A Rare Case of Kratom Induced Seizures
Maria del Pilar Morel, M.D., Wan Hsiang Chen, B.S., Jean-Michel Oquet, M.D., Haritha Mopuru, M.D., Edward Mensah, M.D.
Department of Medicine, St. Vincent’s Medical Center, Bridgeport, CT
Quinnipiac University Frank H. Netter MD School of Medicine

LEARNING OBJECTIVES

• Recognize that Kratom use is a rare cause of seizures.

• Highlight the importance of a thorough history with attention to herbal product use in cases where there are no clear causes of a patients’ symptoms.

CASE PRESENTATION

A 39-year-old Caucasian woman presented to the emergency department (ED) after a witnessed tonic-clonic seizure at work followed by transient right-sided weakness.

HPI: The patient reported feeling not like herself before the onset of events. On arrival to the ED her weakness had resolved but she continued to have postictal confusion and lethargy. She had a second episode of seizure in the ED. Upon regaining consciousness, she revealed she had been drinking tea made of an unspecified amount of Kratom powder in order to reduce her anxiety and alcohol cravings.

PMH: History of Generalized Anxiety Disorder, Major Depressive Disorder, and Alcohol Use Disorder, without prior history of seizures.

Physical Examination: Unremarkable.

Laboratory/Imaging Data: There were no metabolic abnormalities on laboratory results. Urine toxicology was negative. CT Head/Spine was without any acute abnormalities. MRI Brain and EEG were both unremarkable. Neurological workup was completely within normal limits.

Hospital Course:

• In the ED, intravenous levetiracetam was administered, followed by maintenance dosing.

• There were no further episodes of seizures.

• Levetiracetam was discontinued as seizures were determined to be provoked.

• Patient was strongly advised to discontinue Kratom use.

WHAT IS KRATOM?

- Kratom or Mitragyna speciosa is an endemic tree to Southeast Asia.

- Commonly used as an analgesic, stimulant, natural alternative for reducing alcohol cravings and opioid withdrawal symptoms, and anxiety management.

- Over the years, consumption has increased in the United States, with as many as 3-5 million users.

- The two active components of Kratom, mitragynine and 7-hydroxymitragynine, both have opioid activity leading to dependence and addiction.

- Other than the side effects listed above, Kratom-related acute liver injury and hypothyroidism have been described in several case reports.

REFERENCES


DISCUSSION

Kratom is currently listed by the Drug Enforcement Administration as a drug of concern. However, it is not illegal and is easily obtainable over the internet. In 2018, the U.S. Food and Drug Administration released a statement attributing 44 deaths to Kratom use. In 2019, the Centers for Disease Control and Prevention reported 91 deaths related to Kratom use. Our patient presented with seizures, one of the many known adverse reactions following the use of this herbal medicine. Our case exemplifies the risks of Kratom use and the necessity for regulation of this medication. While it has the potential to be used as an alternative for opioid withdrawal treatment, its side effects should be thoroughly investigated as more people are using Kratom as self-treatment with no established dosage guideline, leading to the adverse effects that has been described in this and other case studies.

CONCLUSION

Kratom’s known adverse reactions, documented side-effects and easy accessibility through the web make this substance quite dangerous for indiscriminate and uncontrolled use. Appropriate agencies should impose tighter regulatory control on “herbal/natural medications”.

_0.07.png