

3rd International Conference on Nephrology & Therapeutics

June 26-27, 2014 Valencia Conference Centre, Valencia, Spain

Peritoneal dialysis as a cost-effective treatment modality for acute kidney injury in coronary care unit setting - A developing country experience

Ashish Verma

The Madras Medical Mission Hospital, India

Peritoneal dialysis (PD) is an efficient renal replacement method (RRT) for AKI as it is simple and does not produce hemodynamic instability. There is scarcity of published data on the use of PD for patients with AKI due to acute myocardial infarction, cardiac failure and cardiac dysarrhythmia. We retrospectively analyzed the outcome of AKI using PD as a cost effective modality in 84 patients over a period of 36 months (January 2009-December 2011) out of 6,687 patients admitted to CCU. Among 84 patients, males-64.3% and females-35.7% with mean age 59.23 ± 11.28 years. The total mortality was 14.3% (12). Of the remaining 72 patients, we observed functional recovery in 68 patients (81 %). Four (4.8%) patients were transferred to hemodialysis. Complication was exit site leak which was noted in 8 patients (9.5%). Among those 8 patients, 3 recovered, 4 patients were transferred to hemodialysis and 1 patient died. All leaking catheters were removed. None developed peritonitis. We observed decrease in serum creatinine by 47% ($p < 0.0001$). The stay in CCU was 5-8 days. Patients recovered with a 58% ($p < 0.0001$) increase in mean urine output. Univariate analysis did not showed gender ($p = 0.375$), diabetes ($p = 0.227$), fluid overload ($p = 0.793$) and ventilation ($p = 0.064$) associated with complications. The complications were less with a swan neck catheter ($p = 0.021$). $P < 0.05$ was considered significant. With 81% functional recovery, PD is an inexpensive, effective treatment for AKI patients in CCU with MI, cardiogenic shock and cardiac dysarrhythmias. PD is a cost effective treatment which does not need machinery, skill and financial resources as compared to other modalities.

Biography

Ashish Verma graduated in medicine from Govt. Stanley Medical College, Chennai. After that, he worked as a research affiliate in the Dialysis Vascular Access research group in University of Cincinnati Medical center. He worked as junior resident and clinical research assistant in Department of Kidney, Urology and Transplantation in Madras Medical Mission Hospital. He has published cases and manuscripts in peer reviewed journals and also presented abstracts in international Congress. Currently He is a Clinical Research Assistant in the Department of Nephrology in MMM Hospital.

vermamedical@gmail.com