SARCOPENIC OBESITY: ITS IMPORTANCE IN PRIMARY HEALTH CARE
Sarkopenik Obezite: Birinci Basamak Sağlık Hizmetlerinde Önemi

Yasemin ÖZKAYA[1] 🆔, İsmail ÇİFÇİ[2] 🆔, Bilal DURMAZ[3] 🆔

Afiliasyon / Affiliation:
[1]Sağlık Bilimleri Üniversitesi Tepecik Eğitim ve Araştırma Hastanesi, Dahili Tıp Bilimleri, Aile Hekimliği Anabilim Dalı, İzmir, Türkiye.

[2]Sağlık Bakanlığı, Karabağlar 27 nolu Aile Sağlığı Merkezi, İzmir, Türkiye.

[3]Sağlık Bakanlığı, Karabağlar 4 nolu Aile Sağlığı Merkezi, İzmir, Türkiye.

Sorumlu Yazar / Correspondence:
İsmail ÇİFÇİ
Sağlık Bakanlığı, Karabağlar 27 nolu Aile Sağlığı Merkezi, İzmir, Türkiye.
E-mail: dr.ismailcifci@gmail.com

ABSTRACT

Sarcopenic obesity (SO) is a clinical condition characterized by the coexistence of reduced muscle mass and function along with obesity. The prevalence of SO increases with age, posing a threat to individuals' physical independence. SO is particularly associated with a loss of physical abilities, a higher risk of falls, decreased quality of life, and increased mortality rates in older adults. Additionally, metabolic disorders related to obesity exacerbate the clinical severity of this condition. Among the screening tools used for SO, SARC-F + BMI (Strength, Ambulation, Rising from a Chair, Stair Climbing and History of Falling + Body Mass Index) and SARC-CaLF + PBF (SARC-F Combined with Calf Circumference + Percentage of Body Fat) stand out. However, both methods have limitations. Furthermore, screening with SARC-CaLF + PBF may require devices that are not suitable for use in primary care. This complicates the screening, early treatment, and determination of SO prevalence in the community. Therefore, it is necessary to develop sensitive screening tools suitable for use in primary care.

Keywords: Geriatric populations, Muscle mass, Primary healthcare, Sarcopenic obesity, Screening tools

ÖZET

Sarkopenik obezite (SO) azalmış kas kütlesi ve fonksiyonunun obezite ile birlikte görülmesiyle karakterize olan klinik bir durumdur. Yaşla birlikte artan SO prevalansı, bireylerin fiziksel bağımsızlığını tehdit eder. SO özellikle ileri yaşta fiziksel yetenek kaybı, düşme riski, yaşam kalitesinde azalma ve artmış ölüm oranlarıyla ilişkilidir. Sarkopeniye ek olarak obeziteye bağlı görülen metabolik bozukluklar hastaların kliniğini daha da kötüleştirmektedir. SO için kullanılan tarama araçları arasında SARC-F + BMI (Strength, Ambulation, Rising from a Chair, Stair Climbing and History of Falling + Body Mass Index) ve SARC-CaLF + PBF (SARC-F Combined with Calf Circumference + Percentage of Body Fat) öne çıkmaktadır. Ancak her iki yöntemin de sınırlılıkları bulunmaktadır. Ayrıca SARC-CaLF + PBF ile taramada birinci basamakta kullanımı uygun olmayan cihazlara ihtiyaç duyulabilmektedir. Bu durum SO'nun taranmasını, erken tedavisini ve toplumdaki sıklığının belirlenmesini zorlaştırmaktadır. Bu nedenle birinci basamakta kullanıma uygun hassas tarama araçlarının geliştirilmesi gerekmektedir.

Anahtar kelimeler: Birinci basamak sağlık hizmetleri, Geriatrik popülasyon, Kas kütlesi, Sarkopenik obezite, Tarama araçları

Dear Editor,

Sarcopenic obesity (SO) is a serious condition characterized by the coexistence of reduced muscle mass and function alongside obesity. Its prevalence increases with age, posing a significant threat to individuals' physical independence. Sarcopenia is defined by a decline in muscle mass and strength, whereas SO is distinguished by the additional presence of increased adipose tissue. This condition is particularly concerning in older adults, as it is associated with impaired physical function, a higher risk of falls, reduced quality of life, and increased mortality. Furthermore, the metabolic disorders linked to obesity exacerbate the adverse health impacts of this condition (Wei et al., 2023). Although sarcopenia is generally associated with lean individuals, it is a problem that should not be ignored in obese individuals. While sarcopenia affects 10-27% of individuals aged 60 and older, the prevalence of SO is reported to be around 11%. SO can also occur in younger and middle-aged individuals with obesity-related metabolic complications, inflammation, oxidative stress, and insulin resistance. This suggests that SO is more associated with chronic diseases and lifestyle factors rather than being solely age-related (Petermann-Rocha et al., 2022). The lack of universal diagnostic criteria for SO makes it challenging to accurately identify patients and assess its prevalence. Regular screening and monitoring are crucial to minimizing its adverse effects. Since body mass index (BMI) provides limited information in older adults, more comprehensive screening methods that measure muscle mass and body fat percentage are needed. These screenings should be conducted not only in elderly individuals but also in younger individuals at risk of obesity. Primary care providers play a critical role in early detection and treatment. Primary care providers play a crucial role in promoting healthy lifestyle habits, particularly by encouraging aerobic and resistance exercises. These exercises help preserve muscle mass, support muscle protein synthesis, and reduce age-related complications. Research shows that combining aerobic and resistance exercises with a proper diet can reduce muscle loss and improve physical function. Adequate protein intake can help prevent age-related muscle loss and reduce the risk of sarcopenia. Primary care professionals should remain vigilant in screening for SO, using practical tools like Sarcopenia Rapid Assessment Tool (SARC-F), especially in high-risk elderly populations (Donini et al., 2022). Recognizing SO and employing appropriate screening tools in primary healthcare services are crucial. SARC-F + BMI and SARC-CaLF + PBF (CaLF: addition of calf circumference, PBF: percentage of body fat) are recommended as screening tools for SO, while the Asian Working Group for Sarcopenia (AWGS) + PBF is suggested for diagnosis. The sensitivity and specificity of the SARC-F + BMI screening tool have been reported as 88.5% and 45.1%, respectively. However, its high rate of missed cases poses a disadvantage. On the other hand, the SARC-CaLF + PBF tool demonstrates a sensitivity of 83.5% and a specificity of 66.3%. Despite its improved accuracy, it relies on methods such as bioelectrical impedance analysis and dual-energy X-ray absorptiometry, which require specialized equipment, limiting its use in primary care settings (Batsis&Villareal. 2018; Zhuang et al., 2024). In conclusion, recognizing and managing SO in primary care is vital for individual health and sustaining healthcare systems. Future research should focus on developing cost-effective and widely accessible screening tools that can be implemented in primary care settings. Additionally, incorporating resistance training programs and personalized nutritional interventions into routine healthcare services could be instrumental in preventing and managing SO.

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