

## References

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## Dementia – Key Information

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- **Epidemiology**

- Prevalence: 5% over 65; 20-40% at age 85; prevalence and incidence of Alzheimer's disease (AD) doubles every 5 years between the ages of 65 and 85
- In the US alone, 4 million people have AD; by 2050, AD will over take cancer as the second leading cause of death
- Despite high prevalence, physicians fail to diagnose dementia in up to half of persons with early dementia

- Workup

- History from family member or other informed source
- Perform the Folstein MiniMental State Examination (MMSE) and the Clock Drawing Test
  - Folstein MMSE- educationally but not culturally specific (performs equally well for various cultures when adjusted educationally); cutoff for high school or greater: 23 or less; cutoff for 8<sup>th</sup> grade: 17 or less; test is used as a screening measure and performs much better than simple tests of orientation
  - Clock Drawing Test- adjunct to MMSE because better test to detect visuospatial cognitive dysfunction than MMSE; using scoring system, sensitivity is 82% and specificity is 88%
- Physical Examination
  - Comprehensive neurologic exam to look for focal neurological deficits
- Laboratory Evaluation
  - CBC and Chemistry panel

- TSH
  - Syphilis serology
  - CT w/o contrast (may miss NPH and some vascular lesions) OR MRI (more sensitive for vascular lesions)
  - CSF analysis should not routinely be performed in persons > 55; EEG reserved for high suspicion for Creutzfeld Jacob disease or encephalitis
- Diagnosis: Reversible vs Noncurable
    - Rule out potentially “reversible” causes
      - Drugs (digoxin, theophylline, anticholinergics)
      - Emotional (depression)
      - Metabolic (hypothyroidism)
      - Eyes and ears (sensory isolation)
      - Normal Pressure Hydrocephalus (ataxia, incontinence and dementia)
      - Tumor or other space-occupying lesion **R**estricted mobility
      - Infection (syphilis, chronic infections)
      - Anemia (vitamin B12 deficiency)
    - Major noncurable dementias
      - Prion (Slow virus) disease- such as Creutzfeld Jacob disease (hx corneal transplants or growth hormone administration when young) and Mad Cow Disease (ingestion of cattle products from infected cows)
      - Vascular dementias- step wise progression often with hx of other vascular disease (HTN, MI or Cerebrovascular dz); pseudobulbar palsy common
      - Alzheimer’s disease- NINCDSADRDA Work Group definition: dementia deficits in at least two areas of cognition (memory, language domain, praxis, agnosia, executive function), progressive worsening of cognitive function, no alteration in consciousness, onset between ages 50 and 90, absence of other causes
- Management
    - Caregiver support- literature, referral to support groups, etc
    - Address advance care planning
    - Meds: For vascular, ASA; for Alzheimer’s Dz, cholinesterase inhibitors and Vit E

