Background

- Pulmonic stenosis (PS) and subaortic stenosis (SAS), the two most common congenital heart defects encountered in dogs, are characterized by a narrowing of the outlet of the right or left side of the heart, respectively.
- We are studying the effects of two commonly utilized medications – butorphanol, a mild sedative commonly used to help facilitate heart ultrasounds and atenolol, a beta-blocker commonly utilized to help treat PS and SAS – on heart function and assessment of disease severity in dogs with PS and SAS.

Participation Requirements

- Dogs diagnosed with either pulmonic stenosis (PS) or subaortic stenosis (SAS) with a pressure gradient >50 mmHg and that are free of any other concurrent cardiac disease

Procedures

- Complete physical examination with particular attention paid to the cardiovascular system and complete echocardiogram (heart ultrasound) without the use of sedatives to confirm diagnosis
- Blood collection to determine if your dog is affected with a genetic mutation that may cause a lack of response to the atenolol drug
- Administration of a single standard dose of a sedative, butorphanol (intravenously) and single standard dose of atenolol (orally)
- 2 more echocardiograms (within 5-20 minutes after administering butorphanol and then 2-3 hours after atenolol administration)

Owner Responsibilities

- Bringing your dog to the scheduled appointment (approximately 4-5 hours long)
- Covering any costs not related to the study

Benefits

- All costs associated with the study will be paid for by the study, including diagnostics that would be recommended anyway.
- All dogs previously diagnosed with SAS or PS that are specifically referred for this study will receive a discounted clinical exam and echocardiogram whether they qualify for the study or not.
- If adverse events occur directly as a result of the study and your dog requires further care, the study will cover up to $3,000 of your dog’s care.
- Results from this trial will allow us to better understand and guide medical care for your dog and future dogs affected with pulmonic or subaortic stenosis.