

Prevalence, aetiology, outcome and management of moderate and severe hyponatremia on hospital admission

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ABSTRACT

Introduction: Hyponatremia is a common electrolyte disturbance seen in hospitalized patients. Published data had shown the prevalence of hyponatremia between 2.5% to 30.0% but the data is lacking in Malaysia. This study aimed to describe the prevalence, aetiology, outcome and management of moderate and severe hyponatremia on admission. **Methods:** All adults admitted to medical wards from June to October 2021 in Hospital Putrajaya were retrospectively screened. Patients with at least 2 serum sodium including on admission were included. All patients with moderate (sodium 126 to 129 mmol/L) and severe hyponatremia (<125 mmol/L) were included. Main outcome were length of hospitalization and in-hospital mortality. **Results:** From total of 1775 admission, hyponatremia was present in 39.6% of patients, with moderate to severe hyponatremia was 268 (15.1%). Mean age was 54.5 ± 16.8 years and predominantly male 168 (62.7%). More than half (63.1%) admitted due to pneumonia. Hypovolemia was the most common cause hyponatremia (64.0%). Most of the patients (84.0%) were treated with normal saline. Only 17(6.3%) patients needed hypertonic saline and oral salts. The median length of stay was 6 days \pm 7 days. All cause in-hospital mortality was 43 (16.0%). Two hundred twenty patients (82.1%) had normal sodium before discharge. **Conclusion:** Hyponatremia is common in hospitalized patients. Hypovolemia is the most common cause and most of the patients responded to treatment within a week of stay.