

Minimally Invasive Mitral Valve Repair in Dogs with Chronic Mitral Valve Disease (CVD)

Purpose

To establish the long-term effects of a procedure to repair the mitral valve in dogs with naturally occurring, advanced CVD using a minimally-invasive surgical approach.

Background

Current treatment for mitral valve disease is medical (i.e. drugs) and is intended to control the clinical signs of this disease. However, none of the medical treatments affects the mechanism primarily responsible for the development of clinical signs, which is mitral regurgitation (leakage through the mitral valve). In humans, the standard of care for patients with this disease is surgical mitral repair, but the procedure's invasiveness, complexity, and high cost have limited its implementation in veterinary medicine. Driven by the same obstacles, minimally-invasive mitral repair is currently being successfully used in humans. This study is intended to assess the efficacy and long-term effects of minimally-invasive repair of the mitral valve on a beating heart using a novel biomedical device. Our group has already demonstrated that this procedure is feasible and safe. We now offer the possibility to use this procedure in dogs with naturally occurring, advanced CVD.

Who can enroll in this study?

Dogs with mitral valve disease (also known as endocardiosis) that have:

- Diagnosis of chronic mitral valve disease and had at least one re-occurrence of congestive heart failure
- Significant cardiomegaly
- Body weight > 5kg (11 pounds)

Who cannot be enrolled?

- Dogs with mitral valve disease that do not have an enlarged heart
- Dogs that have other diseases such as kidney disease
- Dogs weighting less than 5 kg (11 pounds)

Study Design

Dogs will undergo standard echocardiographic examination to establish baseline measurements and confirm that they meet specific criteria. Eligible dogs will be anesthetized and the investigational biomedical device will be introduced into the heart in order to repair the mitral valve. Dogs will be hospitalized up to the full recovery from the procedure. Periodic rechecks will be performed to assess function of the mitral valve after the repair.

Compensation

Enrolled dogs will receive, at no cost, a physical examination/office visit, blood work, thoracic radiographs, complete echocardiographic examination, the repair procedure and post procedure hospitalization. Cardiac rechecks at 3, 7, 15, 30 and 60 days post procedure are also included at no cost. The costs of an initial screening exam may be waived for patients that are likely to be eligible.

Contact

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If your query is urgent, please call the Small Animal Hospital on (540) 231-4621 and ask for the **cardiologist** on duty.