

LONG TERM RENAL FUNCTION IN ACUTE RENAL FAILURE TREATED WITH CONTINUOUS VENO-VENOUS HEMOFILTRATION

Raghuveer Kura, William B. Reeves

Division of Nephrology, Department of Medicine, Penn State Hershey Medical Center and Penn State College of Medicine, Hershey, PA.

Continuous Veno-venous hemodiafiltration (CVVHDF) is an effective mode of renal replacement therapy in patients admitted to ICU with hemodynamic instability and renal failure. The aim of our study was to predict the long term outcome of renal function in patients who were treated with CVVHDF during their ICU stay.

We retrospectively analyzed 159 patients, who, over a period of 18 months, were admitted to ICU and required CVVHDF. Of these, 102 patients died (64%) during their ICU stay. Among the 57 survived patients, those who had organ transplants and were taking calcineurin inhibitors, had preexisting ESRD or who lost follow-up were excluded (45), leaving 12 patients for analysis. The Mean ICU stay was 20 ± 17 days. Among these, 2 patients had pre-existing diabetes (16.6%), 5 patients had hypertension (41.6%) and 4 patients had hyperlipidemia (33.3%). The serum creatinine at the time of discharge from the hospital was 1.04 ± 0.38 . After 3 to 36 months of follow up the serum creatinine for the group was 1.08 ± 0.35 . This was not statistically significant from the discharge creatinine. Older patients were found to have higher creatinine levels at the time of discharge ($p=0.014$).

In this small sample of patients, there was no effect of length of ICU stay and use of CVVHDF on renal function after discharge. Acute renal failure during ICU stay requiring renal replacement therapy does not necessarily pose a danger to kidney function over the long term.