CANNABINOIDS HYPEREMESIS SYNDROME – A DILEMMA, UNDER-DIAGNOSIS, AND FUTURE DIRECTIONS? – A REVIEW OF THE CURRENT LITERATURE

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Introduction:

Cannabinoid hyperemesis syndrome (CHS) is a novel and disputed medical condition that has become increasingly prevalent as the use of marijuana for medicinal and recreational purposes has risen in popularity [1].

CHS is distinguished by repeated episodes of vomiting, stomach pain, and nausea among cannabis users. The condition was first recorded in the medical literature in 2004, and it has since piqued the interest of healthcare practitioners, researchers, and the general public [1,2].

Despite the rising attention in CHS, the condition remains underdiagnosed and often misdiagnosed due to its nonspecific symptoms and healthcare practitioners' lack of knowledge. The problem with CHS stems from the fact that the illness is linked to cannabis use, which is often regarded as a benign and harmless recreational drug [1,3]. The diagnosis of CHS is made more difficult by the fact that its symptoms are similar to those of other gastrointestinal disorders, such as cyclic vomiting syndrome and gastroparesis, which may lead to a delayed or incorrect diagnosis [3]. The prevalence of CHS is difficult to estimate because of the lack of specified diagnostic criteria and the small number of studies conducted on the disorder. Several studies, however, have found that CHS may be more common than previously thought, particularly among chronic cannabis users. The condition is suspected to be caused by long-term cannabis usage, which may result in endocannabinoid system anomalies and disruption of the body's natural digestive activities [4].

CHS is often diagnosed based on a history of cannabis use, repeating episodes of vomiting and stomach pain, and relief of symptoms with hot water bathing; nevertheless, the illness's ambiguous symptoms may make identification difficult, and there is no definitive diagnostic test for the disorder [3]. CHS therapy often includes a cessation of cannabis use as well as supportive treatment to address symptoms such as hydration and pain management [5]. Despite growing recognition of CHS, there are many unanswered questions about the condition, including its etiology, diagnosis, and proper management. Future research is needed to establish the diagnostic criteria for CHS, identify risk factors for the condition, and develop effective treatment methods. There is also a need to increase CHS awareness among healthcare staff, particularly in areas where cannabis use is prevalent [2,5,6].

The purpose of this research is to investigate difficulties related to the diagnosis and treatment of CHS, such as a lack of understanding among healthcare practitioners and the disorder's contested nature. Finally, the review will highlight the future possibilities for CHS research and management, including the need for consistent diagnostic criteria and effective treatment strategies.

Methods:

A thorough bibliographic review was conducted using PubMed, Cochrane, Embase, and Medline. In addition, databases were used to search for articles on CHS published between January 2011 and February 2023, yielding relevant articles. Keywords used were "hyperemesis,"Cyclical Vomiting," "cannabis," and "cannabinoid."
Key words :

Results:

CHS is an uncommon but growingly recognized illness linked to long-term marijuana usage. It often manifests as widespread severe stomach discomfort and uncontrollable cyclical vomiting, and patients may find relief by bathing or showering in hot water. The illness has a pathognomonic clinical appearance and may resemble an acute abdomen, resulting in a slew of unnecessary extra exams and lab testing. Patients with CHS usually have a history of chronic marijuana use and frequently have repeated unneeded ED visits and consultations with different doctors. According to the literature, there is no organic explanation to explain the pathophysiology and clinical symptomatology of CHS. Given their history of persistent marijuana use, these individuals are often sent to the psychiatric department or addiction medicine experts. The only recognized treatment option for CHS is to stop using cannabis completely, since ongoing use may aggravate symptoms and lead to severe difficulties.

Despite its pathognomonic clinical appearance, CHS is still underdiagnosed. Clinicians' lack of understanding and awareness of CHS often leads to diagnostic delays and improper care, resulting in wasteful repeat trips to the ED, follow-up tests, and investigations. Early detection of CHS is crucial for reducing unnecessary testing, lowering healthcare costs, and improving patient outcomes. By increasing CHS awareness among clinicians, particularly addiction medicine professionals and psychiatrists, patients may get a prompt diagnosis and appropriate management, resulting in an improved quality of life.

Discussion

Cannabinoid hyperemesis sickness (CHS) is a sickness that has gained attention in recent years as cannabis use has increased. CHS is a clinical disease in which chronic cannabis users have recurrent attacks of nausea, vomiting, and stomach pain [1]. Although CHS was first identified in 2004, it is still underdiagnosed, and the pathophysiology is unknown [2]. Cannabis use is growing in many parts of the world, with some states in the United States legalizing it for medicinal or recreational use [2]. With the rising use of cannabis, it is critical to investigate the potential negative repercussions, including CHS. One of the most significant barriers to CHS diagnosis is a lack of understanding among healthcare practitioners [7]. Many CHS patients are misdiagnosed with other conditions such as cyclic vomiting syndrome, gastroparesis, or other gastrointestinal issues [6,7,8]]. This is due to the lack of accurate diagnostics and the failure to recognize CHS as a distinct clinical entity.
Furthermore, the literature makes contradictory assertions concerning the frequency of CHS. Some studies say that CHS is rare, while others claim that it is more prevalent [4]. This might be due to differences in the diagnostic criteria used in different studies, making it hard to determine the true prevalence of CHS [1,2]. The pathophysiology of CHS is unknown; however, it is thought to be related to the effects of cannabis on the endocannabinoid system [5,9]. The endocannabinoid system regulates gastrointestinal motility and the emetic response. Chronic cannabis use may result in endocannabinoid system dysregulation, leading to the development of CHS [6].
CHS therapy is difficult since no specific medications are currently available. CHS treatment often includes cannabis withdrawal and supportive care, such as hydration and electrolyte replacement [2,5]. To control symptoms, some people may need antiemetic medicines such as ondansetron or benzodiazepines [6,10].

The development of specialized diagnostic tests and personalized medications is one of the future approaches to the diagnosis and treatment of CHS. More research is needed to better understand the pathophysiology of CHS and discover more effective treatments. Furthermore, greater awareness among healthcare practitioners is required to improve CHS identification and diagnosis.
CHS is a clinical condition that is often misdiagnosed and misunderstood. The growing popularity of cannabis emphasizes the need to understand the potentially negative effects of cannabis use, particularly CHS. Healthcare practitioners should be aware of the clinical signs of CHS and include it in the differential diagnosis of chronic cannabis users who experience nausea, vomiting, and stomach pain on a regular basis.

Conclusion:

CHS is an underdiagnosed syndrome that poses difficulty for clinicians due to a lack of knowledge and experience about the condition. CHS is often misdiagnosed as an acute abdomen, resulting in several unnecessary investigations and patients suffering a significant loss of quality of life. Early identification of CHS based on its pathognomonic clinical presentation may avoid unnecessary ED visits, cut healthcare costs, and improve patients' overall quality of life. Clinicians, particularly addiction medicine specialists and psychiatrists, should be made aware of this disorder, and CHS should be included in the differential diagnosis of patients who arrive with violent vomiting and a history of chronic marijuana use. More research is needed to better understand the pathophysiology of CHS and develop more effective treatment options.

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