

CBD for Dogs? New Research Backs Canine Cannabis Use for Osteoarthritis

By Emily Earlenbaugh, Forbes



Is your dog suffering from canine osteoarthritis? A new study suggests that CBD may help dogs with this painful arthritic condition.

Canine osteoarthritis is an inflammatory condition marked by pain, stiffness, and loss of mobility. And it can leave dogs lethargic, irritable and reluctant to play, run or jump. Unfortunately, the condition is all too common in dogs. Researchers estimate that it affects at least 20% of all dogs older than 1 year old, with higher risk for older dogs.

The recent study, published in the journal PAIN, looked at whether different doses and formulations of CBD might help dogs suffering from osteoarthritis - and the results suggested that it could.

Researchers from Baylor College of Medicine worked in collaboration with the CBD brand Medterra on the randomized, double-blind, placebo-controlled study. The 4 week study included 20 large dogs diagnosed with osteoarthritis who were randomly assigned to receive either a placebo or one of three different CBD options. The dogs were evaluated before and after the regimen by both veterinarians and their owners on factors related to their mobility and pain. Details about the amount of CBD each dog was taking was kept from the owners and veterinarians so that it wouldn't influence their evaluations.

While the placebo group and the low CBD group showed no improvement, by the end of the one month period, the group of dogs who took higher doses of CBD or used CBD in a liposomal formulation saw significant improvement in their mobility and quality of life.

“I openly admit that I was surprised at how quickly we saw such large results” says Matthew Halpert PhD, Faculty with the Department of Pathology and Immunology at Baylor College of Medicine and Senior Scientific Advisor for Medterra. “I would not have expected to see too much of anything in just one month.”

Halpert, who designed the experiment, explains that in the placebo and lower dose groups, the owners reported their dogs to be “just as miserable as before” and veterinarians didn’t see any improvement in the dog’s mobility. But in the two higher dose groups “almost every dog saw significant improvement in their conditions, in regards to reduced pain and increased ability to move around. And the dogs seemed happier and were able to do more.”

Even two weeks after the dogs stopped taking the CBD, those in the higher dose groups were still showing improvement. “This would tell us that the CBD was in fact addressing the underlying inflammatory issues” Halpert explains. “It wasn't just masking the pain”

These results add additional scientific backing to the emerging market of CBD for pets. There is currently a wide variety of products geared towards dogs and other pets. According to the Brightfield Group, a consumer research group focused on the cannabis space, the US Pet CBD market expanded by more than 10 times its 2018 size in 2019, producing \$321 million in sales. In 2020 it is projected to reach \$563 million in sales.

The research also lends support to reports of success with CBD from dog owners, such as Zoe Lilly, who lives in Oxfordshire England with her 7 and a half year old dog Zeus - a Rhodesian Ridgeback. Zoe says she noticed Zeus getting a little stiff on one leg, so she decided to try out CBD. She says “It’s made his movement more fluid and he can play pretty well.” Zoe hasn’t noticed any negative side effects in Zeus since starting, but she does report noticing that it helps relax him before vet visits.

While there has been previous research suggesting CBD can help with canine osteoarthritis, this study looked at both traditional CBD and CBD in a liposomal formulation, a method used to make it easier to absorb CBD, which isn’t very bioavailable on its own. “It's kind of like a Trojan horse, or a water balloon” explains Halpert. “We put the CBD inside of that and the liposome itself, the balloon itself, is actually very bioavailable.”

When ingested, liposomes are said to be more easily absorbed into the bloodstream of both humans and dogs, making it easier to absorb CBD. In this experiment, dogs taking a daily dose of 20mg’s of liposomal CBD did significantly better than those who took 20mg’s of traditional CBD, adding some evidence to the theory.

Still, other experts disagree. Stephen Cital, a veterinary anesthesia & pain management specialist points out this study didn’t test the CBD levels in the blood after dogs ingested these two CBD options. They just looked at the outcomes in the dogs’ behavior. He’s not convinced liposomes make a difference.

“I have never seen an added benefit to liposomal encapsulation with these molecules” he explains “I think in theory makes a lot of sense, but we haven't seen the data to support that at this point.”

Still, Cital supports the use of CBD for dogs with osteoarthritis and has even had his own success story, using CBD to treat his own 11 year old mixed breed dog, who was having shaking in his back legs and a hard time getting up the stairs.

“Within three days I noticed that his back leg stopped shaking.” Cital reports, recalling how his elderly dog was more able to walk up the stairs and play. Cital says he has seen many dogs in his practice see similar improvement with CBD. “You just see the life brought back into them... and [you] get a few more quality years out of them comfortably.”

Other veterinarians with experience using CBD in dogs also reported seeing positive results using the drug for canine osteoarthritis.

Gary Richter, a veterinarian in Oakland, CA says he’s “certainly seen quite a number of dogs that are on either CBD or some other preparation of cannabis for the treatment of osteoarthritis and many of those dogs do very, very well.”

While none of the dogs in the recent study saw negative side effects, Richter says he’s seen some dogs have minor side effects from the drug. “The one side effect that is sometimes seen is an elevation in one of the liver values, the alkaline phosphatase” he explains. Still he says that the elevation “does not appear to cause any real world issue, in the sense that it doesn't make the dog sick. And it is reversible if you stop giving the CBD.”

Gastrointestinal problems like diarrhea or vomiting also occasionally occur for some dogs, but Richter and Cital say it is unclear if this is related to the CBD or the oils and other compounds in CBD products.

Elizabeth Mironchik-Frankenberg, a veterinarian and founder of Veterinary Cannabis Consultants, also adds that “CBD can interfere with the metabolism of other drugs, so this needs to be taken into consideration.”

Richter, Cital, Mironchik-Frankenberg and Halpert all urged pet owners to talk to their veterinarian before starting a CBD regimen and to make sure you use high quality CBD products. “There are a lot of products out there and not everything is made properly, not everything is labeled accurately, not everything has in the bottle, what it says on the label” explains Richter. Cital suggests only using brands that can show lab tested results with their products to ensure dosing information is accurate and the product is free from contaminants.