The Highs and Lows of Cannabidiol (CBD) in Arthritic Dogs

It seems everybody's talking about CBD. Recent changes in UK legislation have reignited the debate about medical cannabis use in people. Now, attention is shifting towards animals. Owners are asking more and more questions about cannabis, specifically CBD, use in dogs: Is it safe? Is it effective? Is it legal?

What is medical cannabis?

The terminology is awkward and it's easy to get caught out.

Frequently, the terms 'cannabis', 'cannabidiol (CBD)', 'cannabinoids', 'marijuana' and others are used interchangeably, but they shouldn't be.

According to the Department of Health and Social Care,

- <u>Cannabis</u> is a broad term describing organic products (e.g., cannabinoids, marijuana, hemp) derived from the Cannabis genus of plants;
- <u>Cannabinoids</u> are chemical compounds that act on cannabinoid receptors in cells and affect nervous system function. Cannabinoids can be naturally derived from the cannabis plant or manufactured.
- Medical cannabis (or 'cannabis-based medicinal products') includes cannabis; cannabinoids; and synthetic compounds (i.e. man-made compounds with chemical structures similar to cannabinoids)

So what is CBD?

Cannabidiol (CBD) is one of the naturally-occurring components of the cannabis plant. It is not 'mind-altering', and is, therefore, considered separate from other cannabis-derived products by the Department of Health and Social Care; it is not a controlled (ie, Schedule 1) drug.

However, the Medicines and Healthcare products Regulatory Agency issued an opinion that CBD used for medical purposes is a medicine and therefore must be licensed via a marketing authorisation. There are currently no products containing CBD alone licensed in the UK for human medical use.

Importantly, CBD is not tetrahydrocannabinol (THC), which is the psychoactive component of the cannabis plant (i.e. the part that gets people 'high').

So where does CBD come into play in pets?

When we talk about medical cannabis in pets, we are generally talking about CBD and not the other cannabis-derived products.

All CBD-containing products for animals are considered medicines by the Veterinary Medicines Directorate and require a marketing authorisation.

Currently, there are no licensed CBD products for pets, and given the considerable expense involved in veterinary drug development, they may be a long way off.

Any product containing CBD and marketed towards animals (including supplements) is illegal.

Can I get CBD products from the internet or abroad? Can I use human preparations instead?

You can, but you shouldn't.

These products have not undergone regulatory review (which includes quality control checks). So we don't know how much — if any — CBD or THC is in them. They may not be safe.

Importantly, according to the Home Office, "any CBD product that contains any amount of THC will be a controlled drug within the meaning of the 1971 Misuse of Drugs Act". So by buying these products, you could unknowingly be committing a crime.

Above all else though, THC is toxic to dogs. If the product contains THC and you give it to your dog, you could do enormous harm.

Does CBD provide pain relief to arthritic dogs?

This a tricky one. The honest answer is we don't know.

We have anecdotal reports (i.e. not scientific studies) and we have studies that have tested CBD on people, but we only have one published scientific study investigating its use in dogs with arthritis.

The Cornell University study provides encouraging support for CBD use in the treatment of canine arthritis. In the study, CBD was well tolerated at the doses used (ie no clinically significant side effects were seen) and the dogs experienced less pain. However, the study only looked at 16 dogs, and only reported subjective (vs

objective) measures to assess the dogs' pain. These facts limit our confidence in the results.

Why do so many people recommend it?

There are two possible answers to this; one is that it works, and the other is that people want it to work.

We love our dogs and we want to help them. This can lead us inadvertently to seeing improvements that aren't there. We're not trying to mislead other people but we may start to see what we wish for – it's known in science as the 'caregiver placebo effect'. See here for a CAM conversation with Andrea Tarr on this.

Alternatively, CBD may indeed provide pain relief. And this is what we hope is true.

So what next?

For owners of dogs struggling with arthritis, CBD is an exciting prospect. The evidence so far is encouraging and it is accumulating.

However, more studies are still needed. As it stands, there is limited evidence to prove that it alleviates pain in dogs. As a result, under the principles of evidence-based medicine – not to mention legal and regulatory restrictions – vets cannot support its use. But, this is a rapidly evolving area, and we at CAM will keep you up to date as new information is reported, so please stay tuned.

The good news is that there are lots of other treatment options to help your dog. Check out our information section about managing arthritis to find out more.

Sources/Additional Information

VMD – Statement on Veterinary Medicinal Products Containing Cannabidiol

Gamble et al (2018) – Pharmacokinetics, Safety, and Clinical Efficacy of Cannabidiol Treatment in Osteoarthritic Dogs

NHS – Letter Guidance on Cannabis-based products for medicinal use

Department of Health and Social Care – Cannabis Scheduling Review Part 1

The Medicines and Healthcare products Regulatory Agency – Statement on products containing Cannabidiol (CBD)

Canine Arthritis Management – CAM conversation WITH Mike Petty ABOUT Cannabidiol use in the USA

Canine Arthritis Management – CAM Conversation WITH Andrea Tarr FROM Veterinary Prescriber ABOUT cannabidiol (CBD) use in dogs with osteoarthritis

The SkeptVet – Evidence Update: Promising Clinical Trial of CBD for Arthritis Treatment in Dogs

Pet Poison Helpline – Marijuana Toxicity in Pets