E-Poster

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Prevalence and Characteristics of Sarcopenic Obesity in Older Adults in a Longevity Area of Japan: A Retrospective Cross-Sectional Study

Topic: Miscellaneous

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BACKGROUND

Sarcopenic obesity is defined as the co-existence of sarcopenia and obesity. Compared to simple sarcopenia and obesity, sarcopenia obesity has been reported to be associated with increased risk of illness and mortality. However, few studies have examined sarcopenic obesity in Japan, partly due to the lack of a standardized diagnostic criterion. This study aimed to clarify the prevalence and characteristics of sarcopenic obesity in older adults in a longevity area of Japan using the newly established criteria by the Japanese Working Group on Sarcopenic Obesity (JWGSO).

METHODS

A total of 732 older adults who underwent health checkups between 2017 and 2024 in Kyotango city, one of Japan's longevity areas, participated in this study. All participants were diagnosed as sarcopenic obesity, sarcopenia, obesity, and non-applicable according to JWGSO criteria, using based on body mass index (BMI), body fat percentage (BFP), handgrip strength (HGS), and limb skeletal muscle mass corrected for BMI (LSMM-BMI) as indicators, and the prevalence of four groups was determined. In addition, sarcopenic obesity-related indicators (BMI, BFP, HGS, and LSMM-BMI) were compared among the four groups using analysis of covariance (ANCOVA), adjusting for age, gender, weight, dyslipidemia, diabetes, cardiovascular disease, hypertension, osteoporosis, stroke, drinking status, and smoking status.

RESULTS

The prevalence diagnosed by JWGSO criteria were 1.4% (10 individuals) for the sarcopenic obesity, 0.5% (4 individuals) for the sarcopenia, 18.9% (138 individuals) for the obesity, and 79.2% (580 individuals) for the non-applicable. Significant differences in sarcopenic obesity-related indicators were observed among the four groups (all $p < 0.001$). Compared to the other groups, the sarcopenic obesity group had the lowest estimated marginal means for BMI and BFP, while exhibiting the highest estimated marginal means for HGS and LSMM-BMI.

CONCLUSION

Although the prevalence of sarcopenic obesity in older adults in a longevity area of Japan is low, physical function and metabolic profile were significantly deteriorated. To promote healthy longevity, rehabilitation prevention or treatment targeting both sarcopenia and obesity may be effective.

Statement of Disclosures

Financial and Conflict of Interest Disclosure:

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