ECRONICON OPEN ACCESS

EC GYNAECOLOGY
Research Article

Distinguishing Cannabinoid Hyperemesis from Hyperemesis Gravidarum

Jill Hutton*

Mednax, Sunshine, FL, USA

***Corresponding Author:** Jill Hutton, Mednax, Sunshine, FL, USA.

Received: December 14, 2020; **Published:** May 28, 2021

Abstract

Objective: With the legalization of marijuana in many states, its use is on the rise and consequently, so is cannabinoid hyperemesis syndrome (CHS). CHS causes adverse cyclic vomiting often with abdominal pain in chronic cannabis users. In pregnancy, CHS can be difficult to distinguish from hyperemesis gravidarum, and may not even be considered as the diagnosis. The aim of this study is to query a group of obstetrician/gynecologist hospitalists at a large maternity hospital for pearls on recognizing CHS in pregnancy.

Methods: A group of fourteen obstetrical hospitalists were surveyed regarding whether they have cared for a patient with CHS during pregnancy, and if so, to describe how they distinguish a patient with CHS from one with hyperemesis gravidarum.

Results: Of the fourteen queried, ten respondents (71.4%) have treated patients with CHS in pregnancy. All ten described excessive showering as a sign of CHS. Next, six noted multiple hospital visits and symptoms refractory to antiemetics; five reported odd behaviors and three remarked drug screens positive for other illicit drugs in addition to marijuana.

Conclusion: Clinicians must acknowledge that CHS occurs in pregnancy, and is the more likely cause of hyperemesis, if the patient showers excessively, has multiple visits, suffers with hyperemesis refractory to antiemetics, or exhibits certain odd behaviors as described within this article.

Keywords: *Cannabinoid Hyperemesis Syndrome (CHS); Hyperemesis Gravidarum*

Introduction

As marijuana is now legal in many states, its use is on the rise. Consequently, cannabinoid hyperemesis syndrome (CHS) is also increasing [1,2] and in pregnant women can be difficult to distinguish from hyperemesis gravidarum. CHS, first described in 2004, is a relatively new diagnosis [3]. Although cannabis is known for its antiemetic properties, in some chronic cannabis users, its intake instead results in cyclic vomiting, often with abdominal pain. The use of frequent hot showers alleviates symptoms and is a remedy that most persons with CHS eagerly discover. The symptoms of CHS only truly cease when marijuana use is discontinued. Women admitted with hyperemesis gravidarum may actually suffer from CHS, but as CHS is a relatively new diagnosis, obstetricians may not suspect CHS, nor know how to distinguish CHS from hyperemesis gravidarum [4,5].

Aim of the Study

The aim of this article is to query a group of obstetric and gynecologic (OB/GYN) hospitalists familiar with CHS to create clinical pearls to help distinguish the two diagnoses.

Methods

A group of 14 OB/GYN hospitalists from a large maternity hospital with over 12,000 deliveries per year was queried regarding their experience with CHS in pregnancy versus hyperemesis gravidarum and their responses pooled. They were specifically asked:

- Have you ever diagnosed/treated cannabinoid hyperemesis syndrome (CHS) in pregnancy? (Yes/No).
- If yes: What clinical clues did you notice to distinguish CHS from hyperemesis Gravidarum? Or rather, if you were describing CHS to a doctor who had never heard of it, how would you describe the patient?

This research consists of a survey and no patient data, and is therefore, IRB exempt.

Results and Discussion

Of these 14 OB/GYN hospitalists, ten (71.4%) responded yes to diagnosing/treating CHS in pregnancy; two (14.3%) responded no; and two (14.3%) did not respond. Of those who responded yes, their clinical pearls are categorized in figure 1. The overwhelming clue to CHS is excessive showering by the patients with all ten positive respondents citing showering as a sign to distinguish CHS. Next, six of the ten noted multiple patient visits to the hospital(s) and/or emergency center(s), often extending from before pregnancy to late in the second trimester. Also, six reported that the symptoms of patients with CHS appear refractory to all the usual antiemetics and treatments. Odd behavior, as described by five respondents, included comments on the patients' restlessness, sleeping habits, and disregard for clothing, often laying naked below a sheet. Restlessness was also described as anger, jitteriness and irritability. Anger was a commonly described reaction to confronting patients about marijuana use. Sleeping habits were noted to include sleeping more or less, possibly regarding the same patient, during the same admission; one day described as wired, the next sleeping most of the day. The disregard for clothing led to theories of possible temperature regulation with similar effect to showering, a skin sensitivity of withdrawal, or just an ease of getting back into the shower. Drug screens were noted to be positive for cannabinoids, and often, as regarded by three respondents, other illicit substances too, leading one respondent to stress the importance of drug screening. Lesser responses each by only one respondent included lower socioeconomic status, unmarried status, spitting, and anorexia.

