

Pathology/Biology Section - 2015

H120 Marijuana Edible Consumption as a Contributing Factor in Death: Two Cases and Live Anecdotal Accounts

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After attending this presentation, attendees will have a better awareness of the manifestations of marijuana edibles as a possible contributing factor in various manners of death.

This presentation will impact the forensic science community by presenting the autopsy findings and circumstances surrounding two deaths associated with marijuana edible consumption in Denver, CO. In addition, anecdotal accounts from the State of Colorado Marijuana Enforcement Division will be discussed in an effort to further understand the characteristics of this phenomenon and potential outcomes.

Introduction: As of November 6, 2012, the State of Colorado approved Amendment 64 which included legislation governing commercial manufacturing of marijuana products and retail sales. As a result, there has been an increase in recreational marijuana consumption, including marijuana edibles. Popular marijuana edibles available for purchase include cookies, candy bars, rice crispy treats, peanut butter cups, gummy bears, and various pastries. Currently, there have been two deaths in Denver, CO, where marijuana edible consumption played a contributing role to a variable degree in the cause of death.

Case 1: A 19-year-old African male and his three friends recently traveled from Wyoming to Denver, CO, for spring break and were residing in a hotel room on the 4th floor. According to his friends, the decedent consumed marijuana cookies and soon thereafter exhibited hostile behavior (pulling items off the walls) and spoke erratically. The decedent's friends attempted to calm him down and were temporarily successful; however, the decedent then reportedly jumped out of bed, went outside the hotel room, jumped over the balcony railing, and landed on the interior atrium floor. The decedent was pronounced at the scene. Autopsy findings included multiple injuries compatible with a fall from height; toxicology was positive for Delta-9 THC in the chest cavity blood.

Case 2: A 44-year-old Caucasian female contacted 911 requesting assistance as her husband was acting strangely and reportedly having hallucinations after consuming marijuana candy. The decedent repeatedly requested assistance and asked for authorities to hurry up as her husband was retrieving a gun from the safe. The 911 dispatcher heard a loud scream followed by the sound of a gunshot. Autopsy findings included a contact-range gunshot wound to the woman's head. The decedent's toxicology results were negative. The decedent's husband was arrested and is currently awaiting trial.

Discussion: Given the recent legalization of recreational marijuana use in Colorado, the resulting clinical manifestations of marijuana edible consumption are more formally becoming further elucidated. In addition to Case 1 above, anecdotal reports of post-consumption clinical symptoms have been reported by living individuals to include paranoia, suicidal ideation, and hallucinations. The possibility of these clinical symptoms playing some role as a contributing factor in a death should be considered in the appropriate forensic setting.

Marijuana, Edible, THC