

Association between sarcopenia and health-related quality of life in Korean adults: based on the Fifth Korean National Health and Nutrition Examination Survey (2010–11)

Authors: Jeong Min Oh,^A Jiho Choi^B and Yeon Ji Lee^B

Aims

Sarcopenia is defined as a loss of muscle mass leading to decreased muscle strength, physical activity, and increased mortality. Health-related quality of life (HRQoL) has been identified as a factor in various medical outcomes including death, and has become an important consideration in healthcare. We aimed to analyse the association between sarcopenia and HRQoL in Korean adults older than 19 years.

Methods

We included 2,300 men and 2,849 women who participated in the Korea National Health and Nutrition Examination Survey from 2010–11. Sarcopenia was defined as appendicular skeletal muscle mass divided by weight (%) below 2 standard deviations of the sex-specific mean for young adults. The cut-off point for sarcopenia was 29.1% in men and 23.0% in women. HRQoL was measured with the European quality of life-5 dimension (EQ-5D) instrument. Logistic regression analysis was performed to evaluate the relationship between sarcopenia and HRQoL.

Results

The prevalence of sarcopenia was 14.5% in men and 19.7% in women. The EQ-5D index score was significantly lower and the rate of difficulty with individual components of HRQoL was higher in the sarcopenic group. After adjustment for age, body mass index, lumbar spine bone mineral density (BMD), chronic disease, smoking, alcohol, regular exercise, and education, the odds ratios for problems with mobility were 1.62 in men and 1.31 in women. However, the difference was not statistically significant for women.

Conclusion

Sarcopenia is associated with poor quality of life, especially with regard to mobility in men. Greater consideration of sarcopenia is needed at a younger age to prevent and manage poor quality of life at an older age. ■

Conflict of interest statement

No potential conflict of interest.

Authors: ^AFamily Medicine, Inha University Hospital; ^BFamily Medicine, Inha University School of Medicine, Incheon, Republic of Korea