



**DATE CLINICAL BACKGROUND & STUDY DETAILS**

3.26.26 **History:** Presented on 3/23 for distended abdomen. Grade 2-3/6 heart murmur (noted on exams since 2/2025). Removed a large volume peritoneal effusion.

**PATIENT**

Sapper Bailey

**Pertinent abnormal PE/Chem/CBC/UA Results:** Lab work: NDF.

**Current medications:** Started on furosemide on 3/23

**Sedation used:** Not required to complete full diagnostic ultrasound.

**Pertinent previous ultrasound results:** No previous.

**STAT:** Declined at this time.

**SPECIES**

Canine

**Imaging performed by:** Stephanie Warga RDCS, RVT.

**BREED**

Beagle

**SEX**

MN

**AGE**

8.25.13

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The mitral valve is diffusely thickened with mild prolapse into the left atrial lumen. There is marked mitral regurgitation present. There is marked left atrial enlargement. There is moderate left ventricular dilation. Left ventricular systolic function is hyperdynamic. There is normal systolic flow velocity across the aortic valve. The aortic valve appears trileaflet with normal mobility. The main pulmonary artery is minimally dilated. Moderate right atrial and right ventricular dilation. The tricuspid valve is thickened with moderate tricuspid regurgitation. Velocity consistent with severe PAH. No pulmonic or aortic insufficiency. Scant pericardial effusion. No pleural effusion or cardiac masses are seen.

**CARDIAC CHART**

**WEIGHT**

31lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**HOSPITAL NAME**

Everhart VH

**REFERRING VET**

Dr. Menefee

**INVOICE**

47327

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>	6.0	5.0	NM	2.2	58	88	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>	174	1.5	0.9	14.1	3.7	4.6	1.8
*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)
				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)

Adapted from June Boon, Veterinary Echocardiography, 1998  
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435  
Hansson et al, Vet Rad and Ultrasound 2002  
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995

### **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Chronic degenerative valve disease is present causing marked mitral and moderate tricuspid regurgitation. Marked left heart dilation indicates the risk for spontaneous decompensation is elevated. The finding of moderate TR and severe PAH also puts the patient at risk for right-sided CHF as well. No obvious additional issues are identified.

The finding of biventricular effusion is most consistent with either a LA tear (leading to hemorrhage into the pericardial space) or right-sided CHF. Given concurrent ascites, the latter is considered more likely. Full cardiac support is recommended as below, with continued hospitalization if indicated for stability. Unfortunately, the long-term prognosis is guarded to poor given the severity of disease, with risk for recurrent spontaneous decompensation, fulminant heart failure, development of arrhythmias and/or sudden death in the future.

Monitoring of sleeping breathing rates is recommended as the best way to screen for CHF at home. Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

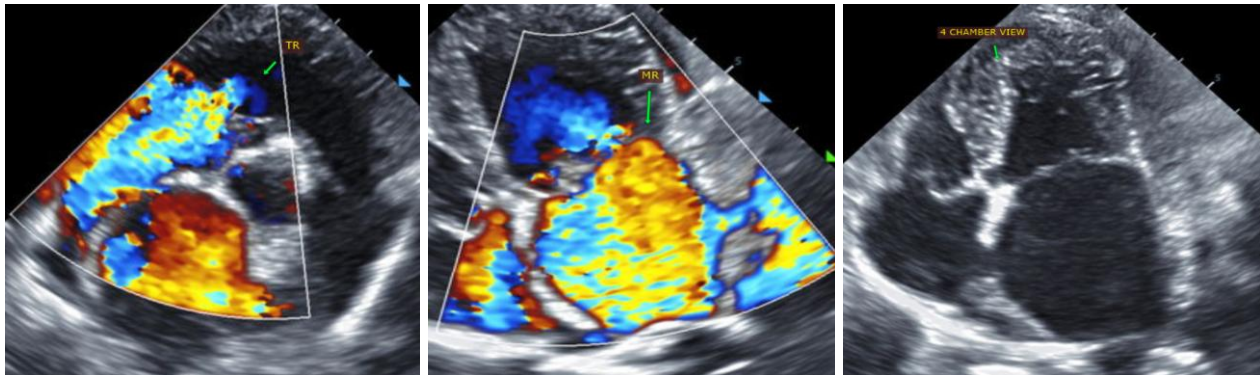
### **PLAN**

Consider hospitalization, baseline BP/ECG. Continue Lasix therapy; 1-2mg/kg PO q12h. Institute spironolactone 1-2mg/kg PO q12h. Institute Pimobendan 0.3mg/kg PO q12h. Institute Sildenafil 1-2mg/kg PO q12h.

A renal panel and blood pressure are recommended in 1-2 weeks following the above medications, then every 3-4 months going forward, if > 130mmHg and patient is doing well, institute ACE-I 0.5mg/kg PO q12h.

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

### **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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