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Editorial Comment

How Do We Screen and Diagnose Sarcopenia in Hospitalized Older Adults?

Sarcopenia is a progressive and generalized skeletal muscle disease characterized by an accelerated loss of muscle mass, strength, and/or function occurring during normal aging.

Early identification and adequate diagnosis of sarcopenia in clinical practice is important because of the association between sarcopenia and a range of adverse effects on health, including impaired mobility, increased risk of falls and fractures, impaired ability to perform activities of daily living, lower quality of life, and higher mortality.[1,2]

Hospitalization rates are highest in older adults. Sarcopenia is a highly prevalent condition in older hospitalized patients, which is associated with a myriad of adverse clinical outcomes such as frailty, readmissions, institutionalization, lower quality of life, and higher mortality.[3–5] The high prevalence of sarcopenia and its implications for adverse clinical outcomes in hospitalized older adults highlights the need for routine screening and/or assessment and subsequent management of these conditions during hospitalization using best practices. Many screening tools for sarcopenia have been developed, including the SARC-F questionnaire,[6] the SARC-F combined calf circumference questionnaire,[7] and the Ishii score.[8] However, there is currently limited evidence available to inform whether these tools represent a valid screening approach for sarcopenia in hospitalized older adults.

Most current guidelines recommend diagnosing sarcopenia based on measurements related to muscle mass, strength, and/or physical function. For muscle strength, grip strength can be measured.[9] For muscle quantity, the gold standards are magnetic resonance imaging and computed tomography. However, since both are expensive, and the cut-off points have not been defined yet, dual-energy X-ray absorptiometry (DXA) and bioelectrical impedance analysis (BIA) can be a substitute. Several tests can be done for physical performance, such as gait speed and the Timed Up and Go test.[9] However, there are many barriers to diagnosing sarcopenia in hospital settings by these tools, including the presence of musculoskeletal disorders, acute illness, treatment plans, and unmanaged pain or bed bound.[10] A study done by Wan et al. showed that only 21.5% of hospitalized older patients completed the BIA assessment, and 9.5% completed the DXA assessment.[11]

Further studies are still required to develop a screening or diagnosis tool and provide guidance to practice screening, assessment, and management approaches for sarcopenia and frailty in older hospitalized patients.

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