OBJECTIVES

Excess mortality in patients with hyponatraemia compared to euonatraemic patients with similar underlying conditions is well documented. However, it is not clear whether the mortality associated with syndrome of inappropriate antidiuretic hormone secretion (SIADH) is different to that associated with non-SIADH hyponatraemia (NSH). This is due to the lack of prospective studies addressing mortality in SIADH patients in hospital.

METHODS

We prospectively evaluated patients admitted with or developing hyponatraemia in a tertiary care hospital (pNa<130 mmol/l) between January – February, 2015. The patients were diagnosed with SIADH based on standard clinical and biochemical criteria (pNa, spot urine sodium, urine osmolarity, 9-AM Cortisol and TFTs), and comorbid conditions including admitting diagnoses were obtained for all patients. Patients were classified as hypo, hyper or euonatraemic hyponatraemia using clinical and biochemical parameters. Statistics were performed using Mann-Whitney U, Student T, or Chi-square Tests, as appropriate. SPSS version 15, Chicago, Ill.

RESULTS (SIADH vs NSH)

180 patients were included. 89 (45 female) were classified as SIADH and 91 (45 female) as NSH.

CLINICAL DATA

Mean age was similar; SIADH 68 y (SD:15) vs NSH 72 y (SD:15), p=0.09.

BACKGROUND HISTORY

Congestive cardiac failure (6.7% vs 30.7%, p<0.0001), ischemic heart disease (17.9% vs 31.8%, p=0.02), atrial fibrillation (8.9% vs 30.7%, p<0.0001) and chronic kidney disease (Stage ≥III, 0% vs 16%, p<0.0001) were more prevalent in NSH (Table 1) compared to SIADH patients.

LABORATORY DATA

pNa at admission was similar in SIADH (126 mmol/l, SD:5) vs NSH (126mmol/l, SD:3), p=0.68. Other laboratory results (Median (IQR) are summarized in table 2. Mean 9-am Cortisol in SIADH group was 482 nmol/l (IQR:412,578), and 21% were receiving therapeutic glucocorticoids. One patient with COPD had a subnormal post synacthenpeak cortisol of 363 mmol/l due to recent oral prednisolone course. No patient had severe hypothyroidism.

DURATION OF HOSPITAL STAY AND MORTALITY DURING ADMISSION

Duration of hospital stay was 13 days (11) in SIADH vs 11 days (10) in NSH, p=0.55. Mortality rate was not different: 5.6% in SIADH compared to 10.9% in NSH (p=0.28) (Figure 1).

CONCLUSIONS

Preliminary results showed that mortality rate and length of hospital stay was similar in patients with SIADH compared to non-SIADH. However, larger studies are required to confirm these observations.

REFERENCES

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