The status of sarcopenia in peritoneal dialysis patients: A single center study

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Objectives: Sarcopenia is associated with increased morbidity and mortality in dialysis patients. The aim of the study is to evaluate the sarcopenia status in peritoneal dialysis patients.

Methods: This study was performed as single center, cross-sectional study. Patients who underwent peritoneal dialysis at our institute from December 2017 to February 2018 were enrolled. Definition of sarcopenia was according to Asian Working group for sarcopenia recommendation: muscle mass measure below 7.0 kg/m² for men and 5.7 kg/m² for women by using bioimpedance analysis and handgrip strength below 26 kg for men and 18 kg for women. 30-second chair stand test was done to assess physical performance.

Results: A total of 57 patients were enrolled for analysis. Mean age was 51.1 ± 11.7 and 34(59.6%) were male. 27(47.4%) had diabetes mellitus and 31(54.4%) had hypertension. Dialysis vintage was 39.3±41.2 months. Decreased muscle mass was detected in 12(21.1%) and low muscle strength in 18(31.65%) patients. Sarcopenia, having both decreased muscle mass and low muscle strength, was found in seven patients (12.3%). The average score of 30-second chair stand test in patients with sarcopenia was lower (18.3±6.6 vs 15.8±5.1, p=0.363), however, there was no significant difference.

Conclusions: Sarcopenia was detected over 10% of participants. The further study with longer follow-up duration should be performed to find out the association between sarcopenia and patients' outcome.