



**PATIENT**

Foxy Martin

**SPECIES**

Canine

**BREED**

Lhasa Apso

**SEX**

Female Spayed

**AGE**

15.4 years

**WEIGHT**

15lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Greg Kuhlman, DVM

**HOSPITAL NAME**

Red River Animal  
Emergency Hospital &  
Referral Center

**REFERRING VET**

Dr. Kuhlman

**INVOICE**

14012

**DATE**

3/9/26

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. Increased cough over past few weeks; seems worse at night and when waking up. On Phenobarbital 37.5mg BID and Sildenafil 12.5mg. Loud right-sided heart murmur heard today. BP: 150mmHg.

-Pertinent previous echo findings (9/2025 MML): CVD B1. Mild pulmonary hypertension (improved from previous). Trace MR, no LA or LVE, mild TR, minimal RHE.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The mitral valve is mildly thickened with no prolapse into the left atrial lumen. Trace/mild mitral regurgitation present. No left atrial enlargement. No left ventricular dilation. Left ventricular systolic function is adequate. There is normal systolic flow velocity across the aortic valve. The aortic valve appears normal. Mild right atrial/ventricular enlargement. The tricuspid valve is mildly thickened with mild to moderate tricuspid regurgitation. Normal velocity. The pulmonic valve is normal. The aortic root is dilated. The MPA is unremarkable. No aortic or pulmonic insufficiency. No pericardial/pleural effusion or cardiac tumors are 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)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
<b>PATIENT</b>	NM	2.2	NM	1.3	39	72	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)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
<b>PATIENT</b>	NM	0.8	1.5	6.8	1.8	2.3	1.4
*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)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				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)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				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)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Compared to the prior evaluation, findings are persistently stable. Mild right heart enlargement persists with mild TR; however, the TR velocity is normal suggesting pulmonary hypertension is well controlled. The left heart disease remains mild, and no additional issues are seen.



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Given these findings, continue Sildenafil as previously described. Treatment for the cough should be a separate approach utilizing Hydrocodone, a course of antibiotics, etc. pending CXR results. Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

Anesthetic risk is considered mildly elevated if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. **Pre-oxygenate for 5-10 minutes prior to induction.** Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

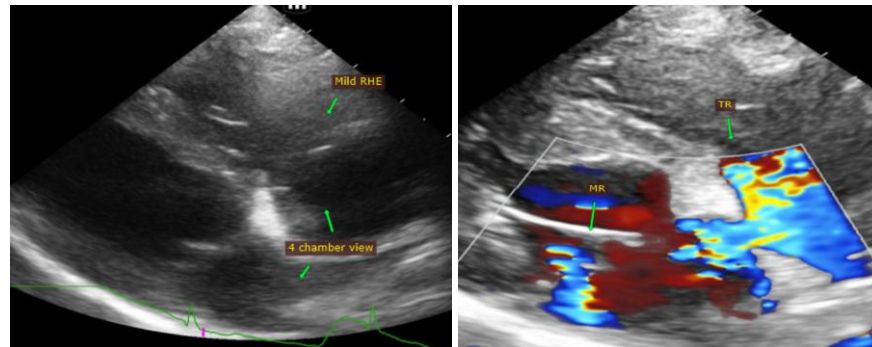
Prognosis is guarded long-term, with risk for progressive disease and/or development of associated issues such as congestive heart failure, exertional syncope, malignant arrhythmias, and/or sudden death in the future.

## PLAN

Continue Sildenafil as previously prescribed. Further workup for the cough as discussed.

Recommend monitor for progression with a recheck echocardiogram in 6-12 months, sooner if any development of clinical signs.

## 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.

**Maggie Machen Lamy, DVM**  
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