KSN 2017 Abstract

KSN-17-P007

Long term outcome for patients with acute kidney injury treated with continuous renal replacement therapy: Single center experience

Harin RHEE, Gum-sook JANG, Miyeun HAN, Inseong PARK, Sang-heon SONG, Eun-young SEONG, *Ihm-soo KWAK

Internal medicine, Pusan National University Hospital, Korea,South

Objectives : Acute kidney injury(AKI) needing continuous renal replacement therapy(CRRT) is a fatal condition which is associated with poor short and long term patient outcome. There were several studies that revealed factors associated with short term patient mortality in these patients however there were few data that reported factors associated long term patient outcome. The aim of this study is to evaluate variables associated with long term patient survival in our clinic.

Methods : This is a single center, retrospective study of CRRT survivors from January 2011 to December 2015. During the study period, all consecutive AKI patients who underwent CRRT were included. Patients with end-stage renal disease on a maintenance dialysis prior to CRRT were excluded. Data associated with baseline characteristics were collected by medical chart review. Serum creatinine level and hemodialysis dependence rate at the time of hospital discharge was also collected by medical chart review. 1-year follow up data was gathered till December 2016.

Results : A total of 430 patients were included and 62.8% of the patients were male. Their mean age was 63.40±14.62 years. They had mean numbers of 1.90±1.36 of comorbidities and hypertension was the most commonly combined disease. Serum creatinine level at the time of CRRT initiation was 3.48±2.48 mg/dL. CRRT was initiated mean time of 3.37 days after the ICU admission and mean doses of 33.58±8.36 mL/kg/hr were conducted for 5.57±6.08 days. At the time of discharge a total of 9.1% of the patients needed maintenance CRRT. eGFR at the time of discharge was 58.42±46.72 and serum creatnine level was 1.96±1.58mg/dL. After 1-yr, only 32.7% of the patients were survived. When we checked factors associated with long term patient survival, longer duration of ICU admission,(HR 1.048 (1.020-1.077), p=0.001), paitents with prior cancer (HR 18.561(6.251-55.111), p<0.001) or COPD(HR 11.76(1.397-99.022), p=0.023) and a patients with lower eGFR at the time of discharge (HR 0.975(0.963-0.987), p<0.001) were independently associatead with 1-yr patient survival after hospital discharge.

Conclusions : Our study demonstrates poor long term survival after CRRT that was determined by longer ICU stay and lower eGFR at the time of hospital discharge. Our data showed importance of renal recovery for the long term patient survival in AKI patients treated with CRRT.

Keywords : AKI, CRRT, Long-term mortality