

# HOW TO EDUCATE CLIENTS ON CBD OIL USE

By Angie Krause DVM, CVA, CCRT

**T**hey were getting such great results with their personal anxiety, body aches and pains, and other conditions, and wanted to extend those same results to their pets.

At the time, I knew very little about marijuana or even cannabidiol (CBD). Soon, I noticed a trend with many of my patients being dosed with marijuana, either intentionally or accidentally. It was then when I began to educate myself about the cannabis plant in order to have informed discussions with clients about the pros and cons of its use in dogs and cats.

Both the hemp and marijuana plant have identical appearances, and both are classified as cannabis. The hemp plant is very low in tetrahydrocannabinol (THC) (less than 0.3 percent) and is high in other medicinal components called phytocannabinoids (CBD, cannabigerol [CBG], cannabinal [CBN], etc.). The marijuana plant is very high in THC and lower in the other phytocannabinoids. THC has psychoactive properties, which cause the infamous “high” when using marijuana, while most of the other phytocannabinoids like CBD do not.

There also are many legal differences between hemp and marijuana. Currently, marijuana is federally illegal, while hemp is federally legal. Many states have legalized both marijuana and hemp. THC continues to be a Schedule I substance, and is, therefore, illegal to prescribe in veterinary medicine. This may change in decades to come as we discover its therapeutic value in both people and animals.

There is a biological system we were not educated about in veterinary school called the endocannabinoid system. This is a neuromodulatory system composed of cannabinoid receptors, endogenous cannabinoids, and the enzymes

responsible for the regulation of cannabinoids. This is the system the phytocannabinoids found in cannabis affect to influence inflammation, immune function, brain function, and mood.

Few studies have investigated the use of hemp extract in dogs, and there are no published studies investigating the therapeutic effects of hemp in cats. I discuss some of these studies in the below. I anticipate more studies will be completed as federal regulation of the plant continues to shift, and as more pet guardians continue to administer this herb to their pets.

## Application/Case selection

**Osteoarthritis.** This application of hemp-derived CBD has been studied both at Colorado State University and Cornell University<sup>1</sup> for treating osteoarthritis in dogs. In my clinical experience, CBD is also effective in treating osteoarthritis in feline patients. I recommend starting with 0.5 mg/kg of CBD twice daily and increasing up to 2 mg/kg until desired effect is reached.

**Anxiety.** I have found hemp-derived CBD to be effective for mild to moderate anxiety in both cats and dogs. In cases of severe anxiety, CBD can be considered in conjunction with other therapies such as SSRIs, trazodone, clonidine, and other anti-anxiety medications.

**Cancer.** When clients receive a cancer diagnosis with a grave prognosis, they often turn to alternative therapies. As a holistic veterinarian, it is my opinion many of these therapies can be a waste of time and money. However, it is my experience CBD can be quite helpful for feline and canine cancer patients.

Hemp extract can improve nausea, increase appetite, decrease anxiety, and help relieve minor

aches and pains. For my cancer patients, I begin with 1 mg/kg twice daily. It is important pet parents understand CBD is not effective as a stand-alone treatment for cancer or cancer pain. Until further investigation has been done, I recommend withdrawing CBD two days before radiation and chemotherapy treatments.

**Seizures.** This is perhaps the most popular use of CBD in dogs and cats. There has been one study performed at Colorado State University investigating the use of CBD in dogs with epilepsy, with promising results when using doses at 2.5mg/kg twice daily.<sup>2</sup>

I have had very mixed results in practice with the use of CBD alone to treat seizures. If a patient has had seizures and the guardians do not elect to start anticonvulsants, I start with 1 mg/kg of CBD twice daily. For some patients, this will control seizures completely or achieve

an acceptable seizure interval. I have used doses up to 3 mg/kg twice daily, but more data is needed to understand a true therapeutic dose.

It is important to educate clients about the many anticonvulsant options available and untreated seizures damaging to the brain. If, at any time while trying CBD, my patient experiences cluster seizures, I recommend starting, adding, or adjusting doses of traditional anticonvulsants.

Owners who have their pets on several anticonvulsants may want to try CBD as a more natural approach. In these cases, I advise these guardians to add CBD in addition to their pets' current anticonvulsant regimen. Many guardians are not aware of the risks when stopping anticonvulsants abruptly. If the CBD is proving effective, consider decreasing the seizure medication causing the most



## Dogs and cats can share

CBD products marketed for dogs or for cats can generally be used for either pet; the biggest difference is flavor. Fish is more common for cats, while peanut butter is popular for dogs. Clients should be educated pets cannot be given CBD products made for humans; there are often flavor additives, such as peppermint, which are toxic to pets. ●

undesirable side effects.

**Other applications.** In my experience, there are very few downsides, beyond expense, to trying hemp-derived CBD for dogs and cats for a variety of ailments. I have had success with some kitties with chronic herpes virus symptoms, cats with inflammatory bowel disease, and atopic dogs.

### Adverse reactions

I have seen very few adverse reactions in dogs and cats when using CBD in my practice. On rare occasions, I have seen hemp extract cause diarrhea and mild sedation.

The cannabis industry is growing, and hemp-derived CBD is becoming more available. As our clients continue to personally

reap the benefits of this plant, they will likely desire equal benefits for their beloved pets.

As veterinarians, it is our job to educate ourselves to better advocate for our patients and clients. I encourage you to create an environment to allow your clients to safely inquire about anything from CBD to marijuana. A non-judgmental environment is the most effective way to educate your clients and to keep your patients safe. ●

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### REFERENCES

1. Gamble LJ, Boesch JM, Frye CW, et al. Pharmacokinetics, Safety, and Clinical Efficacy of Cannabidiol Treatment in Osteoarthritic Dogs. *Front Vet Sci.* 2018; Jul 23;5:165. doi: 10.3389/fvets.2018.00165. PMID: 30083539; PMCID: PMC6065210.
2. McGrath S, Bartner LR, Rao S, et al. Randomized blinded controlled clinical trial to assess the effect of oral cannabidiol administration in addition to conventional antiepileptic treatment on seizure frequency in dogs with intractable idiopathic epilepsy. *J Am Vet Med Assoc.* 2019; Jun 1;254(11):1301-1308. doi: 10.2460/javma.254.11.1301. PMID: 31067185.

## Selecting CBD

Hemp extract is primarily available as either a full- or broad-spectrum oil.

A full-spectrum product contains all the phytocannabinoids like CBD, CBG, CBN, THC, and terpenes. A broad-spectrum hemp extract contains the phytocannabinoids and terpenes without any trace of THC. Both broad and full spectrum formulations are acceptable for both cats and dogs.

CBD isolate is available in a powder formulation and is more economical. However, CBD may not be as effective without the other phytocannabinoids and terpenes found in hemp extract. As we learn more, other phytocannabinoids such as CBG and CBN may be discovered to be more effective than CBD.

If you are selecting a CBD brand to sell or recommend, consider the following:

- 1) Certificate of Analysis (COA). Request a COA from the company to ensure the cannabis was grown organically and the extract does not contain traces of solvents. This COA also guarantees there is less than 0.3 percent of THC and the amount of other phytocannabinoids like CBD, CBG, and CBN are in reasonable amounts.
- 2) I recommend using extracts with no less than 15 mg of CBD per milliliter for cats, and 30 mg of CBD per milliliter for dogs. The more concentrated formulations make for easier dosing. However, if a product is too concentrated, it may be less palatable. ●

