



The Use of Intermittent 7.5mg Tolvaptan on an Out-patient Basis for SIADH: a Retrospective Audit from a Tertiary Cancer Hospital

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Introduction

- Tolvaptan is a Vasopressin-2 receptor antagonist licenced for the treatment of hyponatraemia secondary to SIADH.
- The initial recommended dose is 15mg once daily
- Data in oncology patients with SIADH suggest 7.5mg can safely and effectively increase sodium levels where 15 mg can on occasion lead to too rapid a correction^{1,2}
- Recommendations suggest a repeat sodium taken at 4-6 hours, with repeat sodium measurements and fluid status assessment every 6 hours until the dose is stable³
- At our institution we routinely commence on a dose of 7.5mg initially, with dose escalation if necessary
- We have a small cohort of hyponatraemic patients who attend the endocrine day unit regularly for monitoring of serum sodium levels and given prescriptions if the sodium is on a downward trend and/or symptoms of hyponatraemia have developed

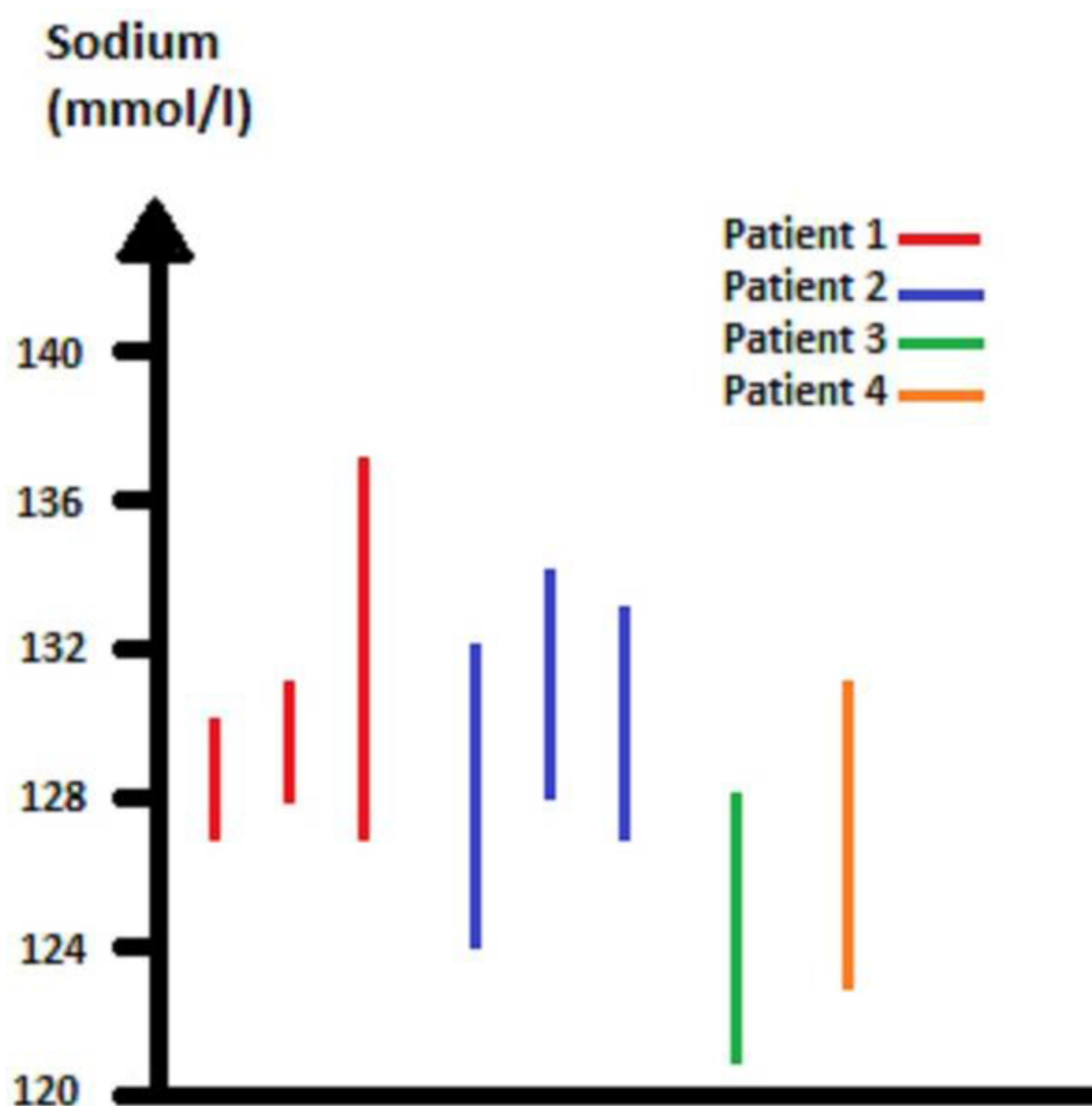
Aim/Methods

We set out to assess the safety and efficacy of intermittent out-patient dosing with 7.5mg tolvaptan. Pharmacy records and case notes were interrogated to find all patients given out-patient prescriptions for tolvaptan between April 2012-January 2015

Results

- A total of 15 doses were administered to four patients, all with an underlying diagnosis of small cell lung cancer
- Mean age 63 years, 3 males, all euvolaemic and biochemically confirmed SIADH, all given tolvaptan previously as an inpatient
- On 8 occasions the repeat sodium was checked at 6 hours (range 6 hours-6 days)
- No adverse events were encountered
- One patient died due to progressive malignancy

Overall (n=15)	
Mean Pre-treatment Na	126 mmol/l (Range 122-128)
Mean Post-treatment Na (1 st measured)	133.6mmol/l (Range 128-139)
Mean Increase	7.6mmol/l
When Na checked at 6 hours (n=8)	
Mean Pre-treatment Na	125.75 mmol/l (Range 122-128)
Mean Post-treatment Na (at 6 hours)	132 mmol/l (Range 128-137)
Largest rise	10 mmol/l



A graph showing individual patients' responses to 7.5mg tolvaptan when the sodium was checked at 6 hours

Conclusions

- Outpatient use of single 7.5mg doses of tolvaptan is effective at raising serum sodium in oncology patients with SIADH
- Patient responses to the same dose can vary considerably
- There are potential economic and patient benefits in using this regime as on an outpatient basis, especially in oncology patients
- There were no adverse effects encountered in the small patient cohort analysed, but robust protocols are required
- Improvements need to be made in checking a 6-hour sodium

References

- 1 High sensitivity to tolvaptan in paraneoplastic syndrome of inappropriate ADH secretion (SIADH) Kenz S et al. Ann Oncol. 2011 Dec;22(12):2696
- 2 Low dose tolvaptan (7.5 mg) is effective in the management of SIADH in oncology patients (results from a retrospective audit at The Christie Hospital and Wythenshawe Pulmonary Oncology Unit). King J et al. Presented at BES 2014. Endocrine Abstracts (2014) 34 P89
- 3 Samsca Summary of Product Characteristics. Accessed from www.ema.europa.eu on 28/4/15

