Dysnatremia

Dysnatremia occurs commonly in patients with aneurysmal subarachnoid hemorrhage (aSAH). The mechanisms for development of sodium dyshomeostasis are complex, including the cerebral salt-wasting syndrome, the syndrome of inappropriate secretion of antidiuretic hormone, diabetes insipidus. Iatrogenic occurrence of altered sodium levels plays a role, as sodium homeostasis is tightly linked to fluid and volume management.

Methods: Narrative review of the literature.

Results: Many studies have aimed to identify factors predictive of the development of dysnatremia, but data on associations between dysnatremia and demographic and clinical variables are variable. Furthermore, although a clear relationship between serum sodium serum concentrations and outcomes has not been established-poor outcomes have been associated with both hyponatremia and hypernatremia in the immediate period following aSAH and set the basis for seeking interventions to correct dysnatremia. While sodium supplementation and mineralocorticoids are frequently administered to prevent or counter natriuresis and hyponatremia, evidence to date is insufficient to gauge the effect of such treatment on outcomes.

Conclusions: In this article, we reviewed available data and provide a practical interpretation of these data as a complement to the newly issued guidelines for management of aSAH. Gaps in knowledge and future directions are discussed [1)].

1)
Busl KM, Rabinstein AA. Prevention and Correction of Dysnatremia After Aneurysmal Subarachnoid Hemorrhage. Neurocrit Care. 2023 May 3. doi: 10.1007/s12028-023-01735-z. Epub ahead of print. PMID: 37138158.