

EFFICACY OF UREA IN THE TREATMENT OF HYPONATRAEMIA IN SYNDROME OF INAPPROPRIATE ANTIDIURETIC HORMONE SECRETION

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Background and importance

The consequence of SIADH is a hypotonic hyponatremia, urea is a well-tolerated therapeutic option indicated to correct sodium levels, acting as an osmotic diuretic eliminating a large amount of water in the urine accompanied by an increase in plasma sodium concentration.

Aim and objectives

To evaluate the efficacy and security of urea in controlling hyponatremia due to SIADH in a third level hospital.

Material and methods

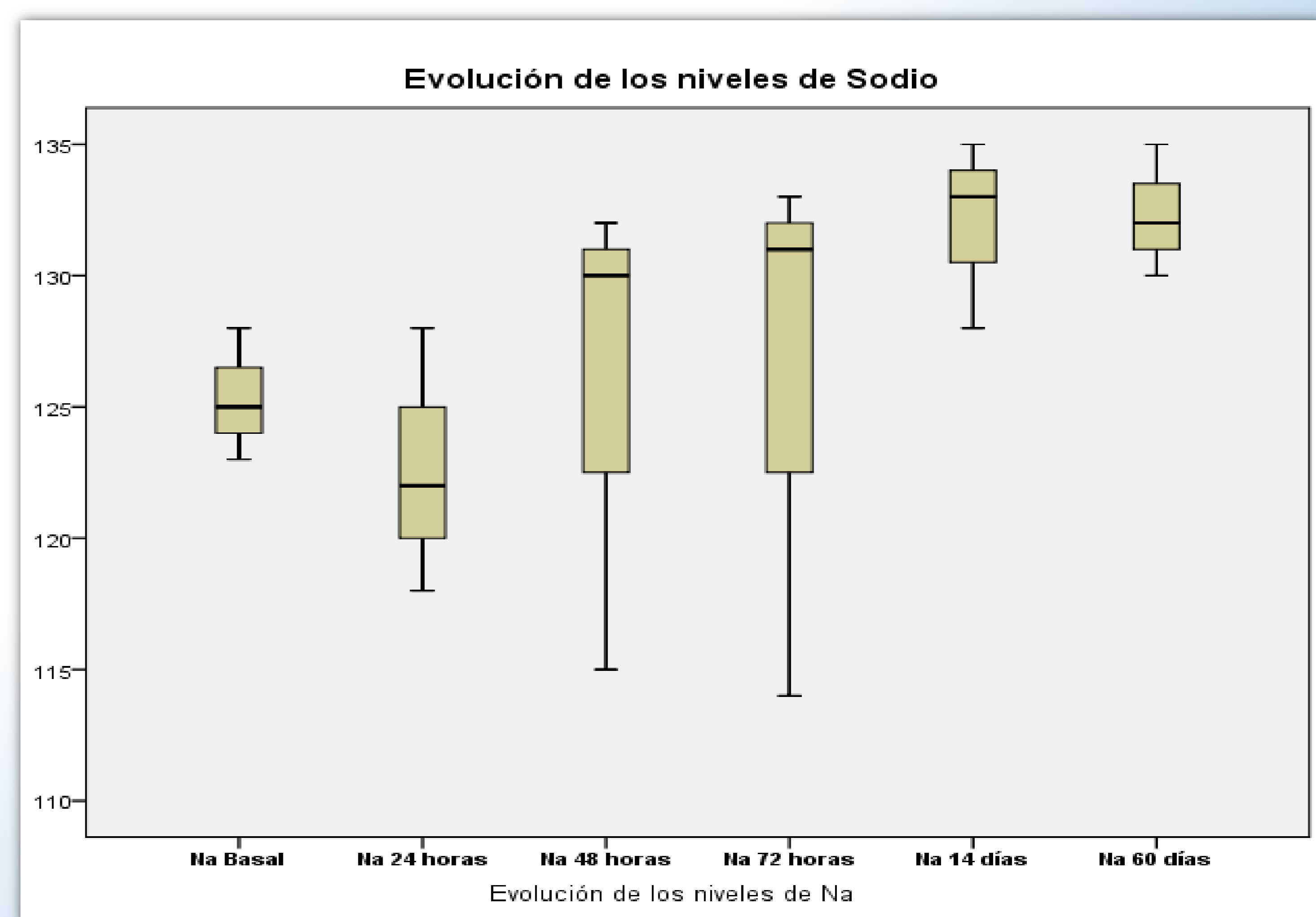
Quasi-experimental study. All patients with hyponatremia treated with urea for more than 24 hours from January to September 2019 were included. All patients received water restriction and hypertonic sodium chloride solution.

The main variable of our study was the serum sodium level (Nas) before treatment with urea at 24h, 48h, 72 h, 14 days and 60 days. The following variables were also collected: age, sex, prescribing service, days of treatment, initial dose, change of urea dose, change of treatment to tolvaptan. As an efficacy criterion, the serum sodium level >130 mg/dL was evaluated at 72 hours and as urea safety criteria >70 mg/mL at 14 and 60 days.

Results

29 patients were included during the study period. Of these, 67% were male and the mean age was 77 ± 13 years. The prescribing services were Geriatrics (26%) and Oncology (13%) and others (61%).

Serum sodium levels before treatment and at 24h, 48h, 14 days and 60 days were 125 ± 4 mg / dL, 127 ± 5 mg / dL, 129 ± 5 mg / dL, 131 ± 4 mg, 134 ± 4 mg / dL and 134 ± 4 mg / dL respectively. At 14 days, only data were obtained from 14 patients, 26% of them presented urea increase above 70 mg/mL. None at 60 days. The average dose of urea at the start of treatment was 26 g (7.5-60), although 90% required dose adjustment. The median days of treatment was 6 days. The 55% had an increase in sodium >130 mg/dL at 72 hours and only 3 patients switched to tolvaptan.



Conclusion and relevance

In the study, urea was effective in most patients, requiring change to tolvaptan exceptionally. The increase in sodium was progressive as study time progressed. Urea increased at fourteen days in a quarter of patients.

