

P98. CASE REPORT: DEATH FOLLOWING SYNTHETIC CANNABOID ABUSE

Volkan ZEYBEK^{1*}, Tuba YAMAN², Kemalettin ACAR², Özgür DEMİRKAN¹, Semih PETEKKAYA³

¹Council of Forensic Medicine, Denizli, TÜRKİYE

²Department of Forensic Medicine, Pamukkale University Medical Faculty, Denizli, TÜRKİYE

³Council of Forensic Medicine, Malatya, TÜRKİYE

Synthetic cannabinoids are increasingly used in Turkey as marijuana substitutes. However, reports of severe toxicity, resulting from their use, are limited. We present the case of death following synthetic cannabinoid inhalation with antemortem hospital records, autopsy findings, postmortem histopatologic and toxicologic analyses results.

A 20-year-old man with no significant medical history presented at the emergency department with loss of consciousness and hyperthermia. He had smoked a synthetic cannabinoid product called "bonsai", had drunk alcohol and took some drugs prior to the onset of symptoms. Physical examination showed heart arrhythmic and tachycardic, decreased breath sounds, body temperature 40,7 °C, then intubated. Laboratory evaluation, blood pH 6,9, ethanol 30,3 mg/dl, troponin I >50000. CK-MB >1000. Cardiac arrest became, CPR began and he was dead. Postmortem examination, we saw subepicardial hemorrhagic area at left ventricle and hemorrhagic areas at apex in myocardial sections. Histopatologic findings, there was focal bleeding between subendocardial myocardial fibers. Toxicologic findings, analysis of blood by LC/MS procedure confirmed presence of JWH-018 and MDA (methylelendioxyamphetamine), internal organ samples by GC/MS procedure showed presence of DDE (diphenyldicloroethylen).

Synthetic cannabinoids are legal in many parts of the world and easily obtained over the Internet. Data on human toxicity are limited and real-time confirmatory testing is unavailable to clinicians. Clinicians, lawmakers, and the general public need to be aware of the potential toxicity associated with synthetic cannabinoid use.