Medical Model of Alzheimer’s Disease

and the difference between young and old disease onset
Alzheimer’s Disease Exists on a Continuum from No/Minimal Symptoms to Dementia

No Symptoms  Mild Cognitive Symptoms  Dementia

Increasing Cognitive Dysfunction; Increasing Neurodegeneration

Time

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The Original Amyloid Cascade Hypothesis

Alzheimer’s is the cumulative product of a series of pathological events that may begin with the deposition of beta-amyloid in the brain.
Alzheimer’s Dementia

- Alzheimer’s dementia (AD) affects about 5 million Americans\(^1\)

- Most are 65 years of age and older, with prevalence reaching nearly 50% at age 85 and older\(^1\)

- AD patients typically live about 7 to 10 years after diagnosis\(^2-4\)

Reasons Why AD Is Underdiagnosed

- Early AD is subtle – easy to overlook initial signs
  - Often misidentified as “normal aging”
- Social skills are often maintained in early disease
- Lack of definitive screening and diagnostic tests
- Concerns regarding time and reimbursement issues
- Patients and caregivers are often reluctant to acknowledge the signs and symptoms
  - Social stigma associated with diagnosis

Potential Benefits of Early Recognition and Treatment

• Identify entities that would be treated differently
• Treatments may slow down functional decline
• Opportunity to participate in research
• Capacity to decide one’s fate
Diagnostic Evaluation

- History and physical examination
- Cognitive Screen
- Laboratory testing
- Brain Imaging

- Early detection requires a high index of suspicion
- Evaluation can be suggested by patient/family, primary care physician, other health care providers, attorneys, etc.
Which Older Adults Should Be Evaluated for AD?

- People with identified risk factors (e.g., age, hypertension, hypercholesterolemia, head injury)
- People with memory or cognitive impairment, with or without functional impairment
- People brought to physician’s attention through informant complaint, with or without patient concurrence
- Depressed or anxious patients, with or without cognitive complaints
Young onset AD

• Young onset (50’s- early 60’s) may have stronger family history
• Diagnosis more challenging
• Course generally with more rapid progression
• Unique psychosocial issues (loss of income, children at home, marital problems)
Targets of Rx

- Delay functional decline
- Improve behavior
- Manage co-morbidities
- Maintain caregiver health

- Continuity of treatment and follow up essential
summary

Alzheimer’s disease extends over a long period of time

Early detection requires high index of suspicion

Treatments may help maintain function and reduce costs of care