Pain and Addiction 101

Potent Pearls

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Heit: The first question is I'm going to prescribe my patient a fentanyl patch because it's a patch and it can't be abused. What's your comment on that one?

Gourlay: Fentanyl is 100 times more potent than morphine. Whoever thought that one up should have been shot. There is nothing about a molecule that's 100 times more potent than morphine that should make you think it has a low abuse liability. Any system of delivery that's designed that's clever by a pharmaceutical company can be compromised. The only question is how long does it take and how much effort. Now, an interesting thing about the form-fill-and-seal, the hydroxyethyl cellulose gel with fentanyl base mixed in it, the common way people misuse it is they suck on it. Some swallow it. Some do something called colon rollin' and I'll explain later afterwards if you know what that means, but you can think about it, and it will probably come to you. The third is they draw it up and they shoot it, and some people do shoot fentanyl. They elute the fentanyl base from the hydroxyethyl cellulose gel. The problem is its untitratable, meaning you're as likely to die as get high when you do that. In fact, most of the case reports related to transdermal fentanyl, the form-fill-and-seal, were initial cases of individuals found and resuscitated and then almost invariably found again, and this time they died. So sucking the contents out of a patch that may have 85%, 100 mcg/hr patch of fentanyl contains 10 milligrams of fentanyl base. That's a lot of fentanyl. Now, the fentanyl matrix which has some endearing qualities about it, one being that the molecule is seeded throughout the adhesive evenly, actually has a different abuse liability. Fentanyl is a very stable molecule thermally, and if you heat it up it will vaporize. So if you cut a fentanyl matrix patch up and if you punch a disk out with a Staples® punch that's a 6 mm diameter disk, the patch has about 155 micrograms of fentanyl in it. I know that because we did this in our lab.

Heit: Recreationally?

Gourlay: Recreationally.

Heit: Okay, at lunch time.

Gourlay: We haven't published it, not because I think that if we publish it we're going to send a whole bunch of people off abusing the matrix patch, but somebody is going to think that I'm responsible for a bunch of people who abuse fentanyl patches, and I don't want that. But the fact is the two are apples and oranges with respect to risk. So fentanyl, regardless of how you deliver it, is still 100 times more potent than morphine.

Heit: And remember is that in regards to the street and the street chemists, they skip Phase I and Phase II studies. They go right to Phase III studies, and they're very clever on the street. Just because you have the disease of addiction doesn't mean that you're not intelligent and you don't know your chemistry because they're very wise of how to extract the particular substance that they want.

Could you make a comment. It was in relationship to Ativan or benzodiazepines. Could you make a comment about taking someone off benzodiazepines? Is it easy? Is it hard? What do you find harder, taking somebody off an opioid or somebody off a benzodiazepine?

Gourlay: If you lined up a group of heroin addicts who also had benzo problems and you asked which drug you'd like to kick twice the least, it would be the benzo. The benzodiazepines are the Energizer® bunny of withdrawal, without question. The shorter acting ones have a much more aggressive withdrawal picture, and they're the ones you're more likely to seize from. Clonazepam and diazepam, to a certain degree, have a self tapering quality about them if you taper down slowly. But what you can get away with at the top, in terms of speed of reduction, you can't get away with at the bottom. So we had a patient who was on, I think, 12 mg of Xanax® a day, and she was converted from morphine on to methadone, and she had tapered off her Xanax®. When she was put onto the methadone, she and her doctor both decided they'd just stop the 0.25 mg of Xanax® that she was on. She went from 12 mg to 0.25 in a month with relative ease. But in going from 0.25 to zero, she totally decompensated. He was chasing her withdrawal syndrome associated with benzos with methadone which, in fact, covered many of the symptoms initially, but ultimately she would have seized if they had kept on going on that road or overdosed from a methadone death. The point is when you get down to the bottom, it's more difficult. So a general rule for tapering is 10% every one to two weeks until you get down to the bottom third, and then it's 5% every two to four weeks. And that will

work for just about any drug. All it means, you can drop 10% quickly from a big number to a small number, but you better slow down and go 5% when you go from a small number to zero.

Heit: Can you repeat that?

Gourlay: As a general rule for most drugs, reduce the start dose by 10% every one to two weeks until you get down to the bottom 20 to 30%, and then reduce the drop to 5% and double the length of time the patient has to accommodate for the neurochemistry to adapt. What some people are doing with benzodiazepine withdrawal is they're using relatively small amounts of gabapentin, and this has been quite effective at reducing the cravings associated with benzo withdrawal. The interesting thing about gabapentinoids is there is a withdrawal syndrome associated with gabapentin, and some people have quite protracted and fairly well defined withdrawal from gabapentin. It makes sense that if it's good for tapering benzos, you probably wouldn't be surprised that it has its own withdrawal syndrome.

Heit: That ends our conference. I really compliment the audience on their questions. The attendance was excellent. People stayed to the end. This is the second time that we have done this conference for the American Academy of Pain Management. We thank them very much for inviting us a second time. Don't forget to fill out your forms for evaluations, both for evaluations so we know what's the good, the bad, and the ugly of the course and so you can receive your CME credits. Also, I want to thank Cephalon for their unrestricted educational grant, ROI Media, and ESP, Emerging Solutions in Pain. I hope you all have a nice trip home and enjoy the rest of your conference, and thank you for coming.