A RARE CASE REPORT OF VENLAFAXINE INDUCED SIADH
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Abstract:

Mr. S was a 50 years old, married male, who was farmer by occupation. Premorbidly, he was a sociable and a very hardworking person. He didn't have any past history of mental illness nor did he have any significant family history. He presented with 3 months duration of pain over lower back, abdomen, Vitamin B-12, Vitamin D, Hbs Ag, and serology HIV Ag were normal. In view of temporal correlation of SIADH and Venlafaxine initiation and since no other cause for SIADH was found, a clinical diagnosis of "Venlafaxine induced SIADH" was made. On physician opinion Olmesartan (20mg) was initiated in view of his high BP and Tolvaptan for SIADH was started. Later Venlafaxine and Olanzapine were stopped. Patient continued to have fluctuating levels of delirium. Hence fluid restriction and high salt diet was initiated. Patient wanted discharge and was followed as an outpatient. He was not on any psychotropic medication & was on Olmesartan and Tolvaptan. He came only for one follow-up where his delirium picture was remitting but somatic symptoms continued. Unfortunately, patient didn’t come for further follow-up.

DISCUSSION:

SIADH (Syndrome of inappropriate antidiuretic hormone secretion) is characterized by excessive release of ADH from posterior pituitary gland or another source, which was first...
described in 1957 [4]. In SIADH there is increased fluid retention, serum hypo-osmolarity and concentrated urine in the presence of normal or increased intravascular volume with normal renal function [5]. Hyponatremia (<135 mmol/L), occurs in 1% of hospitalised patients, which is under recognised and under treated [3]. Risk factors for SIADH are children and elderly patients, female gender, low body weight, medical co-morbidity (e.g: hypothyroidism, CNS infection, trauma, haemorrhage, pulmonary TB, carcinoma diabetes), warm weather and drug treatments (like diuretics, NSAIDs) [3,6,7]. Mild hyponatremia (serum sodium levels 130-125 mEq/L) may present with depressive symptoms (nausea, headache, myalgia, general malaise, decreased appetite). Moderate hyponatremia (serum sodium levels 125-115mEq/L) presents with lethargy, disorientation, agitation, depression, and psychosis. Severe hyponatremia (serum sodium levels <115mEq/L) may present with seizures, coma, respiratory arrest [2]. Our patient also had some of the above mentioned features like myalgia, lethargy, depression, disorientation and seizures. All antidepressants, especially Venlafaxine is associated with hyponatremia (5-6 times) which is doubled when given along with Thiazides [1]. Venlafaxine induced SIADH may take prolonged course for remission. Other medications which may cause SIADH are antipsychotics, mirtazapine, Oxcarbazepine, SNRI’s and TCA’s. Management is treating the underlying cause. Treatment for mild hyponatremia is water restriction and for severe hyponatremia is high salt diet and parenteral sodium replacement (8-12mEq/L within first 24 hrs) [8]. Tolvaptan, selective V2 receptor antagonists is used to treat SIADH in short term and long term treatment. In our patient, serum sodium estimation was missed as a routine evaluation for depressive symptoms and also before initiating Venlafaxine in an elderly vulnerable patient for hyponatremia. Patient had prolonged Delirium even after stopping Venlafaxine. Delirium persisted around 6-8 weeks after stopping Venlafaxine which may be the natural course of drug induced SIADH. Depressive symptoms continued even during follow-up with fluctuating serum sodium level. Since baseline serum sodium level was not taken the depressive symptoms could be either hyponatremia induced or independent mood disorder itself.

CONCLUSION:
- 1) Baseline serum sodium estimation may be necessary in vulnerable patients presenting with depressive symptoms, especially if there are atypical features or if symptoms don’t form a depressive syndrome, as hyponatremia could itself manifest with depressive symptoms.
- 2) Before initiating antidepressants especially Venlafaxine, serum sodium estimation should be mandatory especially in vulnerable patients.
- 3) After initiating psychotropics which may cause SIADH, regular biochemical monitoring for the same is mandatory (need to be repeated within a month or earlier if the patient has symptoms suggestive of hyponatremia).

References: