



**PATIENT**

Daisy Cardente

**SPECIES**

Canine

**BREED**

Beagle Mix

**SEX**

Female Spayed

**AGE**

13 years

**WEIGHT**

18lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Eduardo Rodriguez  
III, RCS

**HOSPITAL NAME**

Wood River Animal  
Hospital

**REFERRING VET**

Dr. Schuelke

**INVOICE**

26783

**DATE**

10/7/22

**PRESENTING CLINICAL SIGNS**

History: Presented 10/4/2022 for worsening cough. Cough present intermittently for past few years, has worsened in the past 2 weeks. Wheezes when coughs but once coughing done, shows no dyspnea. Severe dental disease. Reported to have good energy, coughing mostly at night and not during exercise, BAR, eating and drinking well, no exercise intolerance. Grade V-VI/VI murmur that has progressed since January 2022 when it was described as a new murmur Grade III/VI. Lungs clear, rate and rhythm WNL. Radiographs showed cardiomegaly, LA enlargement, hepatomegaly. Current meds: Prescribed hydrocodone while awaiting echo: Hydrocodone 5mg/ Homatropine 1.5mg. Give 1/2 tablet by mouth 2-3 times daily as needed for cough. BP: 230, 235, 240mmHg.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and Doppler imaging is available.

**Left ventricle:** Significant LV dilation with hyperdynamic myocardial function. Decreased LV wall thickness.

**Left atrium:** The left atrium is markedly dilated.

**Mitral valve:** Marked diffuse thickening of mitral valve leaflets with prolapse into the left atrial lumen. Severe eccentric mitral regurgitation. Normal velocity.

**Aortic valve/Aorta:** The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. Trace aortic insufficiency.

**Right ventricle:** Mild RV dilation.

**Right atrium:** Mild right atrial dilation.

**Tricuspid valve:** The tricuspid valve appears thickened and prolapsing, with moderate tricuspid regurgitation. Elevated velocity consistent with moderate pulmonary hypertension.

**Pulmonic valve/Pulmonary artery:** The pulmonic valve is normal in morphology and mobility. The MPA appears mildly dilated. Normal pulmonic outflow velocities with laminar flow. No PI.

**Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses.

**Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 150bpm.

**2-Dimensional Measurements**

Ao diam (cm)	1.3
LA diam (cm)	3.7
LA:Ao (Swe)	2.8
IVS thickness (cm)	0.8
LVID diastole (cm)	3.8
PW thickness (cm)	0.7
LVID systole (cm)	1.9
FS (%)	50

**Doppler Measurements**

PV Vmax (m/s)	0.76
AoV Vmax (m/s)	1.3
MR Vmax (m/s)	4.9
TR Vmax (m/s)	3.8
TR PG (mmHg)	58

**INTERPRETATION OF THE FINDINGS**

The cause of the murmur is chronic degenerative valve disease causing severe mitral and moderate tricuspid regurgitation. Marked left atrial enlargement indicates the risk for spontaneous congestive heart failure is elevated. Moderate pulmonary hypertension is noted, which is likely secondary to a combination of chronic LA pressure elevation and suspicion for underlying airway disease. A small aortic insufficiency is appreciated, and lifelong blood pressure monitoring is advised. No additional issues are identified.



**PATIENT**

Daisy Cardente

**SPECIES**

Canine

**BREED**

Beagle Mix

**SEX**

Female Spayed

**AGE**

13 years

**WEIGHT**

18lbs

**INTERPRETED BY**

Maggie Machen  
 Lamy, DVM  
 DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Eduardo Rodriguez  
 III, RCS

**HOSPITAL NAME**

Wood River Animal  
 Hospital

**REFERRING VET**

Dr. Schuelke

**INVOICE**

26783

**DATE**

10/7/22

In light of a progressive cough and severity of disease on echocardiogram, there is concern for early congestive heart failure and institution of full cardiac supportive medications is recommended as below. Sildenafil is not clearly warranted at this time; however, should any exertional dyspnea or collapse develop in the future I would not hesitate to institute it.

The average survival time of canine patients with active pulmonary edema is 8-9 months on medications, however they generally are able to maintain a good quality of life for that period. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

The reported blood pressure is elevated and should be reassessed in light of aortic insufficiency. Ideally obtain serial measurements in a controlled, low stress environment and continue until 3 consecutive readings plateau within 5mmHg of variability. If persistently >160mmHg despite a relatively calm demeanor, recommend institution of amlodipine to effect. Additionally, if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushing's, PLN, adrenal tumor, etc.), as primary disease is relatively uncommon and a rule out diagnosis.

**RECOMMENDATIONS**

- Institute furosemide 1-2mg/kg PO q12h.
- Institute spironolactone 1-2mg/kg PO q12h.
- Institute Pimobendan 0.3mg/kg PO q12h.
- Reassess BP as discussed.
- Pending response, consider hydrocodone with homatropine 0.2-0.4mg/kg up to q4-6 hours PRN for any residual mechanical cough in the face of normal sleeping respiratory rates.
- If any exertional dyspnea/collapse develops in the future, institute Sildenafil 1-2mg/kg PO q8-12h.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.
- Monitoring of sleeping respiratory rates will be paramount to screen for congestive heart failure at home.
- Elective anesthesia is not advised.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.

**PLAN**

- Monitor renal values and BP in 1-2 weeks. If BP >130mmHg, institute ACEI 0.5mg/kg PO q12h. Monitor renal panel/NBP every 3-4 months lifelong.
- Recommend conservative monitoring with a recheck echocardiogram in 4-6 months, sooner if any development of clinical signs.

**IMAGES**



**PATIENT**

Daisy Cardente

**SPECIES**

Canine

**BREED**

Beagle Mix

**SEX**

Female Spayed

**AGE**

13 years

**WEIGHT**

18lbs

**INTERPRETED BY**

Maggie Machen  
 Lamy, DVM  
 DACVIM (Cardiology)

**IMAGING  
 PERFORMED BY**

Eduardo Rodriguez  
 III, RCS

**HOSPITAL NAME**

Wood River Animal  
 Hospital

**REFERRING VET**

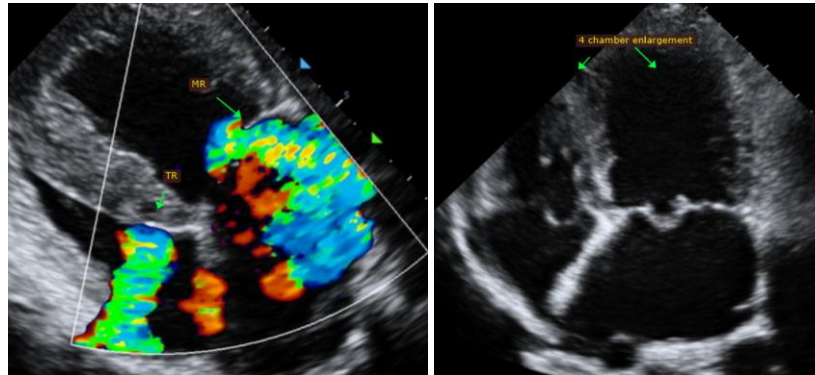
Dr. Schuelke

**INVOICE**

26783

**DATE**

10/7/22



The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

Maggie Machen Lamy, DVM  
 Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
 info@sonopath.com