Driving assessment for people with dementia

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Clinical question

How should driving safety be assessed in dementia?

Bottom line

Office assessment of driving in dementia is challenging. Guidelines recommend patients with moderate-severe dementia not drive, but not all people with mild dementia should be barred from driving. So, how do we define *moderate dementia*? And how do we assess which patients with mild dementia are safe to drive? No evidence-supported tests can guide every situation. "Pen and paper" tasks cannot take into account that driving is a well learned task with myriad variables (eg, road conditions, comorbid conditions, medication). Use of screening tools was summarized in an article in the *Canadian Geriatrics Society Journal of CME*.[1]

Evidence

- The *CMA Driver's Guide* defines *moderate-severe dementia* as new loss of ability to perform 1 ADL (eg, dressing) or 2 IADLs (eg, shopping) owing to cognitive difficulty.[2]
- Scores on the Mini-Mental State Examination are not predictive of driving risk or motor vehicle crashes.[3,4]
- Montreal Cognitive Assessment scores might have better predictive value; in 1 study, a score of 18 or less was associated with greater likelihood of failing on-road assessment, but the predictive ability was not strong enough to recommend it as the sole instrument to identify unfit drivers.[4]
- Visuospatial tests might be most relevant.[5] The clock-drawing test can be helpful, but the type and severity of errors that indicate unsafe driving are not clear.
- Guidelines recommend the Trail Making A and B tests to assess driving. There is support for Trail B cutoffs of 3 minutes for completion or 3 or more errors—the *3 or 3 rule*.[6,7] Inability to complete the Trail A test in 48 seconds might also suggest need for further driving evaluation.[8] However, these are not hard-and-fast rules; decisions about driving safety must consider other findings. Instructions on performing Trail A and B testing have been published by the Canadian Geriatrics Society.[6]
- Corroborating history is critical; family concerns and history of accidents can help inform decisions.[3] Family should be interviewed alone to allow safe disclosure of concerns. Corroboration can also help to determine the degree of functional impairment due to cognitive decline.

Approach

- Consider whether test results are consistent with clinical evidence: Tests are unhelpful unless they fit with patients' functional abilities and observations from caregivers.
- Know what tests measure: Consider what is being measured and any confounding variables (eg, language barriers, low education, depression, or performance anxiety).
- Consider trajectory: Some conditions might improve (delirium) and others progress (Alzheimer and other dementia).
- Understand your role in reporting to transportation authorities: Usually it is to report concerns to the Ministry of Transportation, not to determine medical fitness to drive.
- Use common sense and examine the severity of findings: Sometimes it is obvious the patient is unsafe to drive (eg, very low test scores, psychotic symptoms).
- Consider qualitative and dynamic aspects of testing: How patients perform tests is as relevant as scores (eg, the clock might be perfect but if it took 10 minutes to complete, there might still be driving concerns).
- Understand cutoffs: There is overlap between scores of "normal" and "impaired." To avoid overreliance on cutoffs, consider if you would get in a car with the person driving. Would you let a loved one? Would you want to cross the street in front of them? Would you want a loved one to?

Implementation

Screening tools are irrelevant if FPs do not recognize which patients are driving and assess medical conditions that affect safety. The 10-Minute Office-Based Dementia and Driving Checklist has not been well studied but is a handy form covering relevant parts of the assessment.[9] A checklist of considerations for driving safety in dementia has been published in *Canadian Family Physician*.[10]

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Competing interests
None declared

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