Adolescent Cannabis Hyperemesis Syndrome During the COVID-19 Pandemic

To the Editors:

We wish to bring to the attention of your readers the potential for an increased frequency in presentation of cannabis hyperemesis syndrome (CHS) in adolescents during the coronavirus diseases 2019 (COVID-19) pandemic. A previously reported 10-year case series from our institution —a 257-bed tertiary pediatric academic facility with an on-site outpatient surgical day center—identified 34 patients with CHS, an average of 3 to 4 patients per year.[1] Patients were included in the series if they had a cannabinoid hyperemesis–related *International Classification of Diseases, Ninth or Tenth Revision*, code and an accompanying diagnosis of nausea and vomiting or abdominal pain. During the 4-month period April 1, 2020, to July 31, 2020, 6 patients who fit these criteria presented. The early COVID-19 pandemic therefore appears to correlate with an increase in adolescent CHS presentation at our single institution.

Cannabis hyperemesis syndrome is an underrecognized condition resembling cyclical vomiting syndrome, which presents in patients who consume cannabis for extended periods of time. Presenting symptoms are nausea, vomiting, and abdominal pain, and a hallmark symptom is compulsive bathing behavior with hot showers. Our group has previously published pragmatic criteria for diagnosis of CHS in adolescents,[1] but the diagnosis is essentially one of exclusion in the presence of a patient-endorsed history of long-term cannabis use and cyclical nausea and vomiting with or without supporting features. The only known long-term effective treatment is continuing abstinence from cannabis use.

The COVID-19 global pandemic has presented the population with unprecedented social, psychological, and economic difficulties.[2] A study of adolescent cannabis use during the early COVID-19 pandemic found a significant increase in the frequency of use by adolescents who were already regular consumers, with depression as a predictive marker.[3] As a result of this increased consumption, it follows that more adolescent patients may develop CHS and therefore present to health care institutions. As the delta variant of severe acute respiratory syndrome coronavirus 2 causes the imposition of socially isolating public health measures around the world, we implore health care providers to remain vigilant for this persistently underrecognized condition. Physicians must take steps to create an environment that facilitates accurate reporting of substance use in adolescents, for instance by using established interviewing tools, such as the home environment, education and employment, eating, peer-related activities, drugs, sexuality, suicide/depression, and safety from injury and violence assessment.[4] They can also request adults involved with the patient's care to give the young person privacy, by leaving the room during this section of the history-taking.

This correlation between the COVID-19 pandemic and the apparent increased frequency of presentation of CHS is an observation of interest, but further epidemiological studies are needed to verify any firm causal link. More work is urgently needed to study the effects of the COVID-19 pandemic on both adolescent mental health and substance use, as, without sufficient support, these detrimental circumstances have the potential to cause long-term harm in this vulnerable population.

Hannah Lonsdale, MBChB
Department of Anesthesiology and Critical Care Medicine
Johns Hopkins Hospital
Baltimore, MD
lonsdale@jhu.edu

Jerry M. Brown, BS
Michael Wilsey, MD
Department of Gastroenterology
Johns Hopkins All Children's Hospital
St. Petersburg, FL

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