GERIATRIC PSYCHIATRY #1 - DIAGNOSIS

PSYCHIATRIC SYMPTOMS IN THE ELDERLY (NEUROPSYCHIATRIC SYMPTOMS OF DEMENTIA AND DELIRIUM VS. PRIMARY PSYCHIATRIC DISORDERS)

IS THIS FRONTOTEMPORAL DEMENTIA, ADULT ONSET PSYCHOSIS, OR SOMETHING ELSE? HOW CAN I TELL?

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GENERAL DISCLOSURES

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SPEAKER DISCLOSURES

✓ Any conflicts of interest?

Nope
LEARNING OBJECTIVES

This talk will teach you to:

1. Choose an appropriate workup for your older patient presenting with cognitive complaints and/or new onset psychiatric symptoms.

2. Diagnose the most common neurocognitive disorders based on their typical pattern of deficits.

3. Make a differential diagnosis of the older patient presenting with cognitive and psychiatric symptoms - i.e. decide between neuropsychiatric symptoms of dementia vs. delirium vs. a primary psychiatric disorder.

(no worries, we can get this all done in 30 minutes)
Section 1 (of 3):

PRESENTING SYMPTOM: COGNITIVE COMPLAINTS
...A TYPICAL DAY AT THE (MY) OFFICE

“Joe: Doc, my memory is going bad. I am worried I have Alzheimers.”

What are the possibilities?

• Worried well
• Medical problem
• Psychiatric problem
• Dementia
WORKUP: BRIEF COGNITIVE ASSESSMENT

- MOCA – best short test (20 minutes), includes a visual-spatial component
- Mini-cog – shortest test (3 minutes) for the hurried PCP, tells you “something is seriously wrong”, but false negative for mild cognitive change
MINI-COG:

(It is Monday morning and your docket says 50 patients for the day)

1 – I would like you to remember three words for me: (village, kitchen, baby). Could you please repeat these words for me now? (let’s try again) Please remember those words, I am going to ask you again later.

2 – Could you please draw a clock face for me? (draw the face, and all the numbers) Please have the hands show ten past 11 (make sure your patient has reading glasses).

3 – Can you tell me which three words I asked you to remember earlier? (give first category cues, then multiple choice cues if your patient struggles)
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What the Mini-Cog tells you:
A. Severe memory disturbance. Memory loss not improved by cueing suggests AD.
B. Executive/visuospatial disturbance.

The Ultra-Quick and Very Dirty Diagnostic Algorithm of Common Dementias:
If A but not B: Most likely Alzheimer’s
If B but not A: Most likely vascular dementia
If both A and B: Most likely Alzheimer’s + vascular dementia

...we will get back to a better differential diagnosis in a few minutes
Sum all subscores listed on the right-hand side. Add one point for an individual who has 12 years or fewer of formal education, for a possible maximum of 30 points.

A final total score of 26 and above is considered normal.

Ruth’s rule: a good MOCA (20 min) gives you about 2/3 of the information of a 2-4 hour neuropsychological test battery.

Information is not only contained in the absolute score, but also in the pattern of deficits.
...BACK TO JOE:

65-year old man with a MOCA of 27...

“That’s great, doc, but I am still not the man I used to be. My wife tells me I am forgetting things.”

Why?
WHAT IS NORMAL AGING?

Most cognitive abilities decline linearly throughout the life span – two standard deviations of decline in processing speed and memory retrieval.

Summary

PRACTICAL IMPLICATIONS OF NORMAL AGE-RELATED COGNITIVE CHANGE:

• As (usually high-functioning) middle-aged patients become aware of age-related change, they may present with anxiety, depression, and concerns about dementia.

• Age-related cognitive change leads to a reduction in cognitive reserve, which makes patients vulnerable to the cognitive impact of other medical or psychiatric conditions.
• The majority of children with ADHD continue to have ADHD as adults.

• Some middle aged patients become symptomatic when they can no longer multitask rapidly.

• Patient present with depression, anxiety, feeling overwhelmed.

We think of ADHD as a disease of children, but sometimes patients are first diagnosed in their 60s or 70s.
Patient fills out the form by himself (remind her not to pay any attention to the different shading in the boxes).

4 or more in the shaded area of Part A = probable or possible ADHD

Part B just gives ancillary information; the total score is not very informative.

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Today's Date</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Never</td>
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</tbody>
</table>

1. How often do you have trouble wrapping up the final details of a project once the challenging parts have been done?

2. How often do you have difficulty getting things in order when you have to do a task that requires organization?

3. How often do you have problems remembering appointments or obligations?

4. When you have a task that requires a lot of thought, how often do you avoid or delay getting started?

5. How often do you fidget or squirm with your hands or feet when you have to sit down for a long time?

6. How often do you feel overly active and compelled to do things, like you were driven by a motor?

7. How often do you make careless mistakes when you have to work on a boring or difficult project?

8. How often do you have difficulty keeping your attention when you are doing boring or repetitive work?

9. How often do you have difficulty concentrating on what people say to you, even when they are speaking to you directly?

