

Assessing Sarcopenia in Daily Practice: a Practical Approach

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Dear Editor:

Sarcopenia is a newly described entity that increases in frequency with older age. It is defined as the loss of muscle mass and strength¹. Despite the multiple studies regarding its assessment and characterization until now there is a lack of a standardized approach for an accessible diagnosis. The reason for this is that many of the diagnostic criteria for sarcopenia do not consider the clinical context or the particularities of the patient.¹ The aim of this article is to provide a simple method to approach older adults with suspected sarcopenia in different settings.

In the daily practice, older adults are by far the most challenging patients due to their wide and unspecific expression of symptoms and complex interactions between geriatric conditions, medications and well-established chronic diseases. As older adults with suspected cognitive problems complain about memory loss, there are some manifestations that guide the clinician to consider sarcopenia. The most common complaints related to

sarcopenia are usually considered as unspecific, ignored by the physician or as symptoms of another condition. Loss of strength, fatigue, lack of energy, weight loss or weakness can be indicative of sarcopenia but merit further assessment. It is important to detect high-risk patients such as those with multiple comorbidities, malnutrition or sedentary lifestyle². In general, any older adult with one or more of these complaints will benefit from this approach.

Muscle mass, muscle strength and physical performance are the main components of the operational definitions of sarcopenia. Methods to measure these variables vary regarding to their availability, cost, reliability and validity².

Measuring the handgrip with a dynamometer is the most common method used for assessing muscle strength.³ Also, it has shown a good predictive value by itself in different settings⁴.

Gait speed is both cheap and easy to perform, and widely validated for estimating physical performance.² Also, it has been proven to be useful in different settings.

If any or both are impaired it is imperative to start treatment for sarcopenia. On the other hand, if they are negative it is necessary to evaluate other causes, such as medications, depression, sense impairment, stroke, vertigo, hypotension,

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hypoglycemia, anemia, dehydration, sleep apnea, thyroid dysfunction, cancer and insomnia etc.

Therefore, there may be more than one explanation for the initial complaint, as well as the abnormal result in physical performance and/or the muscle strength test.

It is necessary to measure muscle mass when the person has a normal result in muscle strength and physical performance tests, and also after discarding other etiologies as the cause of the symptoms. Different methods have been proposed for doing these measurements, such as^{2,5} anthropometry, which is both cheap and accessible. However, it has significant limitations, like for example the underestimation of the lean mass volume.⁵ Other methods available are magnetic resonance imaging (MRI), computed tomography (CT), bioelectrical impedance (BIA) and dual-energy x-ray absorptiometry (DXA), have better discrimination of the lean muscle volume. Be that as it may, they are more expensive and less accessible.²

Currently it is not common to assess sarcopenia in clinical practice. This is likely a result of the lack of knowledge or the need of extra time and tools.

Given that the evidence supports that treating sarcopenia may improve the quality of life and prevent negative outcomes such as mortality and morbidity⁶, it is imperative to be more aware about this condition.

Detecting complaints and suspecting sarcopenia are the first and more important steps followed by the muscle

strength- and physical performance evaluation⁷. (Figure 1). If any or both of these measurements are impaired, it is indicative of sarcopenia. In practical contexts, routine muscle mass assessments are not cost-effective, which becomes an obstacle for detecting and treating patients with sarcopenia. Simultaneously, there is the worry of the over-diagnose using this approach. Nevertheless, sarcopenia⁷ has also shown negative effects in older people^{4, 8}.

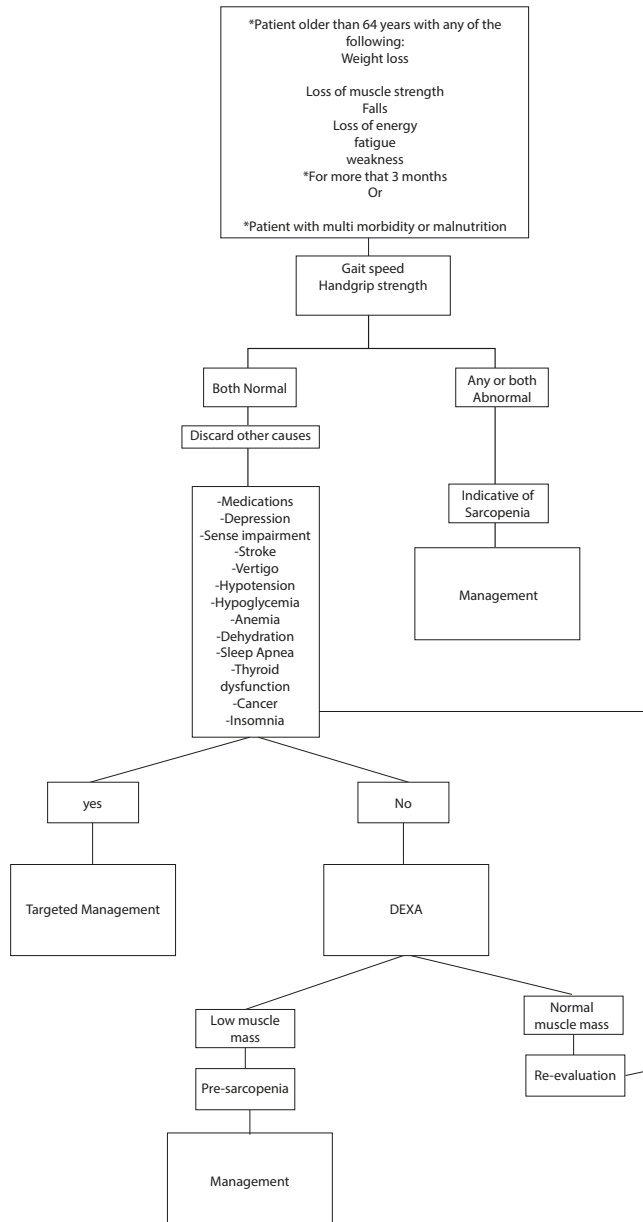
The importance of muscle mass assessment lies on the question whether the sarcopenia process has started (pre sarcopenia) or not⁵. If the strength or performance measures are negative and if other causes for the symptoms have been discarded, it is important to determine muscle mass.

This approach aims to make the benefit of treating sarcopenia in older adult more accessible to the general population. It is important to treat sarcopenia in older adults with low muscle strength or impaired physical performance in spite of not having the muscle mass measure,⁵ in order to avoid underdiagnosing and to provide the benefits the treatment of sarcopenia gives to the people.

Disclosure of interest

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Figure 1. Flowchart for the diagnosis of sarcopenia



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