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Dementia

What is dementia?

Dementia is a condition that includes a wide range of symptoms linked to declining memory or thinking skills. It is also known as cognitive impairment. Symptoms are severe enough to interfere with daily living and worsen over time. The decline may occur slowly or quickly.

Besides memory loss, patients may have trouble with reasoning and judgment, communication, and vision. They may also show changes in personality, confusion, and lack of cleanliness.

Not just Alzheimer disease

Many conditions cause dementia. Some are treatable, and some are not. As many as 9% of all dementia cases are treatable.¹

Alzheimer disease is the most common cause of dementia. It accounts for about 60% to 80% of all dementia cases.² Vascular cognitive impairment and frontotemporal dementia (Pick disease) are also fairly common causes. Unfortunately, these 3 are not treatable.

Treatable and untreatable causes of dementia

Treatment may be able to reverse the signs of dementia in these conditions:

- Certain combinations of prescription drugs
- Drug and/or alcohol abuse
- Folate deficiency
- Hypoglycemia
- Hypothyroidism
- Normal pressure hydrocephalus caused by infection (meningitis), head injury, brain tumor, stroke
- Severe depression (pseudo/false dementia)
- Subdural hematoma
- Various kidney, liver, and lung diseases
- Vitamin B12 deficiency



Dementia risk factors

Factors linked to an increased risk of dementia include:

- Age >65 years
- Alcohol abuse
- Depression
- Head trauma
- Heart disease risk factors: diabetes, tobacco, increased cholesterol, hypertension, metabolic syndrome
- Learning disabilities such as seen in Down syndrome
- Physical frailty
- Low education level
- Low social support
- Never married

Factors that might be linked to a decreased risk of dementia include:

- Adequate folate intake
- Adequate omega-3 fatty acid intake
- Diet rich in fruits and vegetables
- Low or moderate alcohol intake
- Low saturated fat intake
- Mediterranean diet
- Physical activity
- Stimulating mental activity
- High education level

Signs of dementia cannot be reversed in these conditions:

- Alzheimer disease
- Vascular cognitive impairment, including multi-infarct dementia (multiple small strokes)
- Frontotemporal dementia (Pick disease)
- Lewy body dementia
- AIDS dementia complex
- Creutzfeldt-Jakob disease
- Huntington disease
- Parkinson disease

Components of a dementia diagnostic workup³

- Clinical history, including a medication review
- Neurological and general physical exam to assess cognitive function, possible behavioral and psychological symptoms, and daily living activities
- Laboratory tests to help with the differential diagnosis:
 - Calcium, CBC, B12, folate, glucose, renal function tests, liver function tests, and TSH^a
 - Antibody testing for syphilis and/or HIV if an infectious cause is suspected^a
 - CSF testing for amyloid beta 1-42, tau and p-tau proteins, and 14-3-3 protein^b
 - Genetic testing^b
- Neuroimaging (structural and functional)
- Biopsy in select cases

^a Available from Quest Diagnostics.

^b Available from Athena Diagnostics: *APOE*, *APP*, *C9orf7*, *GRN*, *MAPT 2*, *PS-1 (PSEN1)*, and *PS-2 (PSEN2)* genetic testing.

To screen or not to screen for dementia

The United States Preventive Services Task Force (USPSTF) updated their guidelines this year. The Task Force concluded there aren't enough data to recommend for or against screening.² However, the Affordable Care Act calls for screening as part of the annual wellness visit for Medicare patients.⁴ The Alzheimer's Association has provided guidelines for doing this.⁵

References

1. Alzheimer's Association. 2014 Alzheimer's disease facts and figures. *Alzheimers Dement*. 2014;10(2):e47-e92.
2. Moyer VA, U.S. Preventive Services Task Force. Screening for cognitive impairment in older adults: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2014;160:791-797.
3. Sorbi S, Hort J, Erkinjuntti T, et al. EFNS-ENS guidelines on the diagnosis and management of disorders associated with dementia. *Eur J Neurol*. 2012;19:1159-1179.
4. Annual wellness visit (AWV), including personalized prevention plan services (PPPS). CMS Medicare Learning Network Web site. MLN Matters® number MM7079. cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/downloads/MM7079.pdf. Published January 2011. Accessed October 15, 2014.
5. Cordell CB, Borson S, Boustani M, et al. Alzheimer's Association recommendations for operationalizing the detection of cognitive impairment during the Medicare Annual Wellness Visit in a primary care setting. *Alzheimers Dement*. 2013;9:141-150.