

Exploring CBD: A hopeful alternative for pets with osteoarthritis

Nearly 70 per cent of PetCann prescriptions are for dogs with pain and osteoarthritis, and with noteworthy outcomes reported in recent studies, CBD may be the answer to further enhance the well-being, mobility, and quality of life of your arthritic patients. CBD is being increasingly explored by both pet parents and veterinarians, especially where comorbidities exist and/or side effects from other medications want to be avoided.

Delving into the research

One noteworthy study, titled 'Pharmacokinetics, safety and clinical efficacy of cannabidiol treatment in osteoarthritic dogs', reported a marked decrease in pain and an increase in activity in dogs treated with CBD oil. Despite a relatively small sample size of 16 dogs completing the study, the outcomes were encouraging.

The client-owned dogs in this study were presenting with lameness due to osteoarthritis and were included if they had radiographic evidence of osteoarthritis, signs of pain detected by their owners as well as detectable lameness and painful joints on assessment.

Canine brief pain inventory and Hudson activity scores showed a significant reduction in pain and increase in activity ($p < 0.01$) at week two and four during CBD treatment when compared to baseline, while veterinary assessment also showed reduction in pain during CBD treatment ($p < 0.02$). The research demonstrated positive results with no reported side effects and found that a dose of 2mg/kg BID could enhance comfort and activity in osteoarthritic dogs.

Another study titled 'The use of cannabidiol rich hemp oil extract to treat canine osteoarthritis related pain – a pilot study', again emphasised the positive impact of CBD on dogs suffering from chronic pain. It demonstrated decreased pain scores, better mobility, and enhanced quality of life was achieved when CBD was administered.

Thirty-two dogs completed this study and had been selected based on suffering pain for more than three months due to osteoarthritis. The study started dogs on CBD at 0.25mg/kg SID for three days and found that the required effective dose ranged from 0.3 to 4.12mg/kg BID, with most responding

between 1-2mg/kg. Only two dogs saw no improvement by owner or vet at 2mg/kg.

Inclusion in this study did allow acupuncture, gabapentin, laser and nutraceuticals with approval but not the use of NSAIDs. Interestingly, this research highlighted the possible reduction in the need for gabapentin when the right dose of CBD was administered. Of the twenty-three dogs in the study taking gabapentin at the start of the study, 10 dogs completely discontinued gabapentin use, while 11 were able to significantly reduce their dose to 20 to 60 per cent of their original dose.

Many owners reported their dogs sleeping less – likely due to less sedation from gabapentin or the analgesia effects that CBD offers – and, in turn, more family interaction. Dogs displayed increased energy and were more attentive and mentally engaged. 'She's more like a puppy', 'He is acting like a much younger dog' and 'I haven't seen him play like this in for a long time' are just some of the heartwarming quotes from clients in the study.

Emerging discoveries

CBD research is continuously evolving, and clinical evidence is being reported both in human and veterinary medicine. Some studies have shown an increase in ALP in dogs treated with CBD, but without significant changes to ALT or clinical hepatic disease, the significance of this remains uncertain and is being further researched. Recently, researchers discovered cannabinoid receptors present in the synovium.

A pilot study revealed the presence of endocannabinoids anandamide (AEA) and 2AG in the synovial fluid, with higher concentrations in osteoarthritic joints. This finding indicates promising avenues for future exploration.

Globally, many pet parents and veterinarians are shifting their focus to alternatives or supplements to traditional medications. This change is driven by either insufficient pain relief or undesirable side effects from conventional medicines. A survey conducted in the United States reported that nearly 60 per cent of pet owners give or were giving CBD to their dogs, and 12 per cent to their cats, most commonly for treating osteoarthritis, seizures, cancer or anxiety.

For those patients where you're left wondering, what more can I do to improve pain, mobility and quality of life? CBD may be the answer. PetCann is ready to assist with supplying legal and safe medicinal cannabis for pets and educating on its use.

Get in touch with our team at info@petcann.com.au to learn more about the therapeutic potential of CBD and arrange training for your team.

References

- Study 1: *Pharmacokinetics, safety and clinical efficacy of cannabidiol treatment in osteoarthritic dogs*
- Study 2: *Characterisation of endocannabinoids and related acylethanolamides in the synovial fluid of dogs with osteoarthritis – a pilot study*
- Study 3: *The Use of cannabidiol rich hemp oil extract to treat canine osteoarthritis related pain – a pilot study*
- Study 4: *Oral transmucosal cannabidiol oil formulation as part of a multimodal analgesic regimen: Effects on pain relief and quality of life improvement in dogs affected by spontaneous osteoarthritis*
- Study 5: *US Veterinarians knowledge, experience, and perception regarding the use of cannabidiol for canine medical conditions*
- Study 6: *Scientific validation of cannabidiol for management of dog and cat diseases*