ABSTRACT

Background- Patients with acute heart failure (AHF) are hemodynamicaly unstable. This condition is often accentuated by medication and multiple factors.So that they are sensitive to electrolyte disturbance. Hyponatremia worsen the both cardiac and renal function.

Aim-. The aim of this study was to detect the cause of hyponatremia in AHF patients and to investigate whether hyponatraemia, a surrogate marker of congestion and haemodilution and of neurohormonal activation,could identify patients at risk for WRF

Methods-We studied the association between hyponatraemia (sodium ,136 mmol/L) and WRF (defined as an increase of .0.3 mg/dL in creatinine above baseline) inAHF patients .They were monitored for six months.

Results-Some patients with hyponatraemia on admission was improved with treatment, other are worsened with elevated creatinine after three months of monitoring .With proper electrolyte monitoring and treatment hyponatremia was corrected and creatinine became to acceptale limit on sixth months. The morbidity is decreased with sidoum correction.

Conclusion- Hyponatraemia predicts the development of WRF in AHF patients and frequently lead to the type I CRS. These data are consistent with the concept that congestion and neurohormonal activation play a pivotal role in the pathophysiologyof acute cardio-renal failure.

Key words: acute heart failure, worsening renal function, cardio renal syndrome.