# **CBD** oil: Leading patients to safe use

Whether the topic of cannabidiol (CBD) oil comes up during inpatient medication reconciliation or on the sales floor when a patient is looking for a pain reliever, pharmacists are going to get plenty of questions: Will it work for pain? Will it help insomnia? Can it ease anxiety? Although data on optimal use of CBD oil for different conditions are limited, pharmacists can guide their patients on safe use.

## What do we know?

"Most of what we know about CBD oil comes from the Epidiolex package insert and pivotal trials," said Jacquelyn Bainbridge, PharmD, FCCP, MSCS, professor at the University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences in Aurora, CO.

Epidiolex ([CBD] GW Research) was approved with a relatively narrow indication—treating severe seizures due to Lennox-Gastaut syndrome or Dravet Syndrome in those 2 years of age or older. "We don't know if all the information [from clinical trials] translates [to OTC use for other conditions], but it's the best we have," Bainbridge said.

Outside of the Epidiolex trials, researchers continue to look for evidence of effectiveness and data supporting use of CBD oil for muscle spasticity, pain, and nausea and possibly even for cachexia or posttraumatic stress disorder.<sup>1</sup>

Patients who may have heard about prescription Epidiolex for treatment of seizures should be counseled to seek care from a physician, as OTC CBD oil is not approved for seizure disorders and should not replace prescription medications.

## Dosing

For dosing, Bainbridge recommends following the product's labeling or the dosages tested with Epidiolex—2.5 mg/kg twice daily and titrating up to a maximum of 10 mg/kg twice daily, if needed. If the patient has hepatic impairment, however, lower doses are needed, depending on the level of impairment.

Because products vary widely in how CBD is supplied, the risk of therapeutic error may be increased. In the event of an overdose, Jami Johnson, PharmD, DABAT, assistant managing director at the Oklahoma Center for Poison and Drug Information in Oklahoma City, recommends calling the Poison Control Center at 800-222-1222. "Each exposure should be handled on a caseby-case basis," she said.

#### **Adverse events**

Sedation is a common adverse event in patients taking CBD oil. This can be potentiated in patients who also take benzodiazepines, especially clobazam, diazepam, and lorazepam, due to CYP450 interactions.

In addition, GI upset is common in patients taking CBD oil. Bainbridge said the jury is still out on whether GI adverse events are dose related, but she suspects they could also be attributed to additives, such as sesame oil, and not necessarily to the active component. Patient-specific product selection may help curb GI effects if an additive is the culprit.

An increase in serum transaminases (ALT and AST) was seen in Epidiolex clinical trials and may be seen in patients taking OTC CBD oil. When counseling patients, it is important for pharmacists to mention the potential for liver damage, especially if patients are taking other hepatotoxic medications, such as valproate. Patients should see a physician for monitoring of liver enzymes when appropriate.

Regardless of the intended use or risk of drug interactions, Johnson recommends that patients get input from a physician. "I would urge anyone considering a cannabinoid product to please consult with their [primary care provider] before they start using it," she said.

### Not a cure-all

Medical use of cannabis and CBD oil continues to receive a generous amount of media attention. With advertisements and proponents urging its use, patients might find it difficult to

determine fact from fiction. Bainbridge reminds pharmacists to inform patients that CBD oil is for management of symptoms only.

"A lay person may think it's curative, but as far as we know, based on clinical trial data it is for symptom management at this point in time," she said.

Optimizing CBD oil use may still be a mystery in many ways, but Bainbridge is open to receiving infor-

"I would urge anyone considering a cannabinoid product to please consult with their providers before they start using it."

mation and feedback from patients. "There is still a lot

that we don't know and haven't been able to study, but we can listen to what our patients tell us."

#### Reference

 National Academies of Sciences, Engineering, and Medicine. 2017. The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research. Washington, DC: National Academies Press. doi:10.17226/24625

Reagan A. Williams, PharmD, contributing writer