIs</td>
<td>Synthroid</td>
<td>MMSE 30</td>
</tr>
<tr>
<td>Hypothyroid</td>
<td>Estrogen cream</td>
<td></td>
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<tr>
<td>Low back pain</td>
<td>Lorazepam</td>
<td></td>
</tr>
<tr>
<td>Decreased balance</td>
<td>Omeprazole</td>
<td></td>
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<tr>
<td>Dyspepsia</td>
<td>Supp: Ca/D,</td>
<td></td>
</tr>
<tr>
<td>Generalized anxiety</td>
<td>multivitamin,</td>
<td></td>
</tr>
<tr>
<td>--- truncated ---</td>
<td>Vit C, Colace</td>
<td></td>
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</tbody>
</table>
### CASE PRESENTATION # 2
74-YEAR-OLD PATIENT

<table>
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<tr>
<th>Medical Diagnoses</th>
<th>Meds</th>
<th>Functional status</th>
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</thead>
<tbody>
<tr>
<td>SVT/A Fib</td>
<td>Dyazide</td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>Ritalin Remeron</td>
<td>ADLs I</td>
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<tr>
<td>Anxiety/panic attacks</td>
<td>Forteo Premarin</td>
<td>IADLs D</td>
</tr>
<tr>
<td>Osteoporosis</td>
<td>Aspirin</td>
<td>Falls (+)</td>
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<tr>
<td>Irritable bowel</td>
<td>Synthroid</td>
<td>Depr (+)</td>
</tr>
<tr>
<td>Stress incontinence</td>
<td>Supplements: K+, Ca/D,</td>
<td>MMSE 30</td>
</tr>
<tr>
<td></td>
<td>multivitamin, Metamucil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Herbals: GS, ginkgo, fish oil,</td>
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<tr>
<td></td>
<td>flaxseed</td>
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</tbody>
</table>

Slide 25
IMPORTANCE OF FUNCTIONAL ASSESSMENT

- Measuring functional status objectively allows appreciation of deterioration/improvement over time
- Changed functional status is an important presenting symptom
- Function helps prioritize individual problems
- Function is important in deciding treatment efficacy
- Knowing baseline function helps in managing acute illness
COMPREHENSIVE GERIATRIC ASSESSMENT

• Cost-effective (versus piecemeal)
• Improves outcomes
  ➢ Improved level of function
  ➢ Prevention of morbidity
  ➢ Diminished use of resources
  ➢ Patient satisfaction
SUMMARY: “IT TAKES A VILLAGE”

• Older adults have unique needs

• Maintenance/restoration of function and independence is the primary goal (diseases are ubiquitous and secondary to function)

• Functional assessment tools allow for problem identification and treatment strategies

• It’s an interdisciplinary team effort!

• It’s rewarding!

• Older adult medicine is the major medical challenge of the 21st century
THANK YOU FOR YOUR TIME!

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