

Cannabis use and cyclic vomiting

Consumo de cannabis y vómitos cíclicos

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Cannabis has traditionally been associated with antiemetic effects and used by some patients to control chemotherapy-induced vomiting. In 2004, however, cannabinoid hyperemesis or cyclic vomiting secondary to cannabis use was described (Allen, de Moore, Heddle & Twartz, 2004), and this has since been confirmed in a variety of studies (Contreras Narváez et al., 2016; Ochoa-Mangado, Madoz-Gúrpide, Jiménez Giménez & Salvador Vadillo, 2009; Simonetto, Oxentenko, Herman & Szostek, 2012).

Cannabinoid hyperemesis is defined as a condition characterized by the presence, in cannabis users, of cyclic episodes of nausea and uncontrolled vomiting. Such vomiting is relieved by compulsive bathing or showering in very hot water. Vomiting often occurs up to five times per hour, with cyclic episodes lasting from one to two days. Some cases are even more intense, however, both in frequency and duration. Vomiting is normally accompanied by other physical symptoms, such as polydipsia and diaphoresis, abdominal pain and weight loss. Although the condition may occur in early cannabis use, it manifests itself most commonly after several years. Cannabis abstinence, meanwhile, leads to cessation of vomiting.

The condition does not usually appear abruptly. Normally, sufferers describe early symptoms a few months previ-

ously, with morning episodes of nausea or vomiting on one or two days a week, causing reduced food intake for fear of vomiting and pain. The clinical picture is dose dependent, with greater intensity of vomiting due to increased cannabis use, and the type of vomiting and its relief with compulsive bathing in hot water is very typical. These baths are a learned behaviour that often do not appear in the initial episodes, but once sufferers become aware of their benefits they become compulsive (Allen et al., 2004; Ochoa-Mangado et al., 2009; Simonetto et al., 2012; Venkatesan, Hillard, Rein, Banerjee & Lisdahal, 2020).

The relevance of this condition becomes clear when the prevalence of cannabis use is taken into account. According to the EDADES survey, 35.2% of the population aged between 15 and 65 have used cannabis at least once in their lives; 9.1% did so in the previous month; and 1.2% use it daily (Observatorio Español de las Drogas y Adicciones (OEDA), 2018). This diagnosis must therefore be considered for any cannabis-using patient with repeated vomiting.

Patients suffering from this condition very frequently attend a variety of health services (ER, primary care, gastroenterology, etc.) and undergo numerous examinations, some potentially iatrogenic, which normally fail to find anything pathological.

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Differential diagnoses can be made with hyperemesis gravidarum, gastrointestinal disorders and those with metabolic causes, eating disorders, psychogenic vomiting and, of course, the symptoms of cannabis withdrawal. An important situation to consider is when cannabis is used precisely to mitigate the nausea and vomiting associated with other clinical conditions. Far from improving the situation, this will actually worsen the condition in some cases by causing cyclic hyperemesis.

Diagnostic suspicion of this condition is essential to guide diagnosis and treatment. Assessing the history and pattern of cannabis use should be part of the psychiatric interview. Compulsively taking multiple hot showers or baths can help in the differential diagnosis of unexplained vomiting, especially when use is heavy. The detection of cannabis in urinalysis can support the diagnosis, although it must be remembered that false positives may be caused by drugs which are widely used by these patients (ibuprofen, naproxen, pantoprazole, efavirenz), just as synthetic cannabinoids can cause false negatives (Glaser, 2019).

Emergency room treatment of hyperemesis requires the usual basic support measures and hydroelectrolytic balance restoration. In severe conditions, dehydration can lead to acute kidney failure. In such situations, capsaicin, haloperidol or benzodiazepines have been used with some success (Burillo-Putze & Llorens, 2017). Classic antiemetic drugs are not effective in any case.

The clinical management of cannabinoid hyperemesis syndrome requires continuous cannabis abstinence, and this involves acceptance by the patient of the relationship between cannabis and vomiting. The motivation to change will depend on the basis of this realisation since cannabis cessation is the only treatment (Sorensen, DeSanto, Borgelt, Phillips & Monte, 2017). In our still limited experience (Ochoa-Mangado et al., 2009), continuous cannabis abstinence eliminates cannabinoid hyperemesis symptoms. Relapses in use, however, lead to a recurrence of cyclic vomiting, which stops again on renewed cannabis abstinence.

The high frequency of cannabis use in our context and the severity that cyclic vomiting syndrome can reach, as well as the health and social costs involved, call for this diagnosis to be taken into account when patients report repeated vomiting with the characteristics described. Can-

nabis abstinence appears to be the only effective measure to correct the disorder. Further research is necessary to completely clarify the etiopathogenesis of the syndrome and to propose new therapeutic approaches.

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