Practical Skills: Cognitive Evaluation in the Elderly

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Disclosure of Financial Relationships

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Has no relationships with any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients.
Objectives

- Understand the concept of a spectrum of cognitive concerns from normal aging to dementia related concerns.

- Learn how to evaluate and assess cognitive concerns in a time efficient manner.

- Learn to use short cognitive assessment tools

- Learn when to refer patients for neuropsychological testing
How does this apply to my practice?

- “The Silver Tsunami” is here – currently 35 million Americans over age 65, estimated 70 million by 2030. We are a “graying” nation.

- ~13% those over 65 and ~30% over age 80 have dementia.

- This means that you will see lots of patients with cognitive concerns in your practice!
Spectrum of Cognitive Concerns

- Normal Aging, Age associated memory impairment – “the worried well”
- Mild Cognitive Impairment – earliest stage of detectable cognitive problems
- Dementia

Insufficient evidence for or against screening for dementia in elderly (USPSTF – “class I” recommendation)
Office evaluation of cognition

- **Warning signs or concerns about cognition should guide evaluation** – case finding approach (provider, healthcare team, patient, or caregivers/family).

- **Medicare wellness visit** – annual wellness visit includes “Detection of cognitive impairments”

- **One lengthy visit will not be possible so spread it out to three visits….**
Please Read Case Handout

- Visit #1 – obtain history and do a physical examination and explain plans for further evaluation

- History

- High functioning 66 year old who still works. Does this help you distinguish?

- Time course of concerns.

- Spouse is present to give additional history.

- Specific concerns are discussed.

- Any other history that may help?
Visit #1

- **Medical history** – is it contributory and why/why not?
- **Medications** – are they appropriate?
- **Functional Status** – why ask?
- **Family History** – is it important?
- **Social History** – how does it add to a cognitive evaluation?
- **Physical Examination** – what should you do?
Visit #1

- Physical examination
  - Hearing and vision evaluation
  - Thorough Neurological evaluation including gait and look for focal findings.
  - Cardiovascular evaluation
  - Functional evaluation

- What lab tests would you order?
Labwork

- Electrolytes
- CBC
- Liver Enzymes
- TSH
- B12 Level
- Syphilis/HIV if warranted.
- Others only if clinical suspicion high
Visit #2 Perform brief cognitive assessment tool and order additional diagnostic studies

Which Cognitive tests would you perform?

- Mini-Cog (5 minutes to administer)
- MMSE (Mini-mental status exam)
- SLUMS (St. Louis University Mental Status)
- MOCA (Montreal Cognitive Assessment)
Mini-Cog evaluation

Components

• 3 item recall: give 3 items, ask to repeat, divert and recall

• Clock Drawing Test (CDT)
  - Normal (0): all numbers present in correct sequence and position and hands readably displayed the represented time

Abnormal Mini-Cog scoring with best performance

• Recall ≠0, or

• Recall ≤2 AND CDT abnormal
Clocks
St. Louis University Mental Status (SLUMS)

SH Tariq, N Tumosa, JT Chibnall, HM Perry III, and JE Morley. The Saint Louis University Mental Status (SLUMS) Examination for Detecting Mild Cognitive Impairment and Dementia is more sensitive than the Mini-Mental Status Examination (MMSE) - A pilot study. J Am Geriatr Psych
Montreal Cognitive Assessment (MOCA)
Geriatric Depression Scale (GDS)

1. Are you basically satisfied with your life?
2. Have you dropped any of your activities?
3. Do you feel that your life is empty?
4. Do you often get bored?
5. Are you in good spirits most of the time?
6. Are you afraid that something bad is going to happen to you?
7. Do you feel happy most of the time?
8. Do you often feel helpless?
9. Do you prefer to stay home at night, rather than go out and do new things?
10. Do you feel that you have more problems with memory than most.
11. Do you think it is wonderful to be alive now?
12. Do you feel pretty worthless the way you are now?
13. Do you feel full of energy?
14. Do you feel that your situation is hopeless?
15. Do you think that most persons are better off than you are?

Yesavage JA. Clinical Memory Assessment of Older Adults. 1986
Your nurse performs a SLUMS and GDS.

- SLUMS = 23/30, missed recall and mental calculations
- Geriatric Depression scale (GDS) = 5/15
- Labs are normal except for low vitamin B12 level.

Does this make the diagnosis?

Is more work up needed?

- Imaging
- Neuropsychological testing
Case: Mild Cognitive Impairment

- Overall functional (still works)
- Multiple cognitive complaints over time endorsed by patient and caregiver.
- Impaired IADLs (finances)
- Independent ADLs
- Impairment highlighted on objective memory tests (SLUMS)
- Risk for progression high in amnestic type to dementia.
Imaging

- CT usually adequate but MRI better for vascular cognitive impairment.

- Indications
  - Focal neurological findings
  - Younger patient
  - Rapidly progressive or sudden onset
  - NPH suspected (incontinence, gait abnormal)
  - Recent head trauma/seizures
  - Atypical presentation

- White matter changes are frequently seen
When to refer to get neuropsychological testing?

- Typically 3-5 hours of testing
- If they can’t do the SLUMS or the MMSE – they will not do well on the this test either
- For complex cases – hard to diagnose
  - Normal aging vs. Mild Cognitive Impairment
  - Concurrent Depression/Delirium
  - Subjective concerns not congruent with diagnosis on brief objective tests.
  - Competency evaluation
  - Not always needed.
Visit #3 - discuss findings and implement a treatment plan; establish follow-up plans.

- Provide resources and caregiver education
- Offer advanced care planning
- Focus of safety (home and driving safety)
- Consider medications
- Optimize vascular risks
- Suggest mental, physical, and social activity
- Make plans for follow up.
Evaluation

Responses remain anonymous!
Overall quality of this session:

1. Poor
2. Fair
3. Average
4. Good
5. Excellent
How well were the learning objectives met?

1. Poor
2. Fair
3. Average
4. Good
5. Excellent
Did speaker present a balanced view of therapeutic options?

1. Yes
2. No
3. N/A
How useful will this session be in your practice?

1. Poor
2. Fair
3. Average
4. Good
5. Excellent
As a result of this program, do you intend to change your patient care?

1. Yes
2. No
Thank you!

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