



**DATE PRESENTING CLINICAL SIGNS**

12.5.25 History: Recheck echo. Grade 4/6 murmur with otherwise unremarkable exam.  
-Current medications: Vetmedin: 2.5mg BID, Benazepril 5mg BID, Spironolactone 12.5mg BID, Lasix 12.5mg BID.  
-Sedation used: Not required to complete full diagnostic ultrasound.

**PATIENT**

Grit Houck -Pertinent previous ultrasound results (6/5/25 MML): CVD severe, stable. Severe MR, moderate LAE, mild LVE, mild TR, mild PH: 3.2m/s. LA: 3.0, LA/AO: 1.9, LV: 3.5.  
-STAT: Not requested.  
-Imaging performed by: Stephanie Warga RDCS, RVT.

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**SEX**

MN

**AGE**

5.20.11

**WEIGHT**

15.9lbs

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

**HOSPITAL NAME**

Hickory VH

**REFERRING VET**

Dr. Silcox

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode and Doppler imaging are available. Diffuse thickening of mitral valve leaflets (anterior> posterior) with prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with mild to moderate left atrial dilation. No LV dilation with adequate myocardial function. The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Velocity consistent with mild pulmonary hypertension. Normal right heart. Pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities. Trace pulmonic and aortic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

**CARDIAC CHART**

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	6.5	3.3	NM	1.6	45	78	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
PATIENT	120	1.5	1.1	7.2	2.6	2.8	1.5
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
Adapted from June Boon, Veterinary Echocardiography, 1998				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
Hansson et al, Vet Rad and Ultrasound 2002				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

**INVOICE**

46037

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Persistently stable findings with improvement compared to the prior evaluation. The LV has normalized and the LA is only mildly dilated. Severe MR is now moderate with no progression seen. Finally, mild pulmonary hypertension is unchanged, and no additional issues are identified.

Given these findings, it is reasonable to consider weaning or discontinuing Lasix in this case. This patient has been on full cardiac support for some time and the structural changes continue to improve. At a minimum, a dose adjustment in both Lasix and Spironolactone is advised as below. If the client is comfortable with slight risk, a full discontinuation should be considered.

Despite stable findings, the patient will always be at risk for progression to CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a worsening cough, labored breathing, exercise intolerance or collapse episodes.

Once the patient is in CHF, anesthetic risk is elevated and should be avoided as able.

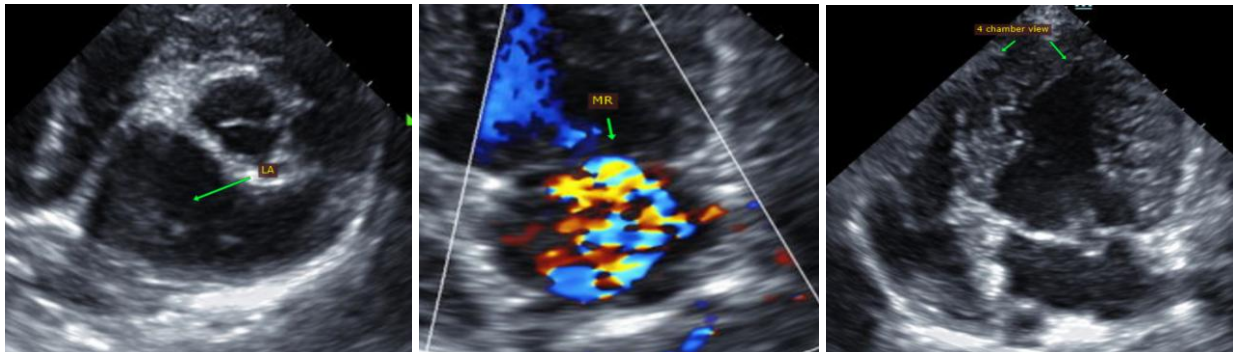
#### **PLAN**

Continue Enalapril and Pimobendan as prescribed. Consider wean Lasix and Spironolactone both to 6.25mg PO q12h. If no change at home in 1-2 weeks, a discontinuation could be trialed.

Monitor BP and renal panel every 3-4 months lifelong.

A recheck echocardiogram is recommended in 6 months to screen for progression, sooner if clinical signs arise in the interim.

#### **IMAGES**



**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.

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