ID AD IDENTIFY ALZHEIMER'S DISEASE EARLIER
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Patient Profiles – Alzheimer's disease (AD) at the mild cognitive impairment (MCI) stage

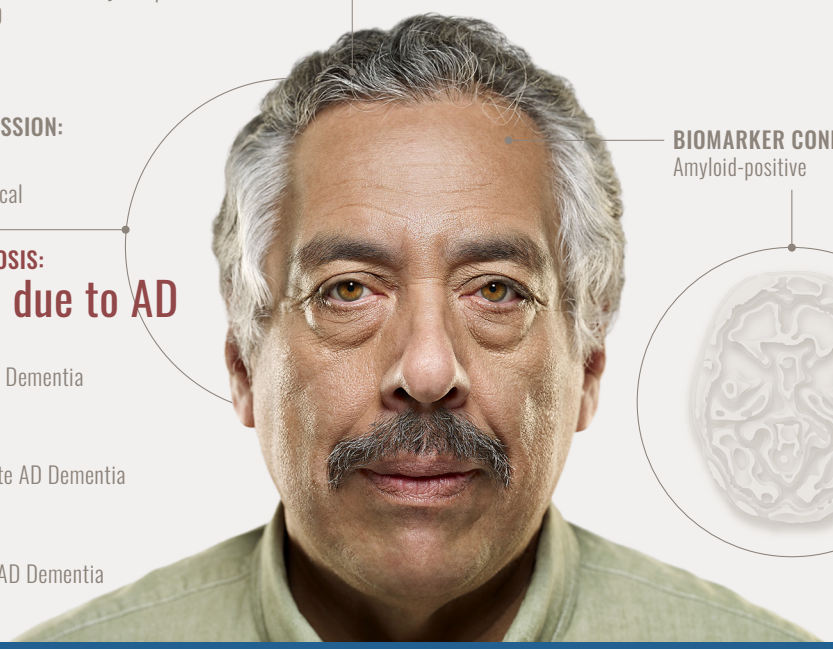
FROM DETECTION TO DIALOGUE

Practical examples of early-stage Alzheimer's disease diagnosis

COGNITIVE ASSESSMENT:
Elevated subjective memory complaints;
MoCA=25/30

STAGES OF AD PROGRESSION:

- Preclinical
- **DIAGNOSIS:** MCI due to AD
- Mild AD Dementia
- Moderate AD Dementia
- Severe AD Dementia



BIOMARKER CONFIRMATION:
Amyloid-positive

"I go to work. I take care of my family. But I'm forgetting things more often. Is it just normal aging?"

Mark, 64 years old | High-functioning patient

Not an actual patient. Patient profile provided for illustrative purposes only.

The path to care starts by recognizing symptoms of Alzheimer's disease

Symptoms of AD at the MCI stage may be subtle and could be mistaken for normal aging.[1]

Examples of Cognitive Concerns[2]

- PROBLEMS PLANNING OR UNDERSTANDING INSTRUCTIONS
- TROUBLE WITH DECISION-MAKING
- POOR JUDGMENT
- CONFUSION REGARDING TIME OR PLACE
- CONSISTENT FORGETFULNESS ABOUT IMPORTANT EVENTS
- PERSISTENT DIFFICULTY IN MAINTAINING FOCUS

This is not an exhaustive list of all symptoms.
MoCA=Montreal Cognitive Assessment.

Diagnostic process in practice: Assessment of a high-functioning patient

Mark–64-year-old male

High-functioning individual, employed in the contracting field, reports difficulty learning

Not an actual patient. Patient profile provided for illustrative purposes only.

HISTORY:

Family history of AD/dementia: No

Patient reports: Missed appointments

Informant reports: Noticeable memory loss, repeats himself

Psychiatric symptoms: None

LAB TESTS:

Blood cell count, electrolytes, glucose, calcium, thyroid function, vitamin B_{12}, folate: Within Normal Range

COMORBIDITIES:

Hypertension (controlled)

COGNITIVE ASSESSMENT:

MCI-sensitive test conducted, MoCA=25/30

DIAGNOSIS: MCI. AD suspected.

Referred to specialist

For the diagnosis of MCI, American Academy of Neurology (AAN) guidelines recommend:
If a patient or caregiver presents with a concern about memory or impaired cognition, HCPs should assess for MCI since the memory issues may not be related to normal aging.[3]

Evidence of progressive cognitive decline is essential for accurate diagnosis in order to initiate a wide range of patient care.[4]

There are many cognitive assessment tools available with varying sensitivity and specificity for different stages of AD.[5]

Brief cognitive assessment tools can aid the early identification of the MCI or mild dementia stage of AD.[4] Examples of MCI-sensitive neurocognitive tools include: MoCA, SLUMS, Cognigram, and CANTAB Mobile.[5*]

HCP=healthcare professional; SLUMS=Saint Louis University Mental Status.
*This is not a comprehensive list of tools for assessing cognitive function and is not intended to recommend any particular tool.
Biogen and Cambridge Cognition have entered into a development and commercialization agreement.

MCI. Alzheimer's disease suspected. Referred to specialist

Specialist examination 1 year after referral

NEUROLOGIC EXAM:

Normal with some mild bilateral upper-extremity action tremor

COGNITIVE ASSESSMENT:

Wechsler Memory Scale-Logical Memory (WMS-LM): 100% immediate recall, 69% delayed recall

FUNCTIONAL DEPENDENCE:

Informant report: Fully independent (3/30 on FAQ)

MAGNETIC RESONANCE IMAGING (MRI):

Hippocampal atrophy, periventricular white matter hyperintensities

BIOMARKER CONFIRMATION (CSF):

Amyloid-positive

The specialist role in AD assessment[6]

- Perform comprehensive cognitive and functional testing
- Perform structural imaging to rule out non-AD causes
- Help support an AD diagnosis with biomarker tests, such as PET or CSF
- Develop a personalized management and follow-up plan
- Direct the patient to additional support resources

DIAGNOSIS: **Alzheimer's disease in the MCI stage**

According to International Working Group (IWG) recommendations, a diagnosis of AD requires a clinical evaluation and confirmation of AD pathology via biomarkers.[7]

The diagnostic value of AD as the cause of MCI provides the clinician an opportunity to initiate patient care.[8]

Biomarker tests for amyloid beta and tau include[7]:

- Positron emission tomography (PET)
- Cerebrospinal fluid (CSF) analysis

FAQ=Functional Activities Questionnaire.

Identifying the earliest signs of Alzheimer's disease presents your earliest opportunity to take action.

The time between MCI due to AD and AD dementia is limited.[1,9]

DETECT

Listen for cognitive complaints, build a history, and look for the core clinical criteria of the mild cognitive impairment stage of AD[1,10,11]

ASSESS

Use appropriate tools to confirm cognitive impairment. Rule out non-AD causes with a full workup, including lab tests and an MRI[3,4]

CONFIRM

If AD is the suspected cause of clinically diagnosed MCI, consider referring to a specialist to confirm AD pathology via biomarker testing[12,13]

Complete the Alzheimer's disease diagnosis with biomarkers.[4,14]

Start a dialogue with your patient about the MCI stage of AD

Early diagnosis allows for individual management plans, including multi-domain non-pharmaceutical interventions that may temporarily potentially improve cognition.[15,16]

Discussing the diagnosis of Alzheimer's disease in the MCI stage with your patient or a caregiver may provide many benefits, including the potential to address questions and provide an opportunity for them to make informed decisions and plan for the future.[16]

Detect early. Diagnose early.

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