HYPONATREMIA AS AN INDEPENDENT PROGNOSTIC FACTOR FOR MORBIDITY AND MORTALITY IN EUVOLEMIC ICU PATIENTS

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Abstract

Background: Hyponatremia is defined as serum sodium concentration less than 135 meq/l. Hyponatremia is the commonest electrolytes disturbance seen in hospitalized patients. The presence of hyponatremia worsen the prognosis in icu patients. Early recognition of hyponatremia and appropriate intervention would improve the outcome.

Objectives: To study the morbidity and mortality of icu patients who are having Euvolemic hyponatremia. Hyponatremia is an independent prognostic factor to assess the outcome of Euvolemic icu patient

Methods: The study will be conducted on 200 Icu patients, admitted at Government Rajaji Hospital & Madurai Medical College during the study period.patients with Normal sodium levels (135-145) are taken as controls. The who had patients had Euvolemic hyponatremia diagnosed by clinical background are further evaluated and confirmed with biochemical and radiological investigations. In those patients morbidity and mortality is assessed.

Results: Out of 200 euvolemic hyponatremia patients, hyponatremia more prevalent in middle aged and male patients.168 patients symptomatic and 32 patients asymptomatic. Asymptomatic patients more in mild groups(20 out of 32), Symptomatic patients more in moderate and severe groups (139 out of 168). So Moderate and severe euvolemic hyponatremia, both have significant morbidity. Among complications, Altered sensorium more common (46%), followed by Hiccup(10.5%), Vomiting (14.5%), seizure(8%) and headach(5%), Asymptomatic(16%) .Altered sensorium and seizure more common in severe group, (59 out of 70). Altered sensorium, vomiting hiccup and seizure more common in moderate group, (64 out of 79). Vomiting (15) more common in mild groups, and Asymptomatic patients (20) more in mild groups. In this study, in severe hyponatremia group had more number of death (29 out of 71), followed by moderate hyponatremia (10 out of 80). So Moderate and severe hyponatremia, both have significant mortality.

Conclusion: Hyponatremia is commonly encountered electrolyte imbalance in icu patients. Morbidity and mortality is significantly higher in patients with hyponatremia. Early recognisation and timely intervention of hyponatremia will improve the outcome. Hyponatremia as an independent prognostic factor for predicting the morbidity and mortality of Icu patients who are having euvolemic hyponatremia.