

A Short Note on Diagnosis of Motoric Cognitive Risk Syndrome (MCR)

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Motoric Cognitive Risk Syndrome (MCR)

The link between objectively slow gait speed and subjective cognitive complaint is termed as motoric cognitive risk syndrome (MCR) [1]. MCR, like mild cognitive impairment (MCI), is one of the phases of pre-dementia [1, 2]. When compared to MCI, MCR does not require a time-consuming thorough neuropsychological assessment, which offers up new possibilities for detecting individuals at risk of dementia in older populations [1-3]. The last ten years have seen a surge in interest in developing and validating biomarkers for early dementia diagnosis and identification of people at risk of dementia. Biomarkers, on the other hand, have limits in many situations. Access to neuroimaging, for example, is challenging, and the expense of biological indicators restricts their usage. Furthermore, in the next years, the highest prevalence and incidence of dementia will be seen in low and middle income nations, where true biomarkers are difficult to come by. As a result, there is a need to improve and expand access to clinical risk assessments of dementia in community dwelling older people. Using a movement test to predict dementia in the elderly could be a viable option.

The motoric cognitive risk syndrome has the potential to quickly screen people at risk of dementia in primary care settings, where dementia is believed to be underdiagnosed by 50% in people over 65. Limited resources and the time required for in-depth assessments of cognitive symptoms contribute to the under diagnosis of dementia. The ease with which MCR syndrome can be assessed could assist to solve this problem. However, because of space constraints, gait speed, a component of MCR, may be difficult to detect during a primary care appointment. Gait speed must be measured over a distance of at least 3 meters in a steady state pace rhythm. When gait speed must be measured, few consultation rooms in primary care have the features required for gait speed assessment, which complicates the consultation process and increases physician workload and consult time. Consult time in general practice has been observed to be quite brief (about 6.9 minutes) and is dependent on the physician, the physician's workload, and the type of visit [4]. As a result, there is a need in primary care for a simpler mobility test that can be conducted quickly and in a little amount of space to aid MCR diagnosis in primary care settings. Furthermore, because the goal of a revised MCR is to identify individuals at risk of dementia, the chosen motor test must be proved to establish a relationship to cognitive impairment or dementia risk.

The five times sit-to-stand test (FTSS) is a physical test that determines how long it takes a person to perform five consecutive chair rises as quickly as possible. This motor test looks at the transition from a sitting to a standing position, which is a challenging balance condition. The FTSS test has all of the necessary characteristics for assessing mobility performance in primary care to diagnose MCR, as it can be done quickly and simply in a small space, and it only requires a chair and a stopwatch. Furthermore, because this exam takes less than 2 minutes to complete, including explanation and performance, it can be done at the time of consultation. As a result, the FTSS test does not add to a physician's burden. Another basic motor test to investigate the challenged balance situation is the one-leg-balance (OLB) test. It requires the person to stand unassisted on one leg. An impaired OLB

test result defined as being unable to stand on one leg for 5 seconds has been linked to injurious falls in community-dwelling seniors and cognitive deterioration in dementia patients, but not in non-dementia patients. Increased FTSS time, on the other hand, has been linked to worse cognitive function in older community residents who do not have dementia. Because non-demented individuals with poor cognitive performance, such as MCI, are at risk of dementia, this link suggests that poor FTSS performance (i.e., increased time) could be used to identify individuals at risk of dementia, and thus could be used as an alternative motor test to define MCR instead of gait speed. Using FTSS performance instead of gait speed to establish MCR value for dementia prediction necessitates research into whether or not people categorised as MCR based on FTSS performance and gait speed are the same person. This line of questioning is justified, as the FTSS test explores different subdomains of mobility, when compared to gait speed. The FTSS test assesses the capacity to transfer from a sitting position, and it is heavily reliant on balance, muscle mass, strength, and lower-limb power. Gait speed, on the other hand, is a proxy for gait ability, as it is dependent on a variety of bodily movements as well as higher levels of movement control requiring executive and memory skills. As a result of the disparities between the FTSS test and gait speed, the possibility of overlap between persons whose MCR status was established using either the FTSS test or gait speed and their relative MCI is called into doubt.

References

1. Verghese J, Wang C, Lipton RB, Holtzer R (2013) Motoric cognitive risk syndrome and the risk of dementia. *J Gerontol A Biol Sci Med Sci* 68:412-418.
2. Verghese J, Annweiler C, Ayers E, Barzilai N, Beauchet O, et al. (2014) Motoric cognitive risk syndrome: multicountry prevalence and dementia risk. *Neurol* 83:718-726.
3. Belleville S, Fouquet C, Hudon C, Zomahoun HTV, Croteau J (2017) Neuropsychological measures that predict progression from mild cognitive impairment to Alzheimer's type dementia in older adults: a systematic review and meta-analysis. *Neuropsychol Rev* 27:328-353.
4. Petek Ster M, Svab I, Zivcec Kalan G (2008) Factors related to consultation time: experience in Slovenia. *Scand J Prim Health Care* 26:29-34.

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