Review: Some screening tests for dementia in older persons are accurate and practical for use in primary care


Clinical impact ratings: GIM/FP/GP ★★★★★☆ Hospitalists ★★★★★☆ Geriatrics ★★★★★☆ Neurology ★★★★★☆

Table. The Mini-Mental State Examination (MMSE), the standard screening instrument for dementia, takes 7 to 10 minutes to administer and had a median +LR of 6.3 and a median −LR of 0.19. Brief screening tests, such as the Memory Impairment Screen, Abbreviated Mental Test, clock drawing, 7-Minute Screen, and Short Cognitive Evaluation Battery, take 1 to 10 minutes, assess fewer domains, and were of variable usefulness for screening for dementia. More comprehensive instruments, such as Cambridge Cognitive Examination, Community Screening Interview for Dementia, and Modified MMSE, take 10 to 45 minutes and had a median +LR of 8.9 and a median −LR of 0.12. Instruments for special situations, such as screening by telephone (Memory Impairment Screen–Telephone Version and Telephone Interview for Cognitive Status), written questionnaires (Cognitive Assessment Screening Test), and tests for highly educated patients (Hopkins Verbal Learning Test), were also useful for screening for dementia.

Conclusions
Screening tests for dementia in older persons that can be used in primary care vary in their diagnostic accuracy and the time required to administer them. No single instrument is ideal for all settings.

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Commentary
This useful review by Holsinger and colleagues confirmed what experienced primary care physicians know: that the MMSE is a useful test for both ruling in and ruling out dementia. Unfortunately, its performance varies according to who is using it; it is less useful if the examining physician does not know the patient well. The MMSE also has limitations if the patient is visually or physically impaired or has a low formal educational attainment. Physicians should keep these limitations in mind and remember that the MMSE is only a screening test; it is helpful if a positive test is repeated on another occasion. Physicians should also remember that the MMSE, like any test, can give both false-positive and false-negative results.

An interesting finding from this review is that the Memory Impairment Screen (which is shorter than the MMSE) has better +LR (33) and −LR (0.08) values; perhaps busy physicians should consider it.

Holsinger and colleagues concluded that clinicians should select 1 primary tool and familiarize themselves with it to become more efficient in screening for dementia. I certainly agree with this conclusion.

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