

Titolo

Beyond the Usual Suspects: Recognizing Cannabinoid Hyperemesis Syndrome in Acute Abdominal Pain

Identificativo

SIMEU ID

1

9

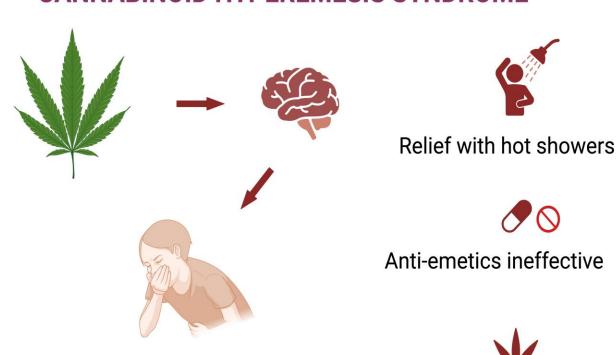
IA Bellofatto¹, M Pace¹, D Pierluigi¹

Introduction: Cannabinoid hyperemesis syndrome (CHS) is a condition related to prolonged cannabis use, characterised by cyclical episodes of nausea, vomiting and abdominal pain. The pathophysiology of CHS is believed to involve chronic overstimulation of endocannabinoid receptors along the neuroendocrine pathways that regulate vomiting.

Case summary: A 30-year-old man presented to our emergency department with wrenching abdominal pain and vomiting that had begun 12 hours earlier. He denied alcohol or drug consumption besides chronic cannabis use, which was confirmed by urine toxicology screening. On examination, the abdomen was tender without signs of acute abdomen. Full blood count, renal function, liver enzymes, pancreatic markers, and inflammatory parameters were within normal limits. An abdominal X-ray ruled out obstruction or perforation. Initial management included intravenous crystalloid infusion and administration of different classes of antiemetics, without clinical improvement. A contrast-enhanced abdominal CT scan was also performed, yielding negative results. Upon further discussion, the patient reported experiencing similar, though less intense, episodes over the previous weeks and noted symptoms relief with hot showers. CHS was suspected, and intravenous diazepam was administered, leading to rapid and significant symptom resolution within 24 hours.

Discussion: The diagnosis of CHS is clinical and requires the exclusion of other abdominal neurological and psychiatric conditions. The prognosis is generally favorable, provided the patient abstains from cannabis use. The Rome IV diagnostic criteria, the most widely accepted framework, include: stereotypical episodic vomiting resembling cyclic vomiting syndrome, presentation following prolonged cannabis use, symptom resolution with sustained cannabis cessation, and compulsive hot bathing behavior. Symptoms are typically resistant to conventional antiemetics. Dopamine antagonists (e.g.haloperidol, droperidol) and benzodiazepines are often effective. Capsaicin cream has shown benefit in many observational studies, and aprepitant, a neurokinin-1 receptor antagonist, has been reported as an option in cases resistant to other treatments.

CANNABINOID HYPEREMESIS SYNDROME



ROME IV CRITERIA

- stereotypical episodic vomiting resembling cyclic vomiting syndrome
- prolonged cannabis use
- symptoms resolution with sustained cannabis cessation
- compulsive hot bathing behavior

the last cannabis use

Within 24 hours of



Response to dopamine antagonists and benzodiazepines

Conclusion: As cannabis use continues to rise across all age groups, recreationally among teens and medically for issues like chemotherapy-related nausea, peripheral nerve pain, and muscle spasms, it becomes increasingly important for healthcare providers in emergency care settings to identify CHS risk factors and recognize presentation.

References:

- 1. Cue L, Chu F, Cascella M. Cannabinoid Hyperemesis Syndrome. [Updated 2023 Jul 3] StatPearls Publishing; 2025 Jan-.
- 2. Burillo Putze G, Darias-Acosta AT, López-Hernández Á. Improving the diagnosis of cannabinoid hyperemesis syndrome. Rev Esp Enferm Dig. 2019 Jul;111(7):574-575
- 3. Richards JR, Lapoint JM, et al. Cannabinoid hyperemesis syndrome: potential mechanisms for the benefit of capsaicin and hot water hydrotherapy in treatment. Clin Toxicol (Phila). 2018 Jan;56(1):15-24
- 4. Richards JR, Gordon BK, et al. Pharmacologic Treatment of Cannabinoid Hyperemesis Syndrome: A Systematic Review. Pharmacotherapy. 2017 Jun;37(6):725-734
- 5. Deceuninck E, Jacques D. Cannabinoid hyperemesis syndrome: a review of the literature. Psychiatr Danub. 2019 Sep;31(Suppl 3):390-394

Affiliazioni

1 Department of Emergency Medicine Ospedali Galliera Genova

Contatti _

ilaria.bellofatto@live.it

CASO CLINICO - TOSSICOLOGIA