Effect of a pulsed electromagnetic field therapy (PEMF) device for treatment of pain secondary to osteoarthritis in feline patients

Purpose

To determine if pulsed electromagnetic field therapy (PEMF) devices are effective for pain control in feline patients with osteoarthritis.

Background

In cats, osteoarthritis (OA) is an underdiagnosed and therefore undertreated disease that can contribute to a declining quality of life for many aging feline patients. Traditional treatments include medications such as NSAIDs, which can have side effects, may be difficult to administer, or may be contraindicated in diseases such as renal or liver disease.

Pulsed electromagnetic field therapy (PEMF) devices may provide an alternative way to treat cats with OA. PEMF therapy is a non-invasive treatment that involves pulsing electromagnetic fields into tissues via inductive coils to decrease inflammation and promote analgesia. However, much is still unknown about the effectiveness of PEMF devices in feline patients, particularly in treating osteoarthritis. The goal of the study will be to determine if PEMF devices are effective for pain control in feline patients.

This study is funded by Anne Hunter Feline Research Fund and Assisi Animal Health, LLC.

Eligibility

- Indoor cats ≥8 years of age with naturally-occurring osteoarthritis, diagnosed through owner or veterinarian-reported mobility impairment

Exclusion Criteria

- Free from systemic illness (except for stable chronic kidney disease up to IRIS stage 3) as confirmed by physical exam and bloodwork
- Not receiving any anti-inflammatory treatment for one week prior to enrollment

Study Design

Eligible cats need to have a high suspicion of OA based on exam and no evidence of severe systemic illness (renal disease up to Iris stage 3) based on routine bloodwork.

Once enrolled, cats will receive radiographs (x-rays) to confirm OA and additional blood tests. There will be one week of recording baseline activity using an activity monitor at home. Then the cat will be treated with the PEMF device for four weeks. Bloodwork will be performed at the end of the study period. Owners are to complete online surveys following the treatment period for four weeks.

If cats become excessively painful at any point during the study period, a rescue therapy (gabapentin) will be administered.

Compensation

Study-related radiographs (x-rays), bloodwork, recheck exams, and PEMF therapy will be provided at no cost. Client is responsible for the cost of the initial screening appointment and bloodwork (approx. $230) to determine eligibility. At the conclusion of the study, clients will have the option of receiving a free PEMF treatment device for their cat (approx. $800 value).

Contact

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