

## 2019-04 Cannabis and Pain Meds - 4:10:19, 10.27 AM.mp3

### INTERVIEW DONE OVER THE PHONE WHILE MARK TWARDOWSKI IN GRAND JUNCTION HAS A MOMENT WHEN HE'S NOT SEEING PATIENTS . . .

**Shelley** [00:00:00] OK we should take this moment. So go ahead and tell me your name. And how do I say it.

**Mark Twardowski** [00:00:05] Mark Twardowski.

**Shelley** [00:00:08] Mark Twardowski. And you're based out of Grand Junction.

**Mark Twardowski** [00:00:10] Yes.

**Shelley** [00:00:10] And you just did a study about how much pain medicine it takes for somebody who uses cannabis compared to other people. What did you find out.

**Mark Twardowski** [00:00:18] The study actually looked at how much medication it required for sedation to do endoscopic procedures in folks who used cannabis versus people who don't.

**Shelley** [00:00:29] Such as a colonoscopy?

**Mark Twardowski** [00:00:31] Yes, colonoscopy, upper endoscopy, those kinds of things. And we kept it fairly specific to that so we could more easily tease out the specifics of the cannabis effect. What we found in all three commonly used medications for sedation for endoscopic procedures folks who use cannabis regularly required substantially more medicine to attain appropriate sedation for the procedure.

**Shelley** [00:01:00] Now your data showed that it took about 14 percent more of that opioid like drug that's causing so much trouble -- fentanyl.

**Mark Twardowski** [00:01:08] Correct

**Shelley** [00:01:10] That doesn't sound like very much more.

**Mark Twardowski** [00:01:11] Well, it's a consistent effect if you look at other two medications used Midazolam and Propofol, those effects are even greater. 14 percent more (for Fentanyl) isn't a huge amount more, but it is a significant effect.

**Shelley** [00:01:25] And how much more was it for the medicine where you had to use the most additional med when somebody was a regular cannabis user.

**Mark Twardowski** [00:01:32] The Propofol I don't have the study right in front of me -- I'm seeing patients . . .

**Shelley** [00:01:38] I think it was about 60 percent.

**Mark Tordowski** [00:01:42] Well it was 220 percent for the Propofol.

**Shelley** [00:01:43] Oh my gosh 220 is a lot. What is the significance of this. What does this mean for patients taking these kinds of procedures.

**Mark Tordowski** [00:01:54] The problem is that cannabis has not been appropriately studied because it's been listed as a Schedule 1 drug forever.

**Shelley** [00:01:59] So that means that you can't use federal money to research it.

**Mark Tordowski** [00:02:03] Right.

**Shelley** [00:02:03] And if you were paid by a federal group in any way you're in trouble if you try to research this. Well how did you research this?

**Mark Tordowski** [00:02:08] We did it for free, basically. There's no payment; we weren't reimbursed for our time or anything. We just did because we saw the study, basically was begging to be done. We had noticed a trend that we thought we saw, and instead of just guessing, we actually went back and pulled data and ran the study. What is certainly interesting is that folks who have been told all along that cannabis is completely benign, what they have been told may not be completely accurate because clearly there's some effect in the body that is requiring more medicine to accomplish appropriate sedation.

**Shelley** [00:02:45] Are you opposed to, or okay about cannabis but you just like it to be more studied, or do you just think it's bad?

**Mark Twardowski** [00:02:50] I have no axe to grind this at all. We're completely neutral. We're Switzerland on the use of cannabis. We simply noticed that in a medical setting, there was a trend. What I would say for what patients need to know is that you can't say for sure that the cannabis isn't having an effect on the body because it does seem to effect something that's requiring more medicine to be used for something as simple as a sedation for procedure. The question has to come up next is, is it affecting how pain medicines or other medicines work in those folks. And the science really needs to be done to sort that out.

**Shelley** [00:03:26] Thank you for explaining that. Everybody's kind of locked in because they can't study it if they get any federal monies at all.

**Mark Twardowski** [00:03:33] Ours is the first study, as far as we can tell, that's even been done, looking at this combination of medicines with that effect of cannabis, and that's just really odd because it's not like cannabis is a new thing. Nobody's had the guts to study it because it's . . . it's scary. If you start studying it in any sort of meaningful way, you worry about the federal government. So we simply did a data collection and didn't use any funds to do and just did it because we saw a trend and we thought it needed to be tracked down.

**Shelley** [00:04:07] What's the deal? If somebody uses more pain medicines during a procedure, is it just a matter of them, well heck, they got to use more pain medicine or is there a medically risky thing that happens when more pain medicine needs to be used?

**Mark Twardowski** [00:04:19] The concern is we don't know if the effect that cannabis has on requiring a higher dose of pain medicine is only the analgesic effect or whether it is on the analgesic and respiratory suppression effect. For instance it was only on the analgesic effect. In other words, if the cannabis only makes the analgesic less effective, but also doesn't also delay the onset of respiratory suppression, to where people stop breathing, that could be really dangerous because requiring higher doses to get pain relief, would be pushing it closer to the dose that would make your respiration shut off.

**Shelley** [00:04:57] So this is a stop breathing issue if pain medicine has to go too high?

**Mark Twardowski** [00:05:01] Right. So that's certainly the potential risk. But once again that hasn't been studied at all because, that's some basic science stuff that we haven't been allowed to study. If indeed a pain relief and the respiratory suppression window is closing then requiring substantially higher doses all of a sudden could put you into trouble with respiratory issues. And actually when we go into phase 2 of our study which looks at requirements for post op pain medicine as well as required in environments for all anesthesia, as opposed to just those simple anesthetics used for sedation for procedures like endoscopic procedures, We're going to look at some of those other issues too. How much medicine does it take to control someone's pain post-operatively. And are we getting into more trouble with respiratory suppression.

**Shelley** [00:05:49] And this again will be a volunteer study that you all do. Do you have any guesses from what you've seen that make you think it may go one way or the other? Ie, the post-operative pain recovery?

**Mark Twardowski** [00:06:01] The reason we got into this study is because my post operative nurses are thinking they're seeing trends towards requiring a lot more pain medicines in regular cannabis users post operatively. What we think we see, we're never comfortable with until we can actually it down and look at the numbers and prove it out. But there seems to be trends, and my anesthesiologist friends are noticing the same thing with the other medicines they use for more complete anaesthesia for surgical cases that seems like the trend is they're having to use more medicine. It takes awhile to get a study done, but Phase Two of the study is going to look at those things in more depth.

**Shelley** [00:06:43] Here's to scientific minds and willingness to do a study even if you have to do it for free.

**Mark Twardowski** [00:06:48] Not everything valuable in life pays you money. Sometimes it's just fun to do something that opens some doors and maybe will cause people ask some other questions and advance the whole science.