

Dr. Jose Lança - Special Series Part One, Impairment and Intoxication: Cannabis and Dental Management

Dr John O'Keefe: The federal government has recently introduced legislation about cannabis and also the government takes a great interest in managing the opioid crisis. These two issues, opioids and cannabis, are generating quite a lot of questions from dentists and I'm caught up today with Dr Jose Lança, who's a medical doctor who teaches pharmacology to both medical students and dental students at the University of Toronto to ask him one of those questions. Jose, what are the implications of consuming cannabis and alcohol together? And I suppose we can talk about the patient and the dentist.

Dr John O'Keefe: Absolutely. That's a nice question. Actually, that's an excellent question. In order to illustrate the point in a clearer way for the viewers, I have organized a couple of slides that will facilitate the understanding of the topic and provide some numbers.

Dr John O'Keefe: Let's go have a look at that.

Dr John O'Keefe: So, I have a few slides to illustrate that point and it relates to the situation that we have currently after the approval of, or the legalization of marijuana for nonmedical purposes, which is Bill C-45 and the consequent adjustments that have been made to the criminal code in Bill C-46 and they relate specifically but not exclusively to the Cannabis Act - Drug Impaired Driving Offences. It basically states that there is a grey area when an individual is tested for cannabis and that is between 2 nanograms (ng) but less than 5 ng. When the concentration of THC is 5 ng per millilitre (ml) of blood or higher within two hours of driving this should be a hybrid offence. At this point what I would like you to focus on is the number 5, 5 ng or more of THC. That is if THC is the only chemical present.

Dr John O'Keefe: So as the question relates to the interaction between alcohol and cannabis, specifically it's active component THC, let's look at this. What the law says specifically, and based on research and using previous [inaudible] as well, is that when we combine THC and alcohol we have to lower or if you have to lower to not .08 but .05 or 50 milligrams (mg) of alcohol per a 100 mg of blood combined with a concentration of THC that is not 5 or higher, but rather just half of that, 2.5 within two hours of driving. So to use a better visual tool, I will say that in the case of coexistence or co-use of alcohol and cannabis the concentration allowed by law has to be less than 50 mg, or .05 for alcohol, and for THC less than 2.5 rather than 5 ng/ml.

Dr John O'Keefe: The reason why the numbers have been so radically lowered is because of the pharmacodynamic interaction between these two compounds. So each of them individually impairs motor ability and behaviors and coordination, but together there is a potentiation of effects. So therefore that is the scientific and

pharmacological reason why in the case of coexistence of both substances, according to the law we have to consider an individual impaired if the

concentration of alcohol is 50 mg/100 ml or if you will .05, as we usually say, or a concentration of THC of less than 2.5, which is half of the minimum acceptable prior to the drug being present alone. So both of them have an interaction, potentiation of effects and impaired cognitive and behavioral functions, and that is basically what my answer is to clarify this point. This is not a matter of personal opinion. I would like to emphasize that I'm just quoting to you directly and clearly what the law states in Canada.

Dr John O'Keefe: So it's almost like that the legal limit for both of those, if they're consumed together, is half the regular and you certainly can't drive for two hours. You gotta leave the car with the keys out of it for at least two hours and it's only half the amount of each of those substances, if they're consumed together.

Dr John O'Keefe: Absolutely. Absolutely.

Dr John O'Keefe: Dr. Jose Lança, thank you very much for clarifying this very important point.