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## **Weight Loss and Muscle Wasting may be Risk Factors of Falling Event in Patients with Parkinson's Disease**

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**Objective:** To compare weight and body composition between patients with falling event and without falling event in non-demented Parkinson's disease patients.

**Background & significance:** Loss of body weight and muscle wasting are common in patients with Parkinson's disease, and associated with symptoms and disease progression. The aim of this study was to explore the association between change of weight and body composition and falling events in non-demented patients with Parkinson's disease

**Methods:** This cross-sectional study was conducted on 49 patients with Parkinson's disease from Jeju National University Hospital. We excluded patient with short follow-up period less than 12 months, with severe disease state (more than H&Y stage III), or with dementia. We measured the height, body weight, body mass index, abdominal circumference, and thigh circumference. We divided the patient into two groups depending on the presence of falling event in the last six months. Assessment of age, disease duration, weight and body compositions between groups were analyzed using Mann-Whitney test.

**Results:** 31 patients without falling event and 18 patients with falling event in last six months were enrolled. Age, disease duration, heights were not significantly different between patients with or without falling event. Patient without falling event had more weight but was not significant. Patients with falling event showed significantly low abdomen and thigh circumference ( $p < 0.01$ ).

**Conclusions:** Weight loss and decreased abdomen and thigh circumference can be risk factor of falling event in non-demented patients with Parkinson's disease.

### **Biography:**

Sook-Keun Song is an Associate Professor in Department of Neurology at Jeju National University Hospital. She is a Fellow, Division of movement disorders in Department of Neurology, Severance Hospital at Yonsei University College of Medicine. She completed her BS, Biology at Korea University. She did MS, Neurobiology at Pohang University of Science and Technical. She did MD in Yonsei University College of Medicine.