



Cannabis Use Increases the Chance of Postoperative Complications

May 29, 2024

Rachel Y. Moon, MD, Associate Editor, Digital Media, Pediatrics

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Article type: [Pediatrics Blog](#)

Topics: [Substance Use](#), [Surgery](#)

Cannabis can have effects on multiple body systems, including cardiac, respiratory, and neurologic, and there can also be potential interactions with medications. Now that cannabis use is fairly commonplace in many states, we need to consider the implications of cannabis use when we are providing care.

Dr. Brittany Willer and colleagues from Nationwide Children’s Hospital conducted a retrospective study on the association of cannabis use disorder (CUD) and postoperative complications (stroke, respiratory, and cardiac complications) in adolescents (10–17 years of age) who had inpatient surgery in 2009–2022. They report their results in an article entitled, “Trends in Adolescent Comorbid Cannabis Use Disorder and Postoperative Complications,” which is being early released in *Pediatrics* ([10.1542/peds.2024-065757](https://doi.org/10.1542/peds.2024-065757)).

The authors used ICD-9 codes to identify patients with both CUD and postoperative complications.

The authors found that:

- The prevalence of CUD in adolescents undergoing surgery increased from 0.4% in 2009 to 0.6% in 2022.
- Postoperative complications were more frequent among adolescents with CUD (5.9%) versus those without CUD (3.7%).
- Compared to adolescents without CUD, those with CUD had higher odds of postoperative respiratory complications, ICU admission, and postoperative mechanical ventilation.
- Adolescents with CUD were also more likely to have a longer hospital stay than those without CUD.

What can we take away from these results? Since these data were taken from ICD-9 codes, we don't really know how CUD was defined by each person who wrote this down as a diagnosis code. How much cannabis must be used and for how long before one can call it CUD?

Another unanswered question is that we don't know how long before surgery one should stop using cannabis to avoid postoperative complications.

Nonetheless, I think that this article has clinical care implications. When we as primary care providers are doing pre-operative visits, we need to ask about cannabis use; we can discuss how its use can increase the risk of postoperative complications, and we can recommend that our patients stop their use of cannabis, at least until after the surgery.

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