ABSTRACT

Background and objectives:

Sepsis remains a major global healthcare concern, owing to high morbidity and mortality. A nearly event in sepsis is the loss of barrier integrity leading to systemic capillary leak which is manifested as microalbuminuria. This study was done to evaluate the degree of microalbuminuria in sepsis in correlation with ABACHI IV &SOFA Score and to test whether the degree of microalbuminuria could predict mortality in critically ill sepsis patient and detection of acute kidney injury in septic patient

Methodology: The present study conducted on patients admitted to Medical and surgical ICU between May 2013 to May 2014

Method of Collecting Data: 40 patients who meet the inclusion and exclusion criteria were included in the study.

Results :The present study included 40 patients, among which 29 were males and 11 were females. Mean age was 62.8 years. Mortality was 45.0%. There was no correlation between ACR1 or ACR2 and age or both gender groups. Median urine ACR 1 was 90.8 among survivors and 139.4 among non survivors with statistically significant with p value of 0.0006 for predicting mortality and ACR 2 was 90.8 among survivors and 179.9 among non survivors with statistically significant with p value of 0.0001 for predicting mortality. APACH IV score ranges from 46 to 118 median APACHI IV among survivors were 62 and

among non survivors were 98 with p value of< 0.0001 for predicting mortality. SOFA score range from 1-17 with median among survivors were 5 and among non survivors were 7 with p value of 0.426 with no significant for predicting mortality. There was a significant correlation between ACR2 and SOFA score p value 0.031. ACR elevated in patient need inotropic support p value 0.009 and patient need ventilation p value 0.011. The optimal cutoff value for ACR1 to predict ICU mortality was **86.3 mg/g**. This cutoff value gave a sensitivity of 100% and a specificity of 50 % for ICU mortality. The optimal cutoff value for ACR2 to predicts ICU mortality was **110.5 mg/g**. This cutoff value gave a sensitivity of 100% and a specificity of 86.2 % for ICU mortality.

Conclusion: Significant microalbuminuria is predictive of mortality which is equivalent to or better than APACHI IV score. Microalbuminuria is an inexpensive and rapid diagnostic tool.Serial measurements may help in the clinical assessment of critically ill patients at risk of worse prognosis, even in resource poor areas.

KEY WORDS: Microalbuminuria; sepsis; mortality; APACHI IV score, SOFA, urine ACR.