

# **A 14 WEEK CLINICAL EVALUATION OF AN ORAL ANTIOXIDANT AS A TREATMENT FOR OSTEOARTHRITIS SECONDARY TO CANINE HIP DYSPLASIA**

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## **INTRODUCTION**

Many nutraceuticals have been introduced into the veterinary market for the treatment of osteoarthritis. Joint laxity, thought to be a primary cause of hip dysplasia, may cause the release of free radicals into the coxofemoral joint. Free radicals are believed to damage joint and connective tissue, leading to inflammation and joint pain: osteoarthritis. One nutraceutical is a multi-vitamin antioxidant called Proanthozone®. Clients have indicated to veterinarians that dogs treated for osteoarthritis with Proanthozone® showed clinical improvement. Proanthozone® is marketed as an antioxidant that reduces free radicals. We hypothesize that a dog with osteoarthritis secondary to hip dysplasia will clinically improve if treated with Proanthozone®. This study evaluated the short-term clinical efficacy of Proanthozone® as a treatment for osteoarthritis secondary to canine hip dysplasia.

## **MATERIALS AND METHODS**

The study was randomized and double blinded. Data was collected from 18 dogs (1 to 13 years of age) with clinical and radiographic evidence of bilateral coxofemoral osteoarthritis secondary to hip dysplasia. Before entering the study, all dogs were determined to be free of other musculoskeletal and medical problems based on history, physical examination, complete blood count, and serum biochemistry profile. Lameness evaluation and range of motion in each coxofemoral joint was noted at week zero. The owner's functional assessment was determined at weeks 2, 4, 6, 8, 10, 12 and 14. A brief lameness exam was done at the same intervals. The data was evaluated for differences attributable to treatment with Proanthozone® using Chi square analysis.

## **RESULTS**

Final results showed improvement in those animals treated with Proanthozone® as opposed to the group treated with a placebo. The results were significant at the 0.1 level using Chi square analysis.

## **DISCUSSION**

Proanthozone® produced clinical improvement in this sampled population of dogs with osteoarthritis secondary to hip dysplasia. The need for further studies with objective methods of measurement such as force plate or kinematic gait analysis, pharmacokinetics or evaluation of synovial fluid changes would be beneficial in supporting the findings of this study. Long-term studies or crossover studies would also be helpful.

**ACKNOWLEDGMENT:** The authors thank Animal Health Options for their support.

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