



## Letter to the Editor

## Dose dependent hyponatremia caused by Vilazodone: A case report



Sir,

Hyponatremia is a well-known side effect of antidepressants. The mechanism behind anti-depressant induced hyponatremia is elevated ADH or an increased renal response to ADH (Leth-møller et al., 2016). Higher risk of hyponatremia is with SSRI and venlafaxine in compare to TCAs or mirtazapine but most of the information was accumulated from retrospective studies, case series or reports (Hyponatremia, 2016). Vilazodone is a newer antidepressant which offers a novel combination of selective serotonin reuptake inhibition and serotonergic (5-HT<sub>1A</sub>) receptor partial agonist activity. There is no case of hyponatremia with Vilazodone therapy in clinical studies till now (Cruz, 2012). So, we are presenting a case of Vilazodone induced hyponatremia for the first time in literature.

## 1. Case

Mr. XZ, 54 years old, working as a teacher, with a history of hypothyroidism stabilized with thyroxin, presented with illness of 2 years duration that had an insidious onset and episodic course characterized by low mood, decreased interest, activity, easy fatigability, decreased talkativeness, anhedonia, sociality, decreased confidence, decreased sleep. He was diagnosed as recurrent depressive disorder, current episode moderate, with the somatic syndrome. Baseline Sodium level of the patient was 136.96 mEq/L. Other routine blood parameters were within normal limit. The patient was started on Vilazodone 20 mg and gradually increased up to 40 mg after 1 week. The sodium level dropped down to 131.98 mEq/L mg. The patient was supplemented with oral sodium and Vilazodone was further hiked to 60 mg as he was gradually responding in regard to depressive cognitions. On 60 mg, sodium further dropped down to 126.72 mEq/L. The patient developed transient episode of giddiness which was lasting for few seconds but without loss of consciousness or amnesia. As patient has hyponatremia related symptoms, the dose was reduced to 40 mg in a span of 1 week. The sodium level raised up to 132.50 mEq/L. Later, we gradually stopped Vilazodone and his sodium was normalized. With Naranjo's score of causality, it comes around 6 which is probable adverse drug reaction (García-Cortés et al., 2008).

## 2. Discussion

Hyponatremia is defined as a serum sodium concentration of less than 130 mEq/L by some sources or less than 135 mEq/L by few others (Leth-møller et al., 2016). Symptoms of hyponatremia are usually detected within 2 weeks and resolved soon after stopping the agent. SSRIs like fluoxetine, citalopram, sertraline; SNRI like venlafaxine, duloxetine etc are the usual agents to cause hyponatremia. Aging, medical comorbidities, multiple drugs intake, poor oral intake are the risk factors (Hyponatremia, 2016; Leth-møller et al., 2016). As Vilazodone being as serotonin partial agonist–reuptake inhibitor (SPARI) shares the features of SSRI, the mechanism behind its adverse effect of hyponatremia is quite understandable. But Vilazodone induced hyponatremia is never reported in literature probably due to its relatively less usage (Cruz, 2012). As hyponatremia can impair mobility and cognitive function, it is extremely important to evaluate the side effect periodically (Leth-møller et al., 2016). Here, our report is the first such case in the literature which will make us cautious while using a relatively newer antidepressant in clinical practice.

## Conflicts of interest

There is no “Conflicts of interest”.

## References

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