10. How often do you misplace or have difficulty finding things at home or at work?

11. How often are you distracted by activity or noise around you?

12. How often do you leave your seat in meetings or other situations in which you are expected to remain seated?

13. How often do you feel restless or fidgety?

14. How often do you have difficulty unwinding and relaxing when you have time to yourself?

15. How often do you find yourself talking too much when you are in social situations?

16. When you're in a conversation, how often do you find yourself finishing the sentences of the people you are talking to, before they can finish them themselves?

17. How often do you have difficulty waiting your turn in situations when turn taking is required?

18. How often do you interrupt others when they are busy?
Section 2 (of 3):

PRESENTING SYMPTOMS:
DEPRESSION – ANXIETY – APATHY –
HALLUCINATIONS – DELUSIONS –
PERSONALITY CHANGE
NEUROPSYCHIATRIC SYMPTOM (NPS) RELATIONSHIPS

“Jenny: Doc, my husband is just not himself.”

Mood/Personality change
- Anger
- Irritability
- Depression
- Apathy
- Anxiety

Behavior change
- Gives up activities
- Social withdrawal
- Suspiciousness
- Paranoia
- Delusions of infidelity
- Out of touch with reality
- Hallucinations
ASSESSMENT OF THE OLDER PATIENT WITH NPS:

- Inventory of symptoms
- Risk to self (suicide or other potentially self-injurious behaviors)
- Risk to others (acting on delusions)
- Time line: Years – months – weeks – days

Reasons to suspect cognitive impairment = most of the time, especially if:

- Patient is **not tracking well** during the interview
- Symptoms are **new** (e.g. no prior episode of major depression)

You do not lose anything by having a low threshold for performing a MOCA.
THE IMPORTANCE OF THE TIMELINE IN NPS:

- **Fairly rapid onset of fairly severe symptoms** raises a red flag for delirium.

- First onset of psychiatric symptoms **5 or more years before** cognitive change indicates a primary psychiatric disorder (with currently complicating neurocognitive disorder such as dementia or mild cognitive impairment).

- Onset of psychiatric symptoms **within 5 years of the onset of cognitive change** suggests a neurocognitive disorder as primary driver of psychiatric morbidity.

Results from longitudinal studies:

- The emergence of sustained anxiety or depressive symptoms in older adults is sometimes a marker of incipient dementia.

- This connection is most likely due to a shared etiology, rather than depression or anxiety leading to cognitive decline.

- In cognitively normal older adults, a higher burden of brain amyloid beta is associated with increasing symptoms of anxiety and depression over five years.

FIRST, RULE OUT DELIRIUM:

Dementia

• Gradually and slowly progressive over months to years

• Minor fluctuations over the course of the day or weeks

Delirium – a medical emergency:

• Sudden onset: anything sudden onset in an older person is delirium unless proven otherwise.

• More dramatic fluctuations – However, the use of fluctuating mental status in the differential diagnosis is limited because (a) strong fluctuations are also a sign of dementia with Lewy bodies, (b) families often overstate symptom variability, and (c) some NPS, like explosive anger, are by their very nature episodic.

• Look for: recent medication change(s) or acute illness.
ASSESSMENT OF THE OLDER PATIENT WITH COGNITIVE AND OR NEUROPSYCHIATRIC SYMPTOMS – LABS & TESTS:

1. Rule out medical problems with “memory labs”: complete metabolic panel, CBC, B12, folate, TSH, HIV, syphilis.

2. Brain MRI in some cases - do if change has been rapid, diagnosis unclear, and a recent fall is possible (r/o subdural hematoma).

3. Neuropsychological testing – if available, the patient and family are worried, deficits are subtle and/or complex.
FROM DELIRIUM TO “REVERSIBLE CAUSES OF COGNITIVE IMPAIRMENT”

From most to least common in my practice:

1. Depression and/or anxiety
2. General medical illness ("brain fog" of autoimmune disease, B12 deficiency)
3. Medications (e.g. anticholinergics)
4. Hypothyroidism
5. Sleep apnea (this does not have nearly as much of an effect on cognition as we like to believe)

None of these conditions lead to marked cognitive impairment, unless delirium is present (e.g. severe hypothyroidism). Hence, in a patient with a markedly abnormal MOCA, these are likely to be ancillary, and not causal conditions.
WHY SUSPECT COGNITIVE CHANGE IF THE CHIEF COMPLAINT IS BEHAVIOR CHANGE?

Younger patient:

- Depression is, more often than not, the driver of social withdrawal and reduction in activities to the point of being perceived as apathetic by others.
- New onset psychotic symptoms are most likely caused by a primary psychiatric disorder.

