



**DATE CLINICAL BACKGROUND & STUDY DETAILS**

3.26.26 **History:** New murmur; grade 2-3/6. No history of cough or new exercise intolerance. Evidence of CKD. Assess prior to dental.

**PATIENT**

Riley Gogel

**SPECIES**

Canine

**BREED**

Dachshund Mix

**SEX**

MN

**AGE**

9.28.09

**WEIGHT**

18.5lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**HOSPITAL NAME**

Eastern AH

**REFERRING VET**

Dr. Warner-Jones

**INVOICE**

47325

**Pertinent abnormal PE/Chem/CBC/UA Results:** Isosthenuric urine at 1.019., SDMA 17, sl elevated, Creat and BUN normal. Mild hypercalcemia at 12.0, mildly elevated globulins at 4.6.

**Current medications:** Chronic DJD/OA, meloxicam standard dosing for body wt. 0.1 mg/kg.

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

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

**STAT:** Not requested.

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

**ELECTROCARDIOGRAPHIC FINDINGS**

A six lead ECG is available at both 25 and 50mm/s; 2mm/mV. The average heart rate is 120bpm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is normal. No ectopic beats, pauses or dysrhythmias observed. ECG diagnosis: Normal sinus rhythm with respiratory variation.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Trace/mild eccentric mitral regurgitation with no left atrial dilation (LA:Ao <1.4). Normal MR velocity. Normal LV diameter with adequate myocardial function. The tricuspid valve appears mildly thickened with septal prolapse and trace/mild tricuspid regurgitation. Normal velocity. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. Trace aortic and pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

**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	5.8	2.5	NM	1.2	32	62	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	140	0.8	0.6	8.4	2.0	2.6	1.5
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)

<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				
<p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i></p> <p>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</p>	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**

Chronic degenerative valve disease causing trace/mild mitral and tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. A small aortic valve insufficiency is noted, and a baseline BP is recommended. No concurrent issues such as systolic dysfunction or pulmonary hypertension are noted in this study. The ECG is unremarkable with a normal sinus rhythm.

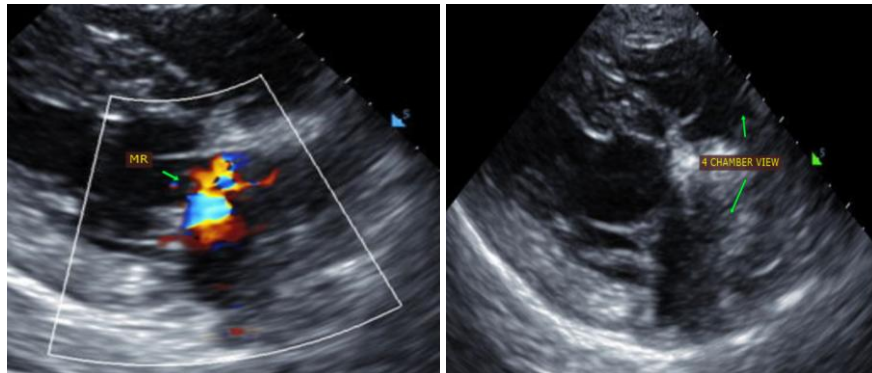
No cardiac medications are clearly indicated, as no benefit has been shown to providing therapy for dogs in stage B1. Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

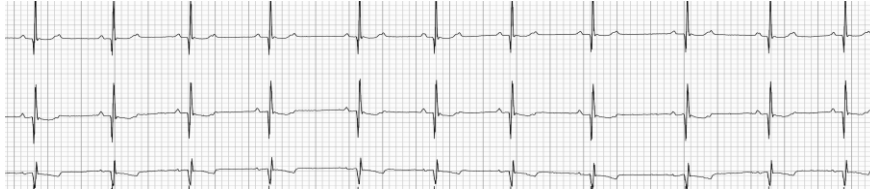
Assessment of progression in the future will help predict long term prognosis, which is highly variable with stage B1 disease. Many B1 dogs will remain asymptomatic with slow progression for years to come.

No cardiac contraindication for general anesthesia prior to chamber enlargement.

