

Abstract Submission No.: A-0285**Association between CKD and frailty, nutritional status, and cognitive impairment and their impact on clinical outcome**

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Objectives : CKD is closely related to not only frailty but also protein energy wasting (PEW), and one of the important factors in frailty is chronic malnutrition. As they affect each other, each is also a risk factor for cognitive impairment, but research on this is scarce. We evaluated the relationship between CKD and frailty, nutrition, and cognitive function, and their effects on cardiovascular disease, hospitalization, and mortality.

Methods : We prospectively enrolled participants from June 2019 to December 2020 and divided into three CKD status according to kidney function (normal kidney function, pre-dialysis CKD stage 3-4, and dialysis). Primary outcomes were defined as hospitalization, new onset of cardiovascular outcome, and all-cause death.

Results : A total of 88 patients were included, of whom 30.7% had frailty, 17.0% had cognitive impairment, and only 4.5% had low nutritional status. Primary outcome occurred in 54.5% (N = 48), of which death occurred in 5.7% (N = 5), cardiovascular outcome occurred in 8.0% (N = 7), and hospitalization occurred in 53.4% (N = 47). CKD status, especially dialysis group was significantly associated with frailty, and nutritional status even after adjusting for other clinical factors. However, CKD had no significant relationship with cognitive impairment. Primary outcomes had significantly associated with CKD. Frailty was associated with cognitive impairment, but age, and BMI were only factors significantly associated with cognitive impairment.

Conclusions : CKD status, especially dialysis had significantly associated with frailty, nutritional status, and primary outcomes. However, CKD status had no significant relationship with cognitive impairment.