Greater Newport Physicians
MemorialCare

Memory Loss, Dementia Screening, Work-up and Management

Definitions:

Mild Cognitive Impairment (MCI) – cognitive impairment without decline in overall level of function - intermediate state between normal cognition & dementia – may be reversible (if related to depression, medications, recovery from acute illness) or a precursor to dementia

Dementia : (DSM-IV) cognitive decline from baseline AND difficulty in one or more of the following:

- Retaining new information (ie trouble remembering events),
- Handling complex tasks (balancing a checkbook);
- Reasoning (eg – unable to cope with unexpected events),
- Spatial ability & orientation (eg getting lost in familiar places),
- Language (eg word finding);
- Behavior

- interferes with daily function & independence (work, personal, or social)
- no evidence of secondary causes such as major depression, psychiatric disorder or systemic or brain disorder.

Symptom	Usual Cause	Possible Features & Suggestive Syndrome	
Gradual onset of short-term memory loss (ie, recent events) and functional impairment in more than one domain: I. Executive function (finances, shopping, cooking, laundry, transportation) II. Basic activities of daily living (feeding, dressing, bathing, toileting, transfers)	Dementia	Most common	Alzheimer disease (60-80%)
		Parkinsonism	Parkinson dementia (5%)
		Visual hallucinations, rapid eye mvmt, early sleep disruption	Dementia with Lewy bodies
		Personality change, inappropriate behavior	Fronto Temporal Dementia
		Rapid progression or early onset	alcohol-related dementia, Creutzfeldt-Jakob disease
			Autoimmune, metabolic
Stepwise, sudden deterioration in cognition; episodes of confusion, aphasia, slurred speech, focal weakness	Vascular disease	Vascular or multi-infarct dementia (10-20%) Binswanger dementia (subcortical dementia) associated with HTN, DM, etc	
Acute cognitive impairment with difficulty with attention; fluctuations in consciousness, concentration - may have hypersomnolence	Delirium	Hypo/hyperglycemia, hypo/hypernatremia, hypoxemia, anemia, thyrotoxicosis, myxedema, alcohol withdrawal, sepsis, drugs (especially cholinergics, benzodiazepines, etc)	
Complains of memory loss, decreased concentration, psychomotor slowing, poor effort on testing, worse in AM, hopelessness	Depression	Minor depression, dysthymic disorder, major depression, pathologic grief reaction	

Risk Factors:

Alzheimer's Disease	Vascular Dementia	Other Medical Conditions	Lifestyle
Age Family History Genetics	Hypertension Hypercholesterolemia Diabetes smoking	History of head trauma Comorbid medical illnesses Obesity High alcohol consumption Exposure to toxins	Lower education level Sedentary lifestyle Lack of social activity Lack of mental activity

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Work-Up:

Complete history - including information from family members
Medication history - esp those that impair (analgesics, anticholinergics, sedative-hypnotics)
Complete physical exam including Neurologic exam

- Focal deficits suggestive of prior strokes
- Movement related findings/Parkinson Disease i.e. cogwheel rigidity tremors, gait issues, etc.

Screening

- **Depression screening: PHQ-9**
- Mini-Mental State Exam, MSI, ad8, SLUMS, etc

Laboratory - screen for other contributing conditions

- **CBC, serum B12** - B12 deficiency
- **TSH** - Hypothyroidism
- Routine CMP, syphilis - NOT recommended (unless signs or sx suggesting conditions warrant)
- Genetic Alzheimer tests (i.e. apoE e4 allele) - ***NOT*** routinely recommended for screening ***or*** dx

Radiology/Imaging

- Indicated for rapid deterioration, suspect secondary causes (ischemic events, subdural hematoma, cancer, or normal pressure hydrocephalus, acute onset of symptoms, duration of symptoms <2 years, or age of onset <60yrs
- If imaging --> MRI of the brain *or* non-contrast CT (contrast if high suspicion neoplasm/infection)
- PET scan- only indicated for **differentiating** Frontotemporal dementia from Alzheimer disease

Management:

Dependent on etiology. Control risk factors.

Pharmaceutical

- Vascular and other causes- treat the underlying conditions (BP, cholesterol mgmt.)
- Alzheimer Disease
  - Cholinesterase inhibitors: donepezil, rivastigmine, galantamine
  - Memantine- moderate to severe AD (MMSE < 17)
  - **Cholinesterase and memantine combo**- additive benefit in moderate to severe AD
  - Monoclonal antibody infusions- only for early/mild AD & minimal impact on function
    - If pt insists - order **ATN Panel** (Amyloid Tau Neurodegeneration) **-** to assess likelihood of Alzheimer prior to other referrals

Supplements

- Vitamin E 1000iu qd (Alzheimer- limited confidence, may delay progression) & Ginkgo biloba – mixed results
- Estrogen, Ginkgo biloba, B12, Omega-3FA – unproven for treatment

Rehabilitation

- Exercise- modest benefit (6-12 months, aerobic – improvement in recall)
- Occupational & Cognitive- no specific benefit

Safety and Societal

- **If Alzheimer: see resources; REFER https://www.alzheimersla.org/ , https://AlzOC.org**
- Discussion to stop driving- predictors of unsafe driving
  - Recent (1-5 years) history of motor vehicle accident or citation
  - Self-restricted driving
  - Aggressive or impulsive behaviors
  - Caregiver's assessment of marginal or unsafe driving
  - Mini-mental state examination (MMSE) score of 24 or less
- Financial Capacity
- Falls/Wandering
- Caregiver stress
- End-of-Life discussion (earlier the better, set up Durable Power of Attorney)