

A Case of Hyponatremia Due to Self-Treatment of Anxiety With a Beverage Containing Valerian Root

To the Editor: Hyponatremia in psychiatric patients is often due to psychogenic polydipsia (PPD) and/or syndrome of inappropriate secretion of antidiuretic hormone (SIADH) from antidepressant medications. Regardless of etiology, severe hyponatremia can result in confusion, delirium, seizures, and, ultimately, death.¹ Assessment is complicated by overlap of symptoms such as confusion with psychiatric illness.

We report a case of an anxious man whose self-treatment of anxiety with an herbal beverage containing valerian root worsened hyponatremia. Valerian root has been used historically for anxiety/insomnia, as valerian affects the gamma-aminobutyric acid (GABA) receptor involved in anxiety.² However, controlled studies have not shown efficacy.³

Case report. Mr A, a 48-year-old man, was found unresponsive and brought to the emergency department, where he developed generalized tonic-clonic seizures. He was intubated and treated with lorazepam 2 mg intravenously every hour. Workup revealed a serum sodium level of 114 mmol/L, and the medication list included escitalopram 20 mg/d (started 2 months previously) for generalized anxiety disorder (*DSM-IV*) along with inhaled fluticasone and albuterol. The patient was admitted to the intensive care unit, all outpatient medications including escitalopram were discontinued, and the patient was given hypertonic sodium chloride (3%). Conivaptan was also started at 20 mg/d. Toxicology screen was positive only for benzodiazepines, presumably the lorazepam given for seizures. Findings of brain magnetic resonance imaging were unremarkable. SIADH resulting from escitalopram was initially of concern, but urinalysis revealed urine sodium level of less than 10 mmol/L.

After Mr A was extubated, he admitted to drinking approximately 5 cans (473 cc each) of Purple Stuff (<http://mypurplestuff.com/>) and 2 bottles of Marley's Mellow Mood (473 cc each) (<http://www.marleymellowmood.com/>) to help with chronic anxiety on the day prior to admission. Purple Stuff contains valerian root; Marley's Mellow Mood contains valerian root, lemon balm, passion flower, hops, and chamomile. The recommended serving size is

one half can or 236.5 cc. There were no further seizures or flu-like symptoms suggesting a selective serotonin reuptake inhibitor (SSRI) discontinuation syndrome. He did not consume excessive fluids. He was discharged in a stable condition with a serum sodium level of 139 mmol/L.

Anxiety disorders are common, and patients frequently self-treat with herbal supplements. A recent trend includes addition of supplements to beverages and foods. This patient drank close to 3.5 L of excess fluid in 1 day, resulting in hyponatremia. Since the patient could not initially provide history, hyponatremia was attributed to an SSRI-induced SIADH, although urinalysis did not show the characteristic sodium wasting.

The amount of valerian root in beverages is typically low, and a case report of a valerian overdose showed only brief abdominal discomfort.⁴ Hyponatremia is more likely related to excess water consumed with the beverage rather than an adverse pharmacologic consequence of valerian. This case illustrates the novel problem of hyponatremia from self-treatment of anxiety with an herbal beverage.

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