



Dear Dr. Smith.

Thank you for referring Annie, an 8 year old, FS, Beagle Mix owned by Mrs. Jones.

History: Annie presented for evaluation of a newly ausculted heart murmur. She has no clinical signs of weakness, lethargy, coughing, or collapse. She needs anesthesia for a dental cleaning.

Cardiac Physical Examination: T: 101.2 P: 96 R: 24 W: 22.2lbs/10kg. BAR, hydrated. MMpink, moist, CRT<2 sec. Grade 2/6 left apical systolic murmur. Regular rhythm. Normal pulse quality, synchronous. Lungs clear, eupneic.

Diagnostics:

Blood Pressure: 120 mmHg #3 RF

ECG: Sinus rhythm during echocardiogram.

Radiographs: The cardiac silhouette is normal sized. The pulmonary vasculature is normal.

The pulmonary parenchyma is clear. **Echocardiogram Interpretation:**

Lenocal diogram interpretation.	
Left Ventricle:	Normal LV wall thickness. Normal cavity size. Normal systolic
	function. Impaired relaxation pattern noted.
Left Atrium:	Normal size.
Right Ventricle:	Subjectively normal wall thickness, cavity size, and systolic function.
Right Atrium:	Normal size.
Aorta:	Normal.
Aortic Valve:	Normal thickness. No aortic insufficiency. No stenosis.
Pulmonary Artery:	Normal.
Pulmonic Valve:	Normal thickness. No pulmonic insufficiency. No stenosis.
Mitral Valve:	Mildly thickened. Mild mitral regurgitation.
Tricupsid Valve:	Normal thickness and function. No tricuspid regurgitation.
Pericardium:	Normal. No pericardial effusion noted.
Other:	No cardiac masses noted.

Diagnosis:

Mild degenerative mitral valve disease – Annie has mild myxomatous degeneration of the mitral valve. Annie's disease has not resulted in an increase in heart size at this time, and complications are unlikely in the near future. This eventually (in severely affected dogs) can lead to cough due to left mainstem bronchial compression from an enlarged heart, congestive heart failure, respiratory difficulties, exercise intolerance, or collapse. Clinical signs are not expected at this time given the mild level of disease. Progression of this disease over time is common, and a sudden worsening of heart function may be caused by increased demands on the heart due to infection, anemia, excessive thyroid hormone, a rupture of the valve chord, development of an arrhythmia, or progressive myocardial failure.

Treatment Recommendations:

No cardiac medications recommended at this time. I typically recommend treatment of this heart disease when there are symptoms attributable to cardiac disease, concurrent systemic hypertension, or moderate to severe structural changes. We will need to monitor Annie for development of these changes overtime.

Monitoring: Monitor for cough, shortness of breath (fast or labored breathing), collapse, or exercise intolerance.

Diet: Please ensure that Annie is eating and drinking. Royal Canin Early Cardiac Support is a diet designed for dogs with symptom free heart disease. Alternatively, Annie can stay on her regular diet, while avoiding high salt treats. People food and treats should not exceed 1mg of Sodium for each Calorie per serving. Some low sodium treats for your dog include: Science Diet Adult Treats (medium), Iams original Formula Biscuits (small), Hills Prescription Diet Canine Treats, Alpo Healthy Snacks Variety Snaps with Real Meat, baby carrots, apple slices, or orange sections.

Exercise: No exercise restrictions necessary.

Anesthesia: Anesthetic risk is only mildly increased with the changes noted with a small potential for fluid intolerance at higher rates. Proper anesthetic precautions should be instituted for any patient with any degree of heart disease, including the use of heart-friendly drugs (avoid thiopental, ketamine, and alpha-2 agonists), conservative intravenous fluid support (1/2 the surgical maintenance rate), and close ECG, blood pressure, and respiratory status monitoring during and after the procedure.

Prognosis: Good, no symptoms are expected at this time. As valvular heart disease tends to be a progressive disease, serial monitoring is key to determining when medication should be instituted.

Follow Up: Annie will need a recheck in 6 months for an echocardiogram and blood pressure. At that time, if no significant progression is noted, we may be able to spread out rechecks to every 12 months.

Thank you again for your referral. Please do not hesitate to contact me with any questions or concerns. I am available by phone or email Monday through Friday 9am-5pm. Afterhours emergencies should be directed to the 24 hour emergency hospital of your choice. Contact information for some local 24 hour emergency hospitals can be found at www.jacksonvetcardiology.com

Sincerely,

Bethany Jackson, DVM, DACVIM (Cardiology)