DND Dementia and Neurocognitive Disorder
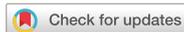
Letter to the Editor

Check for updates

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

Jin San Lee [iD],[1] Geon Ha Kim [iD],[2] Hee-Jin Kim [iD],[3] Hee Jin Kim [iD],[4] Seunghee Na,[5] Kee Hyung Park [iD],[6] Young Ho Park [iD],[7] Jeewon Suh [iD],[8] Joon Hyun Shin [iD],[9] Seong-il Oh [iD],[10] Bora Yoon [iD],[11] Hak Young Rhee [iD],[12] Jae-Sung Lim [iD],[13] Jae-Won Jang [iD],[14] Juhee Chin [iD],[4] Yun Jeong Hong [iD],[15] YongSoo Shim [iD],[16]
Korean Dementia Association

[1]Department of Neurology, Kyung Hee University Hospital, Kyung Hee University College of Medicine, Seoul, Korea
[2]Department of Neurology, Ewha Womans University Mokdong Hospital, Ewha Womans University College of Medicine, Seoul, Korea
[3]Department of Neurology, College of Medicine, Hanyang University, Seoul, Korea
[4]Department of Neurology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea
[5]Department of Neurology, Incheon St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Incheon, Korea
[6]Department of Neurology, College of Medicine, Gachon University Gil Medical Center, Incheon, Korea
[7]Department of Neurology, Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, Korea
[8]Department of Neurology, National Medical Center, Seoul, Korea
[9]Dr Shin's Neurology Clinic, Wonju, Korea
[10]Department of Neurology, Busan Paik Hospital, Inje University College of Medicine, Busan, Korea
[11]Department of Neurology, Konyang University Hospital, Daejeon, Korea
[12]Department of Neurology, Kyung Hee University Hospital at Gangdong, Kyung Hee University College of Medicine, Seoul, Korea
[13]Department of Neurology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea
[14]Department of Neurology, Kangwon National University Hospital, Kangwon National University College of Medicine, Chuncheon, Korea
[15]Department of Neurology, Uijeongbu St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Uijeongbu, Korea
[16]Department of Neurology, Eunpyeong St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea

OPEN ACCESS

Correspondence to
YongSoo Shim
Department of Neurology, Eunpyeong St. Mary's Hospital, College of Medicine, The Catholic University of Korea, 1021, Tongil-ro, Eunpyeong-gu, Seoul 03312, Korea.
Email: ysshim@catholic.ac.kr

ORCID iDs
Jin San Lee [iD]
https://orcid.org/0000-0002-5017-854X
Geon Ha Kim [iD]
https://orcid.org/0000-0001-5395-1924
Hee-Jin Kim [iD]
https://orcid.org/0000-0001-7880-690X
Hee Jin Kim [iD]
https://orcid.org/0000-0002-3186-9441
Seunghee Na [iD]
https://orcid.org/0000-0001-8578-8578
Kee Hyung Park [iD]
https://orcid.org/0000-0001-6847-6679
Young Ho Park [iD]
https://orcid.org/0000-0002-2756-1786
Jeewon Suh [iD]
https://orcid.org/0000-0003-3509-6447
Joon Hyun Shin [iD]
https://orcid.org/0000-0003-2585-6035

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- protein *in vivo*. The revised edition of the Clinical Practice Guideline for Dementia (Diagnosis and Evaluation) was prepared using an evidence-based guideline production

Seong-il Oh
https://orcid.org/0000-0002-8067-2135
Bora Yoon
https://orcid.org/0000-0002-1135-3392
Hak Young Rhee
https://orcid.org/0000-0002-3016-2591
Jae-Sung Lim
https://orcid.org/0000-0001-6157-2908
Jae-Won Jang
https://orcid.org/0000-0003-3540-530X
Juhee Chin
https://orcid.org/0000-0002-3784-9716
Yun Jeong Hong
https://orcid.org/0000-0002-4996-4981
YongSoo Shim
https://orcid.org/0000-0001-5642-5401

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.

Kim HJ,[1] Hee-Jin Kim; Kim HJ,[2] Hee Jin Kim.

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

Click here to view

Supplementary Data

Click here to view