

MVA Trauma Pain and Cannabis

In a study published in the Journal of Safety and Surgery in 2018, four trauma centers collected data through the first quarter of 2016, assessing the use of cannabis and the average daily consumption of pain medications after a traumatic injury due to motor vehicle accident, and it appears that patients who are using cannabis chronically before a motor vehicle accident are requiring more opioids for pain management after the motor vehicle accident.

Cannabis use was reported in 21% of the 261 patients who were followed in the study. More cannabis use was identified in Colorado than in Texas. Cannabis users were also found to consume significantly more opioids during treatment and reported higher pain scores than non-users. Marijuana use was recorded in that 21% of patients, and of those patients, a third reported using marijuana chronically, which is meant to be daily or near-daily use. 51% didn't record an indication, but of those who did, 77% reported recreational use and 22% recorded a medical use.

There were 5,863 separate analgesic doses that were consumed, the majority being opioids. In the setting of a hospital setting, when somebody complains of pain on a zero to 10 scale, one to three typically is treated with Tylenol and Motrin, pain at the rate of three to six is controlled with a lower level opioid like a Tylenol 3 or Norco or Vicodin, and seven to 10 tends to be treated with something like morphine or Dilaudid or a more intense analgesic.

So the pain scores were measured a total of 7,345 times, an average of 7.7 times a day. The pain scores were significantly higher for patients who were using cannabis, a difference of 4.2 on a zero to 10 scale, up to 5.3 for people who used cannabis regularly. There was a 25-37% increase in opioid consumption for marijuana users than non-cannabis users. This suggests that cannabis use affects acute pain management and resulted in an increased amount of opioid analgesics and greater self-reported pain after traumatic injury from motor vehicle accident.

But it's really unclear why. It may be because patients who are using cannabis are aware of the benefit and are going to be less stoic and less tolerant of significant pain. It may be that their personality or physiology led them to be using cannabis on a regular basis and also led them to need additional help with pain management with trauma.

It may also be that other drugs are used more frequently and sometimes the opioid consumption, which we know will increase opioid need post-procedurally or post-traumatically, may have been confused with medical cannabis. It's not clear to me that the researchers very carefully teased out cannabis users who were using opioids in addition, compared to cannabis users who weren't using any other drugs, and it appears from other studies that patients who are simply using cannabis actually have less pain medication needs around the times of planned surgeries.

Substance abusers have higher pain scores compared to non-substance abusers in emergency room studies. But it's important to think of exactly which substance is being abused and exactly how frequently before we can make the decision that this study does truly represent an increased risk of need for opioids after traumatic injury for chronic cannabis users.