

"An Open Retrospective Study of a Standardized Cannabidiol Based- Oil in Treatment- Resistant Epilepsy"

Review # 1: Joli Jarboe, DVM

- 1. There are some selection biases but overall, it gives encouragement to those adding in CBD supplements in animals with seizures. While, I don't feel veterinary medicine has found the "ah ha" understanding of using CBD supplements in pets with epilepsy, it is compelling seeing the positive effects CBD has on humans with epilepsy.
- 2. This paper supports the efficacy of using a 24% CBD based oil (7mg CBD per drop) with better anti-seizure effects with median dosage of 4.2 mg/kg sublingual dosing (73% had >50% improvements in seizure control; 19% experienced seizure freedom; 5% showed less than 50% seizure improvements; 1% withdrew due to lack of efficacy) and increased likelihood of being able to reduce true anticonvulsant doses with concurrent CBD oil supplementation (~27%).
- **3.** There were minimal and temporary side effects reported with the most common side effect being somnolence (77%) and being appreciated more commonly in humans taking valproic acid/clobazam combination therapy (57%).

Take-home message:

I think this paper strongly supports oil/tincture preparations over tablet/capsule/treat CBD preparations.

Review # 2: Stephanie McGrath, DVM

- 1. I do not see the point of this paper. CBD is already FDA approved for human epilepsy. If more research needed, they should focus on trying to strengthen the research field with broader studies, not a simple pilot, retrospective, or open label study in a heterogenous population.
- 2. They point out many of their limitations throughout the article to which I agree. The biggest issue being this study is *not* randomized, *not* prospective, *not* placebo controlled. If they are trying to observe the effects of CBD in different populations than Epidiolex (which lord knows someone needs to do and do it correctly.) I found this study very weak and not very compelling.

- **3.** Unfortunately, they did not measure CBD levels within this study. The claims regarding the bioavailability being high within their formulation, is why "the seizure control was so good" (while ignoring all the inherent biases of their study design), is unproven without CBD concentrations to compare.
- **4.** I think the study would have offered a very nice insight into CBD's potential use a decade ago, but not now- now we need solid studies to support its use in other types of seizure etiology (not just LGS and Dravet).

Take-home message:

I found this study very weak and not very compelling.