

## **Hyponatremia in the elderly: challenges and solutions**

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Hyponatremia is a common electrolyte disorder in the elderly population because of the presence of factors contributing to increased antidiuretic hormone, the frequent prescription of drugs associated with decreases of serum sodium concentration and also because of other mechanisms such as the “tea and toast” syndrome. There are challenges in the evaluation and treatment of hyponatremia in the elderly population and practical solutions should be provided to physicians. Hyponatremia in elderly subjects is mainly caused by drugs (more frequently thiazides and antidepressants), the syndrome of inappropriate antidiuretic hormone secretion (SIAD) or endocrinopathies; however, hyponatremia is multifactorial in a significant proportion of patients. Special attention is needed in the elderly population to exclude endocrinopathies as a cause of hyponatremia before establishing the diagnosis of SIAD, which then requires a stepped diagnostic approach to reveal its underlying cause. The treatment of hyponatremia depends on the type of hyponatremia. Special attention is also needed to correct serum sodium levels at the appropriate rate, especially in chronic hyponatremia, in order to avoid the osmotic demyelination syndrome. In conclusion, both the evaluation and the treatment of hyponatremia pose many challenges in the elderly population.