Older patient:

- Social withdrawal and giving up usual activities are often caused by cognitive impairment.
- Many dementias cause apathy in the absence of depression.
- Cognitive impairment can make usual activities effortful. Often patients feel ashamed of their deficits, anxious about their ability to manage challenging situations, and fear being “unmasked” in social situations.

New onset psychotic symptoms in old patients are most likely caused by a neurocognitive disorder.
THE COMPLEX RELATIONSHIP BETWEEN AGING, COGNITIVE CHANCE, DEPRESSION AND ANXIETY

• Age-related cognitive change reduces cognitive reserve, hence older adults may have higher vulnerability to the cognitive impairment associated with depression. This may lead to what textbooks have described as depressive “pseudodementia”...

• **BUT**: unless the patient is catatonically depressed, depression alone accounts for no more than ~4 points loss on the MOCA.

• The cognitive impact of depression or anxiety typically manifests as “scattered deficits” on an almost normal MOCA (or on neuropsychological testing).

• Depression or anxiety can be prodromal signs of cognitive change, due to a shared etiology.

• Cognitive chance is a potent driver of depression and anxiety (mediated by fear of dementia, perception of deficits, and reduction in activity level).
Section 3 (of 3):

SYMPTOM CONSTELLATIONS: WHAT IS MY DIAGNOSIS?
THE MOST COMMON DEMENTIAS:

- Alzheimer’s disease
- Dementia with Lewy bodies
- Parkinson’s disease dementia
- Vascular dementia
- Frontotemporal dementia (can affect people as young as in their 30s)
ALZHEIMER’S DISEASE – MOST COMMON
(1/3 OF PEOPLE OVER AGE 85)

Key presenting symptoms

• Strongly reduced ability to make new memories, leading to:
  1. Repeated identical questions
  2. Re-telling the same story multiple times
• Word finding difficulties
• Giving up prior activities (socializing, reading, house work, computer)

...often misdiagnosed as:

• Depression
  Family members wonder about depression as the cause of social withdrawal or reduced engagement in activities.
• Inattention
  Spouses complain about their husband/wife not listening to them.
ALZHEIMER’S DISEASE – MOST COMMON DEMENTIA
(AFFECTS 1/3 OF PEOPLE OVER AGE 85)

Key presenting symptoms

- Strongly reduced ability to make new memories, leading to:
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Typical MOCA pattern
VASCULAR DEMENTIA

• Destruction of brain tissue by cerebrovascular disease
• More varied presentation than Alzheimer disease – scattered deficits on the MOCA
• Often co-occurs with Alzheimer disease (as in the MRI on the right).
PSYCHIATRIC SYMPTOMS THAT OFTEN ACCOMPANY ALZHEIMER’S DISEASE OR VASCULAR DEMENTIA:

- Depression
- Anxiety
- Apathy
- Irritability, frustration, anger
- Delusions: most commonly of items being stolen; other forms of paranoid ideation and delusions of spousal infidelity are also somewhat common

Caveats:
1. Caregivers often refer to any hard-to-handle behavior as “agitation” – which can be all of the above (except apathy), or just the patient acting disorganized out of confusion.
2. Families sometimes use the word “hallucinations” to describe general confusion, or delusions.

Frequency of (non-apathy) psychiatric symptoms in dementia: 60-90%, increasing in prevalence and severity with worsening cognitive impairment up to the point where severe functional impairment limits expression and behavior of any kind.
DEMENTIA + PARKINSON’S

Lewy Body Dementia

• Dementia precedes the onset of Parkinson symptoms.
• Strongly fluctuating symptoms (DD – psychiatric/volitional)
• REM sleep disturbance (DD – nightmares)
• Visual hallucinations (DD – psychotic illness)

Parkinson’s Disease

• Parkinson symptoms precede the onset of dementia – most likely not your responsibility to diagnose.
FRONTOTEMPORAL DEMENTIA

• Can affect young patients.
• **Behavioral variant** vs. progressive aphasia.
• Behavioral variant is often misdiagnosed as bipolar disorder, personality disorder, depression.
• Prominent symptoms (differ by patient): disinhibition, impulsivity, hyper-sexuality, change in food preference to sweet or salty snacks, loss of empathy, apathy, psychomotor slowing.
• In the behavioral variant, marked personality and/or psychomotor change often precedes marked cognitive change.
BIZARRE VISUAL SYMPTOMS IN A MIDDLE-AGED OR OLDER PATIENT:

• Visual hallucinations – psychosis vs. dementia with Lewy bodies

• Posterior cortical atrophy variant of Alzheimer’s disease: younger onset than regular AD, may present with visual symptoms such as bizarre visual distortions, being unable to recognize objects, loss of ability to read - often misunderstood as eye problem or factitious disorder. Visual-spatial difficulties on the MOCA.
NEXT TIME (3-1)

Interventions – or: What do I do about any of this?

Ruth's behaviour has changed because of the dementia. I just don't know what to do...