Title:
Serial measurements of platelet activation and P-selectin expression in dogs with heart disease

Investigators:
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If interested please call the Small Animal Teaching Hospital at 706-542-3221 and ask to leave a message for one of the investigators listed above. Referring veterinarians may call the small animal referral coordinator at 706-542-5362.

Study description:
The purpose of the study is to determine if platelet activation (as determined by P-selectin expression and thromboelastography evaluation) is present in dogs with cardiac disease. Activated platelets induce both pro-inflammatory and hypercoagulable states through their interaction with other cells. The study will also assess if the degree of platelet activation changes with treatment of cardiac disease.

Client-owned dogs presenting for initial evaluation of cardiac disease will be eligible for enrollment in the study. Dogs weighing less than 5 kg, dogs that have been recently hospitalized for inflammatory disease or any dog currently taking anti-inflammatory medications such as glucocorticoids or non-steroidal anti inflammatory drugs, and dogs that are already receiving pharmacologic treatment for heart disease are not eligible.

Study participation will last 3 months and include the collection of blood samples at three time periods. After an initial 5.0 mL (1 teaspoon) blood draw for platelet activation assessment, patients will be treated for their cardiac disease at the discretion of the attending cardiologist. Patients will return for recheck appointments (approximately 3 weeks later and again at 3 months after initial presentation), and have blood collected in the same manner. These blood samples will be used to assess the effect of therapy for common cardiac disease on markers of platelet and coagulation activation.

The study will pay for the analysis of blood samples drawn specifically for this project. The client is responsible for all costs relating to the diagnosis and treatment of their dog’s cardiac disease.

Duration of study:
The study is ongoing and will continue until a total of 20 dogs with heart disease and 10 dogs serving as normal controls are enrolled. The study is expected to be completed by January 2014.

Potential benefits to veterinary medicine:
The effect of therapy for cardiovascular disease on platelet activation has not been determined. It is hoped that therapy to improve cardiac function will show a progressive decrease in platelet activation.