

A prospective observational study of the causation and management of SIADH in a tertiary referral hospital

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Background

SIADH is the most frequent underlying cause of hyponatraemia but is frequently ignored and suboptimally treated.

Results

- **Patients:** 748 patients with plasma sodium <130 mmol/L were evaluated.
- 343 (45.8%) had SIADH according to standard criteria.
- 232 (67%) had hyponatraemia on admission, and 111(33%) developed hyponatraemia during hospitalization.
- **pNa** at the time of evaluation (m,IQR):129(126,130) mmol/L, **Uosm:** 470(345,591) mOsm/Kg, **UNa:** 54(28,89)mmol/l. **9 Am Cortisol:**457(387,554) nmol/l. One patient was hypothyroid.
- **Etiology of SIADH:** CNS (n = 85), respiratory (82), cancer (68), post surgery (29), drug-induced(23),other/unknown (56).
- **Therapies during first 48 hours after admission:** 0.9% saline infusion-121 patients(35%), fluid restriction-49(14%), furosemide-19(5%), 3%saline-6(1.7%), Tolvaptan-4(1.1%), Demeclocycline-2(0.5%), Multiple therapies in 19(5.5%) and no treatment in 133(38%). (Chart-1)
- **Plasma sodium at discharge(n=239)**
 - pNa<135 mmol/l in 141 patients
 - pNa<130 mmol/l in 47 patients.

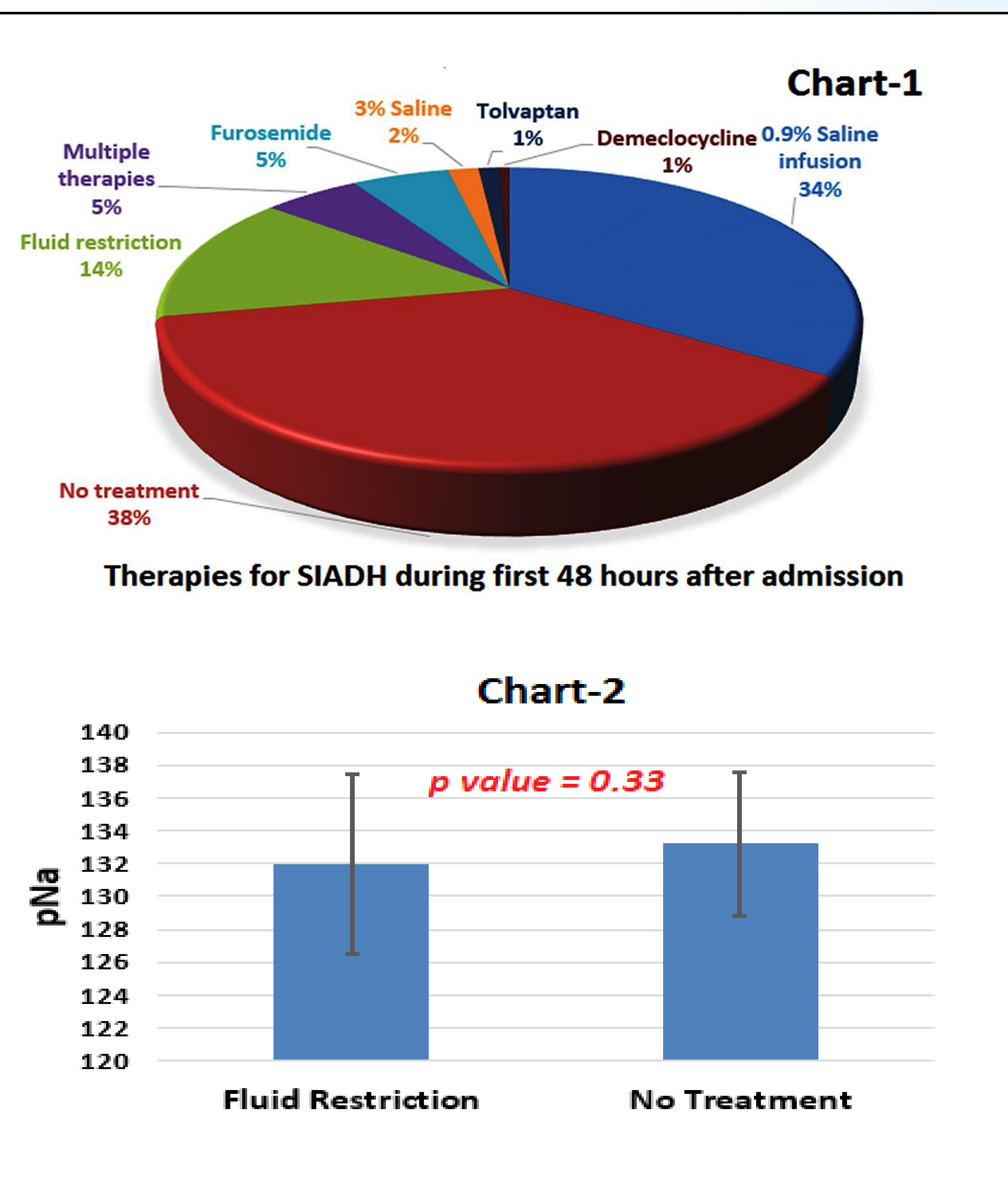
Fluid restriction was not superior than no treatment (discharge mean pNa=132 (SD: 5.5) mmol/l, vs 133.2 (SD: 4.4) mmol/L, p=0.33)- (Chart-2)

Objective

To identify the treatment applied in clinical practice for hyponatraemia due to SIADH and to evaluate the effect of fluid restriction.

Methods

- Patients were identified from the hospital laboratory database on a daily basis.
- The role of endocrine team was in the differentiation of SIADH from other causes of hyponatraemia, and ascertainment of full diagnostic criteria in SIADH patients. Treatment remained at the discretion of admitting team.



Conclusion

- Treatment for hyponatraemia was heterogeneous and did not follow recent guidelines(1).
- First line treatment with fluid restriction was no more effective than no treatment.
- Routinely used therapies were suboptimal in normalising plasma sodium in hospital prior to discharge.
- More effective hospital policies for management of SIADH are needed.