Clinical Evaluation of Major Neurocognitive Disorder (Dementia)

Last updated October 2023

Introduction

Although DSM-5 lists a variety of cognitive functions that can be impaired in dementia (see fact sheet on differential diagnosis in dementia), by far the most important aspect of the assessment is forgetfulness—specifically, rapid forgetting. While in forgetfulness of normal aging, we become slower at retrieving past information, in dementia, the hippocampus is so damaged that memories can no longer be stored, and this is the main target of your evaluation.

This evaluation is divided up into 4 phases: the patient interview, the informant interview, brief cognitive testing, and laboratory screening.

1. Interview the Patient

- Many patients may complain about memory loss and be worried about dementia, but only a small percentage of such patients actually have dementia. A diagnosis requires both establishing that there is memory loss as well as a significant life impact of the deficit.
- Start by asking about the time course of memory loss. Has it occurred gradually over years (typical with dementia) or has it occurred rapidly over months (a red flag for organic causes).
- Have memory issues been significant? “Can you recall an instance where your memory issue has caused a problem in your daily life?”
    - Missed appointments?
    - Forgotten important dates, like family members birthdays or anniversaries?
    - Have they gotten lost?
    - Have they done anything that has put them in danger, like leaving stoves on or leaving car doors open when driving?

2. Interview Family Members or Other Informants

Interviewing informants is crucial, and in fact is likely more sensitive in detecting dementia than interviewing the patients themselves.

- Use the IQCODE questionnaire to save time when interviewing informants (available in this fact book).
- Compared with 10 years ago, how is this person at:
    - Remembering things that have happened recently?
    - Remembering where things are usually kept?
    - Remembering things about family and friends, such as names, occupations, birthdays, or addresses?
    - Making decisions on everyday matters?
    - Handling financial matters?
    - Finding the right word when talking about things?
    - Knowing how to do everyday things around the house, such as cooking and cleaning?

3. Formal Cognitive Testing

- Use the Montreal Cognitive Assessment (MoCA), which takes about 10 minutes to administer. (see the MOCA and the fact sheet on how to administer it).
    - The MoCA is more sensitive than the Mini Mental State Examination.
    - Look for rapid forgetting in Alzheimer's patients especially in list recall sections of the MoCA

4. Do Lab-Work and Neuroimaging

- Ensure that certain labs tests have been done recently, and if they aren't readily available, order them yourself.

[Note to editor—convert the following into a brief table that is condensed enough to fit in this fact sheet]

Lab Test	Pathologies Assessed
MRI	Atrophy patterns (hippocampal, frontal, temporal lobes) indicating Alzheimer's, Vascular dementia, Frontotemporal dementia; rule out tumors, infarcts, or hydrocephalus
Complete Blood Count (CBC)	Anemia, infection
Electrolytes	Fluid/electrolyte imbalances, renal dysfunction
Thyroid Panel	Hypothyroidism, hyperthyroidism
Vitamin B12	B12 deficiency
Vitamin D	Vitamin D deficiency
Syphilis Serology	Neurosyphilis
ESR/CRP	Inflammation, infection
Liver Function Tests	Hepatic encephalopathy

Glucose	Uncontrolled diabetes
Calcium	Hyper/hypocalcemia

When to Refer to a Neurologist

A psychiatrist can comfortably diagnose dementia in approximately 70% of cases. Refer to a neurologist when encountering younger patients, unexpected MRI findings, or unusual dementia patterns.