

SARCOPENIA: THE ROLE OF MUSCLE STRENGTH, MUSCLE MASS, AND PHYSICAL PERFORMANCE

Sarkopeni: Kas Kuvveti, Kas Kütlesi ve Fiziksel Performansın Rolü

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Dear Editor,

I have read with great interest the study titled "Screening for Sarcopenia in Older Adults Living in Kırıkkale Province: A Pilot Study," authored by Akdağlı et al., published in Volume 27, Issue 1, dated April 26, 2025, of your esteemed journal.¹ I would like to congratulate the authors for contributing to an extremely important topic in the context of aging populations. This study, conducted on a large sample to determine the prevalence of sarcopenia among older individuals, makes a significant contribution to the geriatric health screening literature in Turkey.

Sarcopenia is defined as a progressive and generalized musculoskeletal disorder characterized by a decline in muscle strength and muscle mass. According to the EWGSOP2 guidelines updated by the European Working Group on Sarcopenia in Older People in 2019, the diagnosis of sarcopenia begins with the identification of low muscle strength, followed by the confirmation of low muscle mass, and the severity of sarcopenia is assessed through measurements of physical performance. Severe sarcopenia is defined by the simultaneous presence of low muscle strength, low muscle mass, and low physical performance.²⁻⁴

When examining the methodological approach of the study, it is seen that, in line with the EWGSOP2 recommendations, the SARC-F screening tool, muscle strength measurements, body composition assessments, and the Short Physical Performance Battery (SPPB) test for physical performance measurement were utilized. However, the sequence in which these evaluations were applied during the diagnostic decision-making process, the criteria by which classification was made, and how these assessments were integrated into the classification system were not clearly specified in the study.

In the tables (Tables 5 and 6) where patients were categorized as "no risk of sarcopenia," "sarcopenia," and "severe sarcopenia," the objective measurements and threshold values used for this classification were also not clearly defined. However, the EWGSOP2 guidelines clearly specify the standard cut-off values used in sarcopenia diagnosis:

For muscle strength:	For muscle mass (measured by DXA):	For physical performance:
<27 kg in men <16 kg in women (handgrip strength)	<7.0 kg/m ² in men <5.5 kg/m ² in women	4-meter walking speed <0.8 m/s

According to these threshold values, the presence of low muscle strength and low muscle mass is defined as sarcopenia, while the coexistence of low muscle strength, low muscle mass, and low physical performance is defined as severe sarcopenia.⁵⁻⁷ The lack of clear specification regarding which measurements and threshold values were used as a basis in the study reduces methodological transparency and limits the reproducibility of the results.

In future studies, clearly presenting the diagnostic criteria and the cut-off values used would contribute to stronger alignment of the obtained data with international standards.

I believe that this study represents an important step both in raising awareness of sarcopenia and in developing preventive health strategies for older adults, and I sincerely thank all the researchers involved.

Sincerely

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