



**PATIENT**

Lucky Goodman

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Spayed Female

**AGE**

11 Years 11 Months

**WEIGHT**

28.8 Pounds

**INTERPRETED BY**

Sara Brethel, DVM,  
 DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Kathleen Byrnes

**HOSPITAL NAME**

AH of Boone

**REFERRING VET**

Dr. Palmer

**INVOICE**

36502

**DATE**

4/8/26

**PRESENTING CLINICAL SIGNS**

History: Previously diagnosed with MVD, was stable until 2025. Had an episode of elevated resp rate and apparent CHF in November 2025, responded to Lasix but became azotemic. Weaned off the Lasix and azotemia resolved. Seen on Monday 4/6 for elevated resp rate, responded to IV Lasix @2mg/kg. Advised owner to start Lasix 20mg BID.

Current medications: Vetmedin 5mg PO AM, 2.5mg PO PM (0.57mg/kg per day) Enalapril 7.5mg PO q24h (0.57mg/kg/day) Lasix 20mg PO q12h (1.5mg/kg twice daily).

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

<b>CANINE CARDIAC PARAMETERS</b>	<b>MR VMAX</b> (m/s)	<b>TR VMAX</b> (m/s)	<b>LA/AO</b> (M-Mode)	<b>LA/AO</b> (Heart Base; Swe)	<b>FS</b> (%)	<b>EF</b> (%)	<b>EPSS</b> (cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
<b>PATIENT</b>	5.55	3.21	NM	2.2	46	--	NM
<b>CANINE CARDIAC PARAMETERS</b>	<b>HR</b> (BPM)	<b>AV VMAX</b> (m/s)	<b>PV MAX</b> (m/s)	<b>BODY WEIGHT</b> (kg)	<b>LAD</b> LA MAX 4 Chamber	<b>LVIDd</b> Avg; 2D and m-mode short axis (cm)	<b>LVIDs</b> Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6				
<b>PATIENT</b>	113	1.26	0.92	13.1	5.9	5.34	2.88

**Cardiac Presentation**

The mitral valve leaflets are moderately thickened with moderate mitral regurgitation posteriorly directed. There is moderate prolapse of the mitral valve leaflets. The left atrial size is severely increased. There is left ventricular eccentric hypertrophy and left ventricular systolic function that appears to be low/normal in the face of mitral regurgitation. There is normal right atrial size with mild tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and mild evidence of pulmonary hypertension based upon tricuspid regurgitant velocities. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonic valves have normal morphology and the corresponding outflow velocities are within normal limits. There is no evidence of pulmonic insufficiency. There is trace aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

**ULTRASONOGRAPHIC FINDINGS**



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- Degenerative valve disease, ACVIM stage C
- Severe left atrial enlargement
- Mild pulmonary hypertension (subclinical)
- Trace aortic insufficiency

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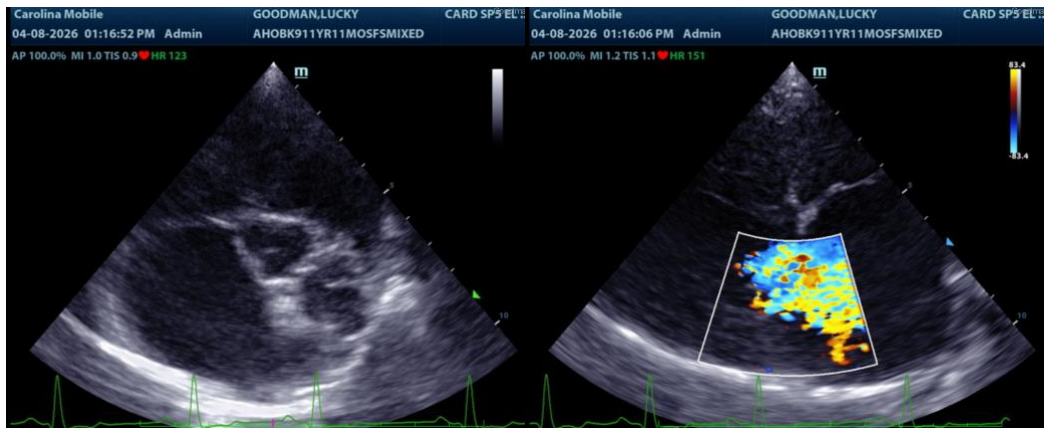
4/8/26

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The patient has had reported signs of congestive heart failure and is therefore classified as ACVIM stage C. Given the patient's clinical response, I would continue the therapies as they are currently prescribed. The only addition that I would recommend would be spironolactone and a dose of 2.0 mg/kg once a day. This is for aldosterone antagonism and often does not have a diuretic effect nor an effect on the kidneys for most patients. 1-2 weeks after starting therapy, I recommend reassessing kidney values to ensure the patient's tolerating things well, but typically these therapies are needed lifelong. The pulmonary hypertension is mild and does not require therapy at this time. Recheck echo in 4-6 months, sooner if the patient's not doing well.

The client should start monitoring respiratory rate and effort at home if not already doing so. The resting respiratory rate should be < 35-40 breathes/minute when the patient is resting or sleeping. If the breathing rates are increasing, then chest radiographs are recommended.

Recommend obtaining a blood pressure on the patient to ensure it is <160mmHg. If the blood pressure is elevated recommend following ACVIM guidelines for systemic hypertension and treating if indicated.



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

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Sara Brethel DVM, DACVIM (Cardiology)



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[info@SonoPath.com](mailto:info@SonoPath.com)

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