



RESEARCH PROGRESS REPORT SUMMARY

Grant 02661: Investigation into Diet-Associated Dilated Cardiomyopathy in Dogs

Principal Investigator: Darcy Adin, DVM
Research Institution: University of Florida
Grant Amount: \$211,521.24
Start Date: 4/1/2019 **End Date:** 3/31/2021
Progress Report: Mid-Year 1
Report Due: 9/30/2019 **Report Received:** 8/31/2019

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Original Project Description:

Dilated cardiomyopathy (DCM) is a serious disease of the heart muscle whereby the heart becomes enlarged with weak contractions. DCM can result in abnormal heart rhythms, congestive heart failure or sudden death. In dogs, DCM most often occurs in large- and giant-breeds, such as Doberman Pinschers, Boxers, Irish Wolfhounds, and Great Danes; in these dogs, survival time after diagnosis is often only months, even with aggressive medical therapy. Recently, veterinary cardiologists have recognized DCM more frequently in all breeds of dogs including mixed breeds, and even those not usually associated with DCM. There is suspicion that the disease in some dogs is associated with boutique, exotic ingredient, or grain-free (BEG) diets. Some affected dogs on such diets have shown reversal or improvement of their disease after changing their diet, supporting a potential association between consumption of a BEG diet and development of DCM. A specific cause, however, has not been identified, despite extensive nutritional testing of the dog foods and the canine patients. Moreover, the extent of the problem is unknown because only dogs that are symptomatic for DCM have been reported. It is possible that more dogs may be affected but not yet showing signs of heart disease. To investigate the extent of diet-associated heart problems in dogs, this multi-institutional team of veterinary cardiologists and nutritionists will prospectively screen a large population of apparently healthy dogs for DCM and compare important cardiac disease measures, including ultrasound of the heart, blood biomarker and taurine concentrations, and the frequency of DCM in dogs eating BEG versus non-BEG diets.

Publications:

No publications have been prepared yet because case enrollment is ongoing.



Presentations:

No presentations have been given yet as a result of this research.

Report to Grant Sponsor from Investigator:

The study titled "Investigation into Subclinical Diet-Associated Dilated Cardiomyopathy in Four Dog Breeds" is progressing on schedule. All Whippets have been evaluated. Thirty of the planned 40 Golden Retrievers at the University of Florida have been evaluated. Approximately 5-10 of the Dobermans, Miniature Schnauzers and University of California, Davis Golden Retrievers have been evaluated. Approximately 20% of evaluated dogs have been scheduled for recheck evaluations after dietary change.