CASE STUDY

93. Kratom Khaos: Tracing the Medical and Societal Toll of Kratom Use in Kentucky

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Background: Kratom, derived from a tree species native to Southeast Asia and used in traditional medicine, is gaining popularity within the United States. While at low doses it is intended for stimulant use, higher doses of kratom can achieve analgesic effects similar to opiates. It's use and misuse continues to be an area of interest given its unregulated status and propensity for addiction and abuse. Here we present four cases of kratom abuse observed in the inpatient and outpatient settings in southcentral Kentucky.

The Case: First, 20-year-old female with medical history of anxiety and major depressive disorder presented to the emergency department due to symptoms of restlessness, body aches, chills, nausea, palpitations and loose stools. Patient revealed she has been taking 7-8 kratom tablets daily and had attempted immediate cessation but relapsed due to her symptoms. In clinic follow up, she was started on Atarax and methyl salicylate patches for symptom control and is currently in process of tapering off Kratom. Next, 49-year-old male with history of hypertension, chronic kidney disease, hyperlipidemia, and chronic pain presented to clinic with recurrent hypertensive episodes. He disclosed chronic use of kratom following MVC 5 years prior, currently taking 10 g every 4-5 hours. With a desire to cut back, the patient and his physician through shared-decision making created a tapering plan. With a slow taper, he has not reported any withdrawal symptoms. As his kratom use trends down, he will be referred to a pain management specialist for chronic pain. Additionally, 18-year-old male with no significant medical history was brought to the ED being found unresponsive and foaming at the mouth. He was tachypneic, tachycardic, and hypotensive with a mildly elevated troponin. After receiving Narcan and IV fluids, the patient became responsive. Patient disclosed he was taking two 50 mg packages of kratom alongside marijuana and alcohol for recreation. After returning to baseline, the patient was discharged with close outpatient follow up. Lastly, 38-year-old female with medical history of anxiety/depression, seizures, and thyroidectomy complicated by vocal cord dysfunction presented to the ED after being found minimally responsive by family. Family explained the patient took up to 60 kratom tablets daily and she was found to have urine mitragynine level > 2500. Patient initially displayed nonsensical speech, paranoia, and hallucinations, but progressed to hypersomnolence with subsequent seizure and catatonia necessitating ICU admission. Ultimately transferred to tertiary center for benzodiazepine challenge and possible ECT.

Conclusion: Presently, the United States does not regulate the manufacturing or distribution of kratom. In fact, very little is known about the long-term effects or safety profile. Due to the demonstrated potential for abuse and harm, six states have made the drug illegal. From our patient interactions, the common theme is one of surreptitious addiction, monetary strain, and little understanding of the risks inherent to what was marketed as a natural supplement. Further research is warranted appropriately counsel our patients to the potential dangers recreational kratom use poses and improve the understanding of the medical and socioeconomic impact of its wide availability.

Table 1. Kratom Cases

Age/Sex	Kratom Use	Presentation
20F	7–8 tablets daily; abrupt cessation attempted	Withdrawal symptoms: restlessness, body aches, chills, nausea, palpitations, loose stools
49M	~10 g every 4–5 hours for 5 years	Recurrent hypertensive episodes
18M	Recreational: 2 × 50 mg packets + marijuana + alcohol	Found unresponsive, foaming at mouth; tachypnea, tachycardia, hypotension; elevated troponin
38F	Up to 60 tablets daily; urine mitragynine >2500	Nonsensical speech, paranoia, hallucinations → hypersomnolence, seizure, catatonia → intensive care unit

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