



LETTER TO THE EDITOR

Cannabinoid hyperemesis syndrome: Diagnosis and effective treatment in a psychiatric ward

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Dear Editor,

Cannabinoid Hyperemesis Syndrome (CHS) is an underrecognized clinical condition that is becoming increasingly common with the rise in cannabis use. Characterized by cyclical episodes of severe nausea, vomiting, and abdominal discomfort that temporarily improve with hot showers or baths, CHS presents a diagnostic challenge in both emergency and psychiatric settings. Although first described in 2004, it remains unfamiliar to many clinicians, often leading to repeated emergency visits, unnecessary investigations, and inappropriate treatments (1).

We present the case of a 34-year-old male who had been using cannabis heavily since the age of 18, consuming five to six marijuana cigarettes daily. Over the course of one year, he experienced multiple hospital visits for persistent symptoms of nausea and vomiting, which were temporarily relieved by compulsive hot showers—up to 20 times per day. He had previously been admitted to psychiatric wards on two occasions due to depressive symptoms and suicidal ideation, but no definitive diagnosis was made. During these admissions, he was treated with antiemetics and benzodiazepines, with only minimal improvement.

Upon admission to our psychiatric unit, the patient exhibited a severely impaired quality of life. He had lost 18 kilograms over the past year and was unable

to maintain employment due to the frequency of his symptoms. His mental status examination revealed a depressive affect, suicidal ideation, feelings of guilt and worthlessness, and agitation. He had a history of eight suicide attempts in the previous year, triggered by his unrelenting gastrointestinal symptoms and the resulting social and occupational dysfunction.

Our clinical team conducted a comprehensive evaluation, including laboratory and imaging studies, all of which yielded normal results. A CHS diagnosis was made based on the Rome IV criteria: (1) stereotypical vomiting episodes, (2) chronic cannabis use, (3) symptom relief after cessation, (4) compulsive hot bathing, and (5) exclusion of organic causes (2). Given the patient's chronic cannabis use, compulsive bathing behavior, and persistent vomiting, the diagnosis of CHS was consistent with previously reported clinical patterns (3). His depressive symptoms emerged after the onset of vomiting and significant functional impairment, suggesting a secondary, substance-induced depression, rather than a primary mood disorder. Structured interviews excluded primary depressive, psychotic, and anxiety disorders. The differential diagnosis included obsessive-compulsive disorder due to his compulsive showering, but there were no intrusive thoughts, compulsions, or impaired insight. Eating disorders were also considered, but there was no fear of weight gain, distorted body image, or restrictive eating behavior—weight loss was due to

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emesis and food avoidance caused by nausea. Cyclic vomiting syndrome and psychogenic vomiting were ruled out based on the patient's cannabis use history, bathing behavior, and the presence of psychiatric sequelae. A detailed history was obtained, and toxicological screening ruled out opioids and other psychoactive substances. Laboratory and imaging tests were normal. The Hamilton Depression Rating Scale was administered, yielding a score of 21.

Recent literature has reported CHS cases with suicidal behavior, illustrating the syndrome's emotional burden and the need for psychiatric vigilance (4, 5). Though CHS pathophysiology remains under investigation, proposed mechanisms include CB1 receptor downregulation, delayed gastric emptying, hypothalamic-pituitary-adrenal axis dysregulation, and involvement of the transient receptor potential vanilloid 1 (TRPV1) pathway (6). These neurobiological insights suggest that CHS is both a gastrointestinal and neuropsychiatric disorder.

Treatment was initiated with nutritional support, amitriptyline (25 mg/day, titrated up to 75 mg/day), amisulpride (400 mg/day), and topical capsaicin cream applied every four hours. Over the course of three weeks, the patient showed remarkable improvement. His vomiting ceased, hot shower frequency decreased from 15 times daily to once daily, and his appetite and mood significantly improved. He was discharged with ongoing pharmacological therapy and remained abstinent from cannabis. At follow-up, the patient reported no recurrence of symptoms, was eating regularly, and no longer exhibited suicidal ideation. He was evaluated weekly for three months after discharge, during which time he abstained from cannabinoid use and reported no complaints.

This case highlights the importance of considering CHS in patients with chronic cannabis use and unexplained, recurrent vomiting—particularly when compulsive hot bathing behavior is reported. CHS often mimics other gastrointestinal or psychiatric conditions, leading to misdiagnosis, as noted in recent prevalence studies (7). The patient received psychoeducation regarding the nature of his condition, the link between cannabis use and his symptoms, and the importance of cessation. However, no individual or supportive psychotherapy was initiated during the inpatient stay. Psychoeducation on the relationship between cannabis use and hyperemesis is essential to prevent relapse. While patients may perceive cannabis as relieving nausea, continued use may paradoxically exacerbate the condition.

Although treatment protocols remain under development, the literature increasingly supports the efficacy of topical capsaicin, tricyclic antidepressants such as amitriptyline, and antipsychotics. These findings align with recent reviews supporting the use of capsaicin in CHS management (8, 9). Capsaicin is believed to act through activation of the TRPV1 receptor, which is involved in thermoregulation and nociception (8, 9). Amitriptyline contributed to both symptomatic and psychiatric recovery in our case, consistent with literature supporting the role of tricyclic antidepressants in the psychiatric management of CHS (9, 10).

In conclusion, clinicians—especially psychiatrists—should remain vigilant for CHS in patients presenting with persistent vomiting, depressive symptoms, and a history of chronic cannabis use. Early diagnosis, psychoeducation, and structured cannabis cessation strategies are essential to reduce patient distress, prevent unnecessary medical interventions, and avoid potentially life-threatening psychiatric sequelae.

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