

Case Report

AN UNUSUAL PRESENTATION OF HYPONATREMIA

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ABSTRACT

Selective serotonin reuptake inhibitors are widely used anti depressants. It can cause acute onset hyponatremia with or without neurological manifestations due to SIADH (Egger *et al.*, 2006). SIADH (Syndrome of inappropriate antidiuretic hormone secretion) is a diagnosis of exclusion characterised by euvolemia, low serum osmolarity, inappropriately high urine osmolarity and high urinary sodium (Jacob and Spinler, 2006). Many studies have shown that all SSRIs have the potential to cause SIADH but very few studies are available on Venlafaxine causing SIADH (Dianne *et al.*, 2002). Most of the patients are in the older age groups (Kirchner *et al.*, 1998; Ranieri *et al.*, 1997) only few studies have shown hyponatremia occurring in young age group. We report the case of a patient who developed acute-onset drug induced hyponatremia that progressed rapidly to serious neurological dysfunction, following initiation of Venlafaxine as a treatment for depression.

Keywords: Hyponatremia, Venlafaxine, SIADH

CASES

A 50 years old male farmer with no previous mental illness presented with history of diffuse body pain, lack of energy, decreased interest in work and increased frequency of crying spells. He also had sleep disturbances, worsened since past 1 month. There was no history suggestive of affective or psychotic symptoms. There was no history of trauma, head injury, hypothyroidism or any long term medications. On mental state examination, he was found to be depressed. He was given a provisional diagnosis of "Moderate depression with somatic syndrome". He was investigated further to rule out medical causes for depression. His Renal function tests and TSH were normal. As all the baseline investigations were normal, we started the patient on Venlafaxine which was titrated up to 75mg along with Olanzapine. On the third day of treatment, patient had one episode of GTCS followed by delirium, which lasted for 2 days. On investigating, he was found to have Hyponatremia. MRI brain was normal. On evaluating the causes for Hyponatremia, he was found to have normal cortisol, with low serum osmolality, high urine osmolality and high urinary sodium. Hence a clinical diagnosis of "Venlafaxine induced SIADH" was made. He was started on Tolvaptan and was fluid restricted. His Serum sodium levels started to raise and neurological symptoms improved.

DISCUSSION

Hyponatremia is one of the commonest side effect of SSRI treatment in old age. Hence when any patient is diagnosed with depression, we should rule out medical comorbidities and biochemically evaluate them before starting on antidepressants (Liu *et al.*, 1996; Ranieri *et al.*, 1997). All antidepressants, especially Venlafaxine is associated with hyponatremia and remission is often slow (Jacob and Spinler, 2006). Management of drug induced hyponatremia includes withdrawal of the drug immediately and fluid restriction. Tolvaptan has recently emerged as a promising new therapeutic option for SIADH.

REFERENCES

Dianne Kirby, Harrigan S and Ames D (2002). Hyponatremia in elderly psychiatric patients treated with selective serotonin reuptake inhibitors and venlafaxine: a retrospective controlled study in an inpatient unit. *International Journal of Geriatric Psychiatry* **17** 231-7.

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Egger C, Muehlbacher M, Nickel M, Geretsegger C and Stuppaeck C (2006). A review on hyponatremia associated with SSRIs, reboxetine and venlafaxine. *International Journal of Psychiatry in Clinical Practice* **10** 17–26.

Jacob S and Spinler SA (2006). Hyponatremia associated with selective serotoninreuptake inhibitors in older adults. *Annals of Pharmacotherapy* **40** 1618–22.

Kirchner V, Silver L and Kelly C (1998). Selective serotonin reuptakes inhibitors and hyponatremia: review and proposed mechanism in the elderly. *Journal of Psychopharmacology* **12** 396–400.

Liu BA, Mittmann N, Knowles SR and Shear NH (1996). Hyponatremia and the syndrome of inappropriate secretion of antidiuretic hormone associated with the use of selective serotonin re-uptake inhibitors: a review of spontaneous reports. *Canadian Medical Association Journal* **155** 519–27.

Ranieri P, Franzoni S, Rozzini R and Trabucchi M (1997). Venlafaxine induced rest osmostat syndrome: case of a 79-year-old depressed woman. *Journal of Geriatric Psychiatry and Neurology* **10** 75–8.