



Lecture Code : NIH01-S4

Session Name : National Institute of Health (NIH) Symposium

Session Topic : National Institute of Health (NIH) Symposium

Date & Time, Place : June 11 (Thu) / 10:30-12:00 / Room 4 (203), 2F

Prognostic Implications of Continuous Kidney Replacement Therapy Duration in Critically Ill Patients

Hee-Yeon Jung

Kyungpook National University Hospital, Republic of Korea

Acute kidney injury (AKI), a serious complication commonly occurring in critically ill patients admitted to the intensive care unit, is associated with high morbidity and mortality. In patients with severe AKI, continuous kidney replacement therapy (CKRT) serves as an effective treatment, providing safe fluid and solute removal, maintaining electrolyte and acid–base balance, and supporting hemodynamically unstable patients. Prolonged use of CKRT may increase the risk of complications, including infection, bleeding, and malnutrition, and unnecessarily extended treatment can lead to inefficient use of healthcare resources. Conversely, premature discontinuation of CKRT may worsen patient outcome owing to inadequate uremic toxin removal and failure to achieve fluid balance. In clinical practice, clear guidelines regarding the timing of CKRT discontinuation are lacking; therefore, clinicians determine the optimal treatment duration based on the clinical condition and overall status of each patient. The duration of CKRT represents a complex clinical surrogate reflecting the severity of systemic illness, the rate of metabolic recovery, and clinical decision-making regarding treatment discontinuation. The clinical implications of CKRT duration in adults in critical conditions remain poorly characterized, and studies addressing this relationship remain limited. Identifying the clinical factors associated with CKRT duration in real-world practice and determining its effect on long-term outcomes are essential for developing individualized treatment strategies and predicting prognosis. This presentation will present the results of an analysis using the LINKA cohort to identify the factors associated with CKRT duration and its prognostic implications for long-term kidney failure and patient mortality in critically ill AKI survivors.

Keywords: continuous kidney replacement therapy, acute kidney injury, CKRT duration, end-stage kidney disease, all-cause mortality