

Letter to the Editor



Clinical Practice Guideline for Dementia (Diagnosis and Evaluation): 2021 Revised Edition

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In 2010, Clinical Research Center for Dementia of South Korea, a nation-wide clinical dementia research group, published the Clinical Practice Guideline for Dementia: Part 1, Diagnosis and Evaluation. This paper is the revised edition of the Clinical Practice Guideline for Dementia (Diagnosis and Evaluation). Since studies related to the diagnosis and evaluation of dementia are rapidly changing over the world, the latest evidence is required to revise the existing guideline. The Executive Committee for Guideline Development of the Korean Dementia Association updated recent changes related to the diagnosis and evaluation of dementia in this revised guideline. We used a hybrid development method, in which 8 different key questions not included in the existing guideline were used for the revision (**Table 1**). In addition, relevant recommendations were made by evaluating the evidence with a *de novo* method used for the revision. Notably, this revised guideline additionally describes subjective cognitive decline, which is regarded as a preclinical stage of Alzheimer's disease, and amyloid positron emission tomography, a test method that can visually identify amyloid- β protein *in vivo*. The revised edition of the Clinical Practice Guideline for Dementia (Diagnosis and Evaluation) was prepared using an evidence-based guideline production

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Conflict of Interest

The authors have no financial conflicts of interest.

Author Contributions

Investigation: Lee JS, Kim GH, Kim HJ,¹ Kim HJ,² Na S, Park KH, Park YH, Suh J, Shin JH, Oh SI, Yoon B, Rhee HY, Lim JS, Jang JW, Chin J, Hong YJ, Shim Y; Methodology: Lee JS, Kim GH, Kim HJ,¹ Kim HJ,² Na S, Park KH, Park YH, Suh J, Shin JH, Oh SI, Yoon B, Rhee HY, Lim JS, Jang JW, Chin J, Hong YJ, Shim Y; Writing - original draft: Lee JS, Kim HJ,¹ Kim HJ,² Na S, Park KH, Park YH, Suh J, Shin JH, Oh SI, Yoon B, Rhee HY, Lim JS, Jang JW, Chin J, Hong YJ, Shim Y; Writing - review & editing: Lee JS, Kim GH, Shim Y.

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Table 1. Key questions and recommendations for dementia diagnosis and evaluation

Key questions	Recommendation	LE	GR
KQ 1. Are dementia rating tests (CDR and Global Deterioration Scale) useful for screening and diagnosing dementia in patients with neurocognitive disorders?	Performing CDR in patients with neurocognitive disorders is useful in diagnosing dementia by distinguishing it from cognitively normal and MCI. It is recommended to perform CDR for dementia diagnosis.	Moderate	Strong
KQ 2. Is performing MMSE and Montreal Cognitive Assessment useful for screening and diagnosing dementia in patients with neurocognitive disorders?	Performing MMSE in patients with neurocognitive disorders is recommended for screening dementia and evaluating cognitive function. In the process of diagnosing dementia, performing MMSE may be considered to determine whether overall cognitive function of patients has reached the level of dementia.	Screening: High Diagnosis: High	Screening: Strong Diagnosis: Weak
KQ 3. Is SCD a potential risk factor for dementia?	The elderly with SCD have a higher risk of progression to dementia (or AD dementia) in the future compared to those without SCD. Therefore, it is recommended to evaluate their clinical progress through periodic follow-ups every 1 or 2 years.	Moderate	Strong
KQ 4. Is neurological examination useful for the diagnosis of dementia in patients with MCI or dementia?	The neurological examination is recommended for the differential diagnosis of dementia in patients with MCI or dementia.	Moderate	Strong
KQ 5. Is it possible to increase the accuracy of diagnosing AD by performing Aβ, total tau, and phosphorylated tau tests in CSF in patients with MCI or dementia?	CSF Aβ, total tau, and phosphorylated tau tests can increase the accuracy of the diagnosis of AD in patients with MCI or dementia. These tests can be considered for differential diagnosis of AD.	High	Weak
KQ 6. Can APOE genotyping be helpful in the diagnosis and prognostic evaluation of dementia due to AD in patients with MCI or dementia?	APOE genotyping can be considered as a diagnostic tool since it can be helpful in the diagnosis and prognostic evaluation of dementia due to AD in patients with MCI or dementia.	Moderate	Weak
KQ 7. Can assessing the degree of MTL atrophy in structural brain imaging in patients with MCI or dementia increase the accuracy of dementia diagnosis?	Brain MRI (structural brain imaging) examination in patients with MCI or dementia is recommended since it can increase the sensitivity and accuracy of the diagnosis of AD by evaluating the degree of MTL atrophy as well as by excluding other causative diseases.	Moderate	Strong
KQ 8. Can performing amyloid PET scans in patients with MCI or dementia improve the accuracy of AD diagnosis?	Results of amyloid PET scans in patients with MCI or dementia can increase the diagnosis accuracy of AD. This test can be considered for the diagnosis of AD.	High	Weak

KQ: key question, LE: level of evidence, GR: grade of recommendation, CDR: Clinical Dementia Rating, MMSE: Mini-Mental State Examination, SCD: subjective cognitive decline, AD: Alzheimer’s disease, MCI: mild cognitive impairment, Aβ: amyloid-beta, CSF: cerebrospinal fluid, APOE: apolipoprotein E, MTL: medial temporal lobe, MRI: magnetic resonance imaging, PET: positron emission tomography.

method along with a meta-analysis of the latest literature. Recommendations were made according to domestic situations based on evidence published so far. This guideline and recommendation will not only help neurologists and psychiatrists, but also help health care providers such as internists, family medicine specialists, and primary care physicians in their clinical decision-making.

SUPPLEMENTARY MATERIALS

Korean version

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