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Diagnosing a Neurocognitive Disorder

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Background

An estimated 5 million people in the United States are living with some degree of neurocognitive disorder. Millions more caregivers, relatives and friends suffer as they witness their loved one experience progressive, irreversible decline in cognition, function, and behavior. As the population of older adults swell, clinicians will need to be equipped with the ability to diagnose and treat patients with cognitive decline. Equally important, is the need to address the complex needs of their caregivers. They will need to be supported with knowledge and confidence to provide care, including knowing when and where to access assistance from community resources such as respite, adult day care, or even long term care.

Making the Diagnosis

While there are multiple frameworks for diagnosing dementia, the DSM 5 provides a useful systematic framework. Patients must demonstrate:

- A deficit in Cognitive Function in one or more of the 6 cognitive domains: complex attention, executive function, learning and memory, language, perceptual-motor, or social cognition
- An acquired decline from previously attained level of cognitive function and are not developmentally related
- The deficit must be supported by objective evidence such as history, physical examination, lab findings or preferably neurocognitive testing ie. MOCA, SLUMS, MMSE

What's on the differential?

Clinicians will need to rule out pathologies that can mimic a neurocognitive disorder or underlying reversible causes. The following table provides a quick reference for such pathologies and the corresponding diagnostic tests:

Pathology	Diagnostic Modality
UTI	UA (microscopic)
Vitamin B12 Deficiency	B12 level (supplement if < 400)
Thyroid Conditions	TSH
Depression	PHQ-9, Geriatric Depression Screen
Other diagnostic clues:	Acute onset
	Gradual onset
	Stepwise

Delivering Difficult News and Clarifying Misunderstanding:

Many patient's and caregivers have the mistaken notion that dementia is "simply a memory disorder." Over time, clinicians need to reinforce the reality that dementia is a chronic and progressive disease that can potentially, and most likely will, affect all major body organs. Dementia is not representative of cognitive decline that accompanies the normal, natural aging process. Clinicians might find it useful to educate patients and families regarding the 6 cognitive domains, pointing out that language, learning and memory are but 2 of the 6 domains that make up normal cognitive function.

Facing the Difficult Questions

Patient's and caregiver's will want to know about treatment and prognosis. Other questions that they may grapple with include the following:

Patient

- How long will I live?
- Will I be a burden to my family?

Caregiver

- How long will my loved one live?
- How will I manage this on my own?
- What services are available to help me?
- How will our lives change?
- How will this affect us financially?

In addition, clinician need to be ready to face questions with regard to potential causes of dementia. It is not unusual to hear the following questions:

Common Myth:	Response and Reassurance
Does drinking out of aluminum cans or cooking in aluminum pots and pans can lead to AD?	Studies have failed to show any link between Alzheimer's and aluminum.
I saw on the internet that aspartame causes memory loss. Is this true?	According to the FDA, as of May 2006, the agency had not been presented with any scientific evidence that would lead to change its conclusions on the safety of aspartame for most people. The agency says its conclusions are based on more than 100 laboratory and clinical studies.
Do flu shots increase the risk of AD? Am I putting my loved one or myself at risk?	Studies reveal that flu shots and other immunizations actually lead to decreased risk of Alzheimer's disease and better overall health.
Do silver dental fillings increase the risk of AD?	The Journal of the American Dental Association as well as the New England Journal of Medicine have produced separate studies refuting this claim.

Source: https://www.alz.org/alzheimers-dementia/what-is-alzheimers/myths

Timing is everything. Maybe...

There is much debate about the value of screening for dementia. While screening for cognitive impairment is a requirement for initial and subsequent evaluations for the Medicare Annual Wellness, the USPSTF in 2014 determined that evidence was insufficient to recommend either for or against dementia screening.

Early diagnosis could cause potential emotional harm to patients and family members, especially given that there is no curative therapy or treatment. Even so, the advantages to early engagement of patients and caregivers with a clinician and support team are undeniable. Support options will need to be unlocked for patients and families. Clinicians need *time* to build rapport and trust which are fundamental to fruitful goals of care discussions, acceptance of the diagnosis, education and confidence building, and understanding of the family dynamic and network of support (provided this exists).

The rewards of service...

Clinicians enter into the field of medicine with the desire to provide competent and compassionate care to those who are suffering. Caring for those with neurocognitive disorders, or dementia, can provide both a rewarding and challenging pathway to fulfilling that desire. With our aging population, care of patients with dementia, and their caregivers, promises ample opportunity to meet unique and complex needs.