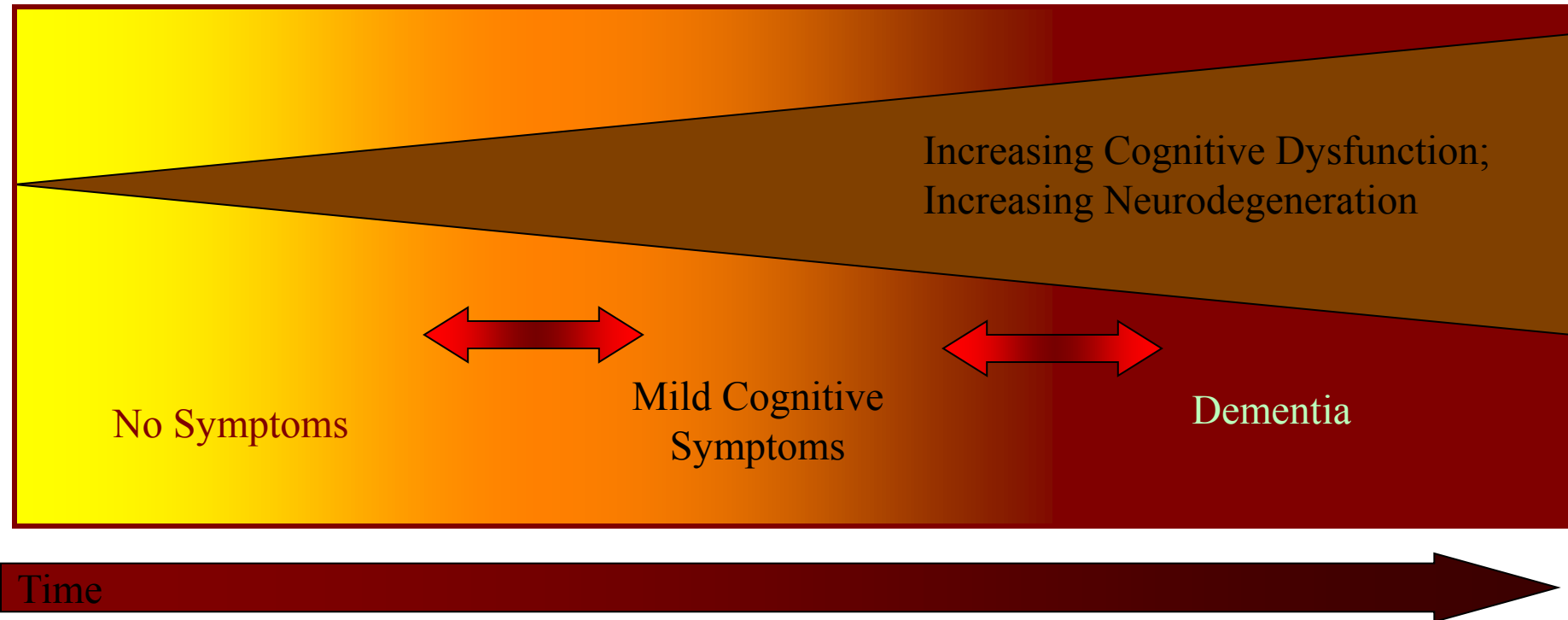


Medical Model of Alzheimer's Disease

and the difference between
young and old disease onset

Alzheimer's Disease Exists on a Continuum from No/Minimal Symptoms to Dementia



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

AGE

30

40

50

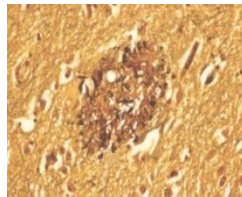
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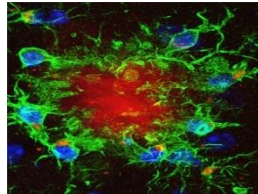
80

90

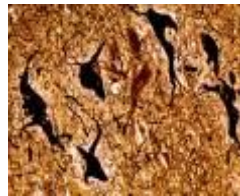
**Amyloid
deposition**



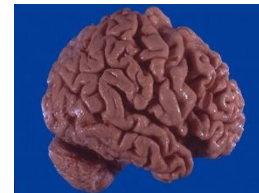
**Microglial
activation**



**Neurofibrillary
tangles**



**Neuronal loss/
neurochemical
changes**

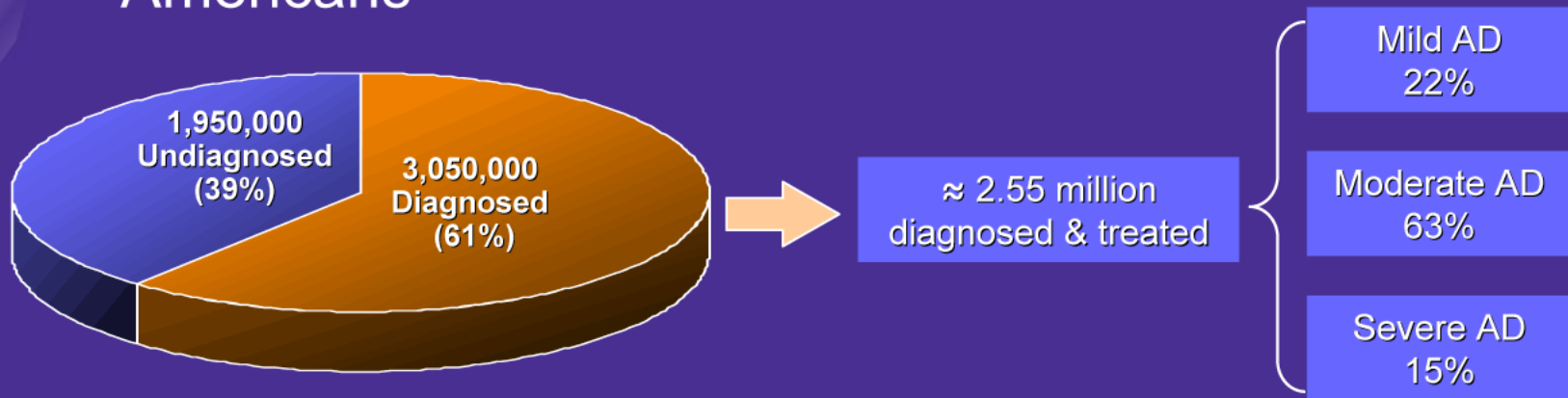


DEMENTIA



Alzheimer's Dementia

- Alzheimer's dementia (AD) affects about 5 million Americans¹



- Most are 65 years of age and older, with prevalence reaching nearly 50% at age 85 and older¹
- AD patients typically live about 7 to 10 years after diagnosis²⁻⁴

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 (eg, 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