

Study of a Collar for Lameness and Osteoarthritis in Dogs

Purpose of study

Osteoarthritis affects up to 60% of adult dogs. The quality of life in affected dogs is adversely affected by pain, stiffness, lameness, and decreased activity. Management of affected dogs is multifaceted, and including weight reduction, exercise and activity modification, physical rehabilitation, nutritional supplements, and other treatments. Glucosamine, chondroitin sulfate, MSM and turmeric may have beneficial effects on cartilage and may improve clinical function. Unfortunately, there may be significant reduction in absorption of some of these compounds because of digestion. For this reason, the proposed collar used in this study is a unique application because the active blend in the polymer collar is purported to be absorbed through the skin and have clinical effects.

Inclusion criteria

- Must be skeletally mature;
- Must be clinically healthy;
- Must be between 1-8 years of age;
- Must weigh between 15 and 40 kg;
- Must have radiographic evidence of OA of a shoulder, elbow, hip or stifle
- Must have lameness and owner-identified mobility impairment

Exclusion criteria

- Dogs that do not have confirmed osteoarthritis
- Dogs that have gross instability of a joint
- Dogs that receive analgesics other than an NSAID or gabapentin
- Immune mediated polyarthropathy or other immune-mediated disease
- Intervertebral disc disease or other clinical neurologic disease;
- Clinically significant abnormal hematological or blood chemistry values



- No impending changes to dog's lifestyle (e.g. boarding, moving, new pets added to household). Dogs will be fed their regular commercial dry and/or wet diet with no changes during the trial
- Dogs will not receive any joint supplements for 4 weeks prior to study start.

Study procedure

Participants will be randomly assigned to treatment groups of a collar with ingredients or a placebo collar. Recheck examinations will be performed every 2 weeks for 8 weeks for force plate evaluation of gait, subjective gait evaluation, and blood samples. Owners will complete questionnaires to document home function.

Study Incentive

The study will cover all study expenses, including radiographs and blood work. If compliance with the study and all study visits are completed, owners will receive a \$1000 honorarium.

For Further information

Josh Burnette, DVM

Darryl Millis, DVM, MS, DACVS, DACVSMR, CCRP

Jessica Montoya, AAS, LVMT, CCRP, VTS-Surgery
utvetortho@utk.edu | 865-974-8387