

### INTRODUCTION

Kratom and Kava use for medicinal and recreational purposes is rising across the U.S., despite limited regulation. Both are linked to dependence and withdrawal due to receptor activity as follows:



*This case reviews managing Kratom and Kava withdrawal with PRN medications commonly used for opioid withdrawal.*

### CASE

A 26-year-old male presents with Kratom/Kava withdrawal after using "Feel Free Tonic" Kratom/Kava, purchased from a gas station, to stay alert during night shifts. Over the course of a year, his daily intake increased from 1 to 8 bottles due to tolerance and withdrawal symptoms upon cessation. His last dose was 4 days ago. He reports severe anxiety, insomnia, nausea, abdominal discomfort, constipation, diarrhea, and fatigue, with normal vitals and a COWS score of 5.

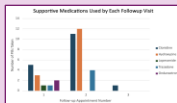
### METHODS

Our patient's symptoms resembled opioid withdrawal due to Kratom's opioid and alpha-2-receptor activity, with added excitability from Kava's GABA-A receptor potentiation. We prescribed the following PRN medications, commonly used for acute opioid withdrawal:

- Clonidine 0.1 mg Q4H
- Hydroxyzine 25 mg Q8H
- Loperamide 2-4 mg Q8H
- Ondansetron 4 mg Q8H
- Trazodone 50 mg nightly

### RESULTS

The medications relieved withdrawal symptoms



- **Visit #2 (Day 5):** Cravings with restlessness, anxiety, nausea, cramping; diarrhea resolved. COWS: 4.
- **Weekend (Days 6-7):** Minimal cravings, persistent though improved anxiety, irritability, night sweats, no Ondansetron/Loperamide.
- **Visit #3 (Day 8):** No cravings, significant improvement in anxiety, irritability, fatigue, sleep. COWS: 2

### CONCLUSION

- Kratom withdrawal resembles opioid withdrawal due to mu-opioid receptor agonism
- Kratom withdrawal also presents as noradrenergic hyperactivity due to alpha-2 adrenergic receptors effects
- Kava withdrawal presents with severe anxiety, muscle spasms, and insomnia due to its GABA-A receptor potentiation
- Supportive PRN medications typically used for relief of opioid withdrawal provided relief of Kratom/Kava withdrawal symptoms in our patient.
- Increased attention, research, and regulation of these products are needed to

### AUTHORS & DISCLOSURES

Cynthia Pathmathasan, MD, MA; Julie Kmiec, DO. The University of Pittsburgh Medical Center (UPMC), Pittsburgh, PA, USA. Nothing to disclose

### REFERENCES

Please scan QR code for supplemental information and complete list of references.