

What Do Psychiatric Patients, Marathon Runners and Ravers Have in Common? a Case Report of the Consequences of Water Intoxication.

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Water intoxication is a rare condition characterised by overconsumption of water. It can occur in athletes engaging in endurance sports, users of MDMA (Ecstasy) and in patients receiving total parenteral nutrition. This case outlines water intoxication in a patient with psychogenic polydipsia. When the kidney's capacity to compensate for exaggerated water intake is exceeded, hypotonic hyperhydration results. Consequences can involve headaches, behavioural changes, muscular weakness, twitching, vomiting, confusion, irritability, drowsiness and seizures. Cerebral oedema can lead to brain damage and eventual death. In this case, psychogenic polydipsia led to significant hyponatraemia, cerebral oedema and tonic-clonic seizures. Differential diagnoses for hyponatraemia include SIADH, diabetes insipidus, hyperthyroidism and excess cortisol. Extreme water consumption, as in the case outlined, is also implicated. Psychogenic polydipsia is a disorder that can lead to significant morbidity and mortality and occurs in 6% to 20% of psychiatric patients. Although psychogenic polydipsia is relatively common in this population, only one fifth to one third of polydipsic patients will experience symptomatic hyponatraemia. A number of psychiatric disorders have been linked with psychogenic polydipsia. The most commonly reported is chronic schizophrenia, but it may also occur in anorexia nervosa, psychotic depression and bipolar psychosis. The aetiology of psychogenic polydipsia is uncertain, but postulated hypotheses are explored. Psychogenic polydipsia occurs in up to 20% of psychiatric patients and this case serves to remind us to be cognisant of water overconsumption.