

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 [2], is the highest 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, in 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. Test definition is crucial for this purpose.

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