PSYCHOGENIC POLYDIPSIA AND WATER INTOXICATION IN CHRONIC SCHIZOPHRENIA: A CASE PRESENTATION

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Psychogenic polydipsia is a well recognized clinical entity that manifests in about 20% of chronic psychiatric patients, especially in schizophrenia. Of these patients about 5% develop episodes of water intoxication in addition to a few mild cases. It has been shown that among polydipsic patients 29% develop water intoxication. Schizophrenic patients with polydipsia leading to water intoxication may have poor prognosis as opposed to cases of simple polydipsia. A case of a chronic schizophrenic patient with polydipsia, admitted to the Teaching Hospital, Kandy, due to water intoxication, is presented here for purposes of documentation of an unusual, unique clinical entity.

The patient is a 43 year old female with a history of chronic schizophrenia. At the time of admission she was on clozapine, 400 mg per day. She presented with vomiting, followed by a generalized tonic clonic seizure, dual incontinence, heamaturia and loss of consciousness. There was no past history of seizures. However, she has had polydipsia of two years duration with a history of drinking 8-10 litres of water per day. On examination, the patient appeared drowsy and had hypotension with a reading of 90/60 mm/Hg. Blood analysis showed low levels of urea, 2.8 mmol/l, and low serum levels of sodium, 122 mmol/l; Potassium and sugar levels were normal. The patient recovered after symptomatic treatment.

Psychogenic polydipsia, be it primary or hysterical, is an uncommon clinical disorder, characterized by excessive water consumption in the absence of a physiological stimulus. This may lead to lowered serum electrolyte levels and osmolality with dilute urine production resulting in rhabdomyolysis, generalized compartment syndromes, drowsiness, convulsions, coma and even death. Thus, it is known as water intoxication. In the current case, the presence of low levels of sodium in the serum suggests that the manifestations of drowsiness and seizures are indicative of water intoxication. Thus an early diagnosis of these cases is important for prompt treatment thus avoiding "renal medullary washout", leading to a reduced capacity to concentrate urine in the kidney. A recommended method of treatment would be a simultaneous restriction of fluids and treating any underlying pathological condition.

In the case of chronic schizophrenic patients, treatment with clozapine is beneficial as regards polydipsia and water intoxication. Nevertheless, the manifestation of compulsive water drinking while being treated with clozapine makes the current case unique and unusual.