ID AD IDENTIFY ALZHEIMER'S DISEASE EARLIER
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SCREENING FOR MILD COGNITIVE IMPAIRMENT (MCI): CRITERIA AND TOOLS

In a large percentage of patients with MCI, early detection and diagnosis of Alzheimer's disease (AD) may be possible[1-3]

According to practice guidelines from the American Academy of Neurology (AAN), appropriate diagnosis of MCI is important in order to[4]:

- **Assess** for reversible causes of cognitive impairment
- **Help** patients and families understand the cause of their cognitive concerns
- **Discuss** the prognostic possibilities so patients and families can plan accordingly

FOUR CLINICAL CRITERIA FOR THE DIAGNOSIS OF MCI FROM THE NIA-AA WORKGROUPS ON DIAGNOSTIC GUIDELINES FOR AD[5]

Concern regarding a change in cognition

A. Evidence of concern about a change in cognition, in comparison with the person's previous level

B. May come from the patient, a close contact of the patient, or a clinician observing the patient

Impairment in one or more cognitive domains

A. Objective evidence of impairment in one or more cognitive domains, greater than expected for age and education level

B. If repeated assessments are available, then a decline in performance should be evident over time

C. Cognitive domains include memory, executive function, attention, language, and visuospatial skills

Preservation of independence in functional abilities

A. People with MCI might have mild problems performing complex functional tasks, such as paying bills or shopping

B. They may take more time, be less efficient, and make more errors at performing such activities than in the past

C. Nevertheless, they generally maintain their independence in daily life, with minimal assistance

Not demented; only mild cognitive changes

A. Cognitive changes should be sufficiently mild that there is no evidence of a significant impairment in social or occupational functioning

B. If the patient has only been evaluated once, infer change from history and/or evidence that cognitive impairment is beyond what would be expected for the individual (factors may include age and education level)

Subjective cognitive complaints alone can result in overdiagnosis or underdiagnosis of MCI. Brief, validated cognitive assessment tools (see next page) are recommended for screening.[4]

NIA-AA=National Institute on Aging–Alzheimer's Association.

EXAMPLES OF BRIEF COGNITIVE ASSESSMENT TOOLS THAT ARE VALIDATED FOR SCREENING MCI[4]

- No tool has been confirmed to be superior to any others in diagnostic accuracy for MCI
- Patients who test positive for MCI should have further formal assessment for this diagnosis
- More in-depth cognitive testing such as neuropsychological testing with interpretation based on appropriate normative data may be recommended

MMSE[6]
(Mini-Mental State Examination)

Learn More

- ✓ Frequently studied in medical literature
- ✓ Effective at ruling out dementia in MCI and dementia studies
- ✓ Administration time: 10 minutes

MoCA[6]
(The Montreal Cognitive Assessment)

Learn More

- ✓ Designed to detect and distinguish MCI from normal cognition
- ✓ Notable reliability, consistency, and content validity
- ✓ Administration time: 10 minutes

GPCOG[6]
(The General Practitioner Assessment of Cognition)

Learn More

- ✓ Incorporates informant input
- ✓ Assesses 9 different cognitive items
- ✓ Administration time: 6 minutes

Mini-Cog[6]

Learn More

- ✓ Easy to administer to non-English speakers
- ✓ Less biased by low education and literacy than other tools
- ✓ Administration time: 3 minutes

Recommendations for discussing a potential diagnosis of Alzheimer's disease with patients are summarized in our Patient Dialogue Guide: Aβ Testing

For more information on biomarker assessment of MCI, refer to our Aβ Test Overview

References: 1. Cordell CB, et al. *Alzheimers Dement*. 2013;9(2):141-150. **2.** Plassman BL, et al. *Ann Intern Med*. 2008;148(6):427-434. **3.** Knopman DS, et al. *Alzheimers Dement (Amst.)*. 2016;2:1-11. doi:10.1016/j.dadm.2015.12.002. **4.** Petersen RC, et al. *Neurology*. 2018;90(3):126-135. **5.** Albert MS, et al. *Alzheimers Dement*. 2011;7(3):270-279. **6.** Ismail Z, et al. *Int J Geriatr Psychiatry*. 2010;25(2):111-120.

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