노인재활

발표일시 및 장소 : **10 월 26 일(금) 14:25-14:35 Room C(5F)**

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Association between Sarcopenia and Falls in Community-Dwelling Elderly Population

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Objective
Korea is classified as one of the most rapidly aging nations around the world. Falling is a well-known geriatric syndrome and is the leading cause of injury and accidental death in older adults. This study aimed to assess the associations of falls with sarcopenia in a community-dwelling elderly population, based on an assessment of both history of falls and physical performance tests.

Method
Using data from the first year baseline data of Korean Frailty and Aging Cohort study, a total of 1551 elderly individuals (70 years and old) were included. According to the diagnostic criteria of the Asian Working Group for Sarcopenia (AWGS), Sarcopenia was defined as low muscle function accompanying low muscle mass. The participants were asked about their history of falls in the preceding year. The Activities-Specific Balance Confidence (ABC) Scale, Short Physical Performance Battery (SPPB) and Timed up and go (TUG) test were used to assess risk of falling. For continuous variables, an independent t test was performed, and for categorical variables, a chai square test was performed. Multivariate analysis was performed using logistic regression to identify independent risk factors for falls.

Results
The mean age of the participants was 76.2 ± 3.9 years, and 52.9% were women. From a total of 1551 participants, 156 (10.0%) were classified to sarcopenia according to the diagnostic criteria of the AWGS. There was a statistically significant difference in the history of falls between sarcopenia group and no sarcopenia group (26.9% versus 19.6 %, $p<0.05$). Compared to no sarcopenia group, sarcopenia group had a lower ABC score (73.4 ± 52.7 versus 84.0 ± 37.9, $p<0.05$) and SPPB score (9.7 ± 2.0 versus 10.8 ± 1.5, $p<0.001$) and higher TUG (12.6 ± 3.4 versus 10.6 ± 2.8, $p<0.001$). After adjusting for age, obesity in the logistic regression model, sarcopenia (Odds ratio 1.57, 95% Confidence

interval 1.07-2.29, p<0.05) and female sex (Odds ratio 1.63, 95% Confidence interval 1.26-2.10, p<0.001) were independent risk factors for falls in the community-dwelling older adults.

Conclusion
Our study showed that sarcopenia had an association with falls in community-dwelling older adults. Moreover, Sarcopenia worsened balance and increased fall risk assessed by ABC, SPPB and TUG. In conclusion, Sarcopenia is risk factor for falls in community-dwelling elderly population.