The Prevalence and Associated Factors of Sarcopenic Obesity in Older Patients

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Background: Sarcopenia is highlighted in geriatric medicine over decades. However, the coexistence of sarcopenia and high accumulation of fat mass, termed sarcopenic obesity, has been under focus recently. Both conditions synergistically cause even more adverse health outcomes compared to what it causes when existing alone, e.g. increasing risk of disability, morbidity and mortality. Therefore, the prevalence of sarcopenic obesity and its associated factors are essential for policy planning as well as its implication during routine daily clinical practice.

Objective: 1) To determine the prevalence as well as the associated factors of sarcopenic obesity among older patients, 2) To identify differences of prevalence and associated factors of sarcopenia and sarcopenic obesity.

Methods: This cross-sectional study recruited older patients aged 60 years and over who were followed up at the out-patient department of Siriraj Hospital. Appendicular muscle mass and body fat mass were evaluated by bio-electrical impedance analysis (BIA). Hand grip strength and usual gait speed (6-meter distance) were also assessed. Sarcopenic obesity was defined as sarcopenia based on the consensus of the Asian Working Group for Sarcopenia plus obesity based on WHO criteria (body fat mass ≥ 25% in male or ≥ 35% in female).

Results: A total amount of 186 patients were recruited with 60.2% female. The mean age was 70.5 + 7.5 years. The prevalence of sarcopenic obesity was 5.4% (male 2.7%, female 7.1%), while those of sarcopenia was 7.5% (male 8.1%, female 7.1%). The associated factors of sarcopenic obesity were: increasing age, low education, high co-morbidity index, and low physical activity. Meanwhile, the associated factors of sarcopenia were: increasing age, low education, low BMI, poor nutrition status, high co-morbidity index and number of medications, impair cognition and IADL.

Conclusion: Although the prevalence of sarcopenia is more prevalent than sarcopenic obesity, the prevalences and associated factors are different. Therefore, both of these conditions should be screened and highlighted simultaneously during clinical practice for the benefit of treatment and prevention.

Keywords: Sarcopenia, Sarcopenic obesity, Prevalence, Associated factors