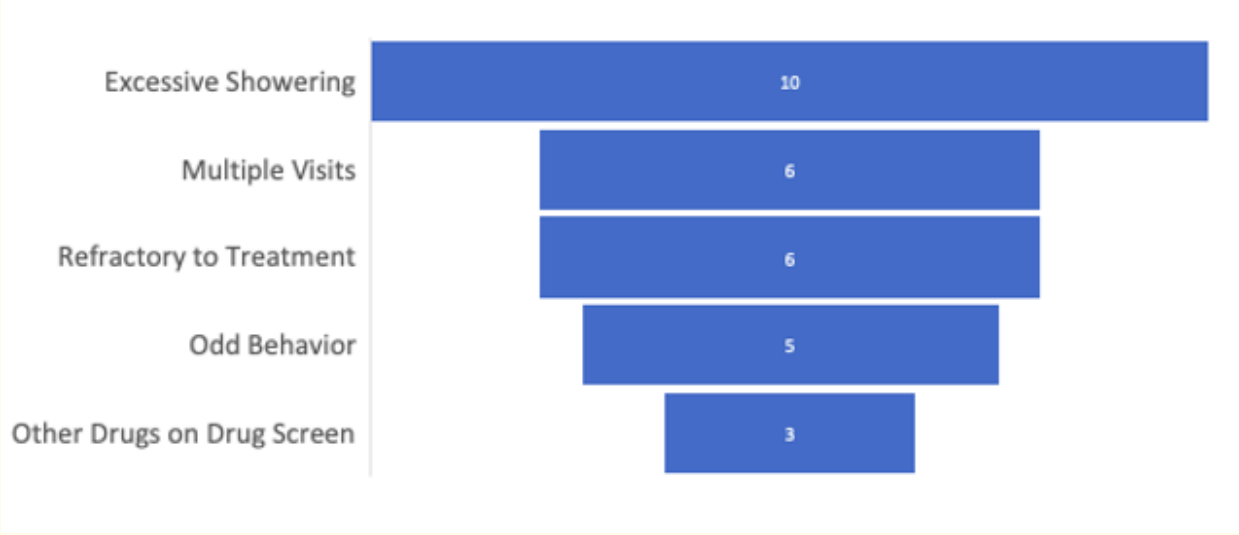

Figure 1: *Clinical features of cannabinoid hyperemesis in pregnancy as given by respondents.*

Of the ten positive respondents the time range of being a hospitalist at this particular hospital is one to eleven years. The two negative respondents have both worked less than a year at this hospital, as have the two non-respondents.

Conclusion

Distinguishing CHS from hyperemesis gravidarum is important as the main treatment is counseling the woman with CHS to stop all cannabinoid use. Without such counseling, her symptoms of CHS recur leading to unnecessary and often costly interventions. In truth, CHS in pregnancy looks much the same as it does in nonpregnant women, and the responses here reiterate much of what is known about the syndrome. Excessive showering is the sign most associated with CHS. Excessive showering should be an easy sign to pick up, but an obstetrician who only visits a patient once a day might miss this activity, or occasionally a patient may be fearful of showering with any lines in place. Obstetricians must be mindful to query the patient and her nurses about her showering habits. Behaviors described by the respondents rather closely mimic those described in nonpregnant populations. Respondents described CHS patients as restless, jittery, angry or irritable. Other studies report symptoms of "agitation, diaphoresis, tachycardia, postural hypotension, subjective fevers and chills, and weight loss" [3]. Altered temperature regulation may result in patients' disregard for clothing, as described above. Of course, some of these behaviors and signs are a direct result of cannabis use or withdrawal, as well as use and withdrawal of other illicit drugs. Dehydration and poor nutrition may also contribute to symptoms. Patients affected by CHS were noted to have many visits, with difficult to treat hyperemesis often refractory to antiemetics. The timing of the hyperemesis was also given as a clue. If the woman has symptoms and visits noted before pregnancy or when her HCG level was just barely positive, the hyperemesis is less likely thought to be from her pregnancy. Hyperemesis gravidarum usually subsides after the first trimester and so if the symptoms continue into the second trimester, this also favors the diagnosis of CHS, according to the respondents. This group of hospitalists may see more cannabinoid hyperemesis as they work in a large referral hospital frequently accepting patients whose providers felt they could no longer adequately treat their patients' symptoms of what they assumed was hyperemesis gravidarum. As this group of respondents is now more aware of the diagnosis of CHS, drug screening is more readily ordered. More data is needed to base recommendations of when to test for CHS, but perhaps a third hospital admission, or before starting invasive treatments such as placing a centralized catheter or administering total parenteral nutrition might warrant investigation. Essentially obstetricians should think about CHS when a patient does not respond to antiemetics and treatments, or in one requiring readmission soon after discharge. The hope is that other practitioners can use these pearls to recognize CHS and appropriately counsel their patients without the need for more specialized care.

Disclosure

The author reports no conflicts of interest. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Bibliography

1. Lapoint J., *et al*. "Cannabinoid Hyperemesis Syndrome: Public Health Implications and a Novel Model Treatment Guideline". *The western Journal of Emergency Medicine* 19.2 (2017): 380-386.

2. Gupta M. "Treating cannabinoid hyperemesis syndrome. Incidence may increase as marijuana use rises". *The Hospitalist* (2018).

3. Alaniz VI., *et al*. "Cannabinoid hyperemesis syndrome: a cause of refractory nausea and vomiting in pregnancy". *Obstetrics and Gynecology* 125.6 (2015): 1484-1486.

4. Committee on Practice Bulletins-Obstetrics. ACOG Practice Bulletin No. 189: Nausea And Vomiting Of Pregnancy". *Obstetrics and Gynecology* 131.1 (2018): e15-e30.

5. Young-Wolff KC., *et al*. "Association of Nausea and Vomiting in Pregnancy With Prenatal Marijuana Use". *JAMA Internal Medicine* 178.10 (2018): 1423-1424.

Volume 10 Issue 6 June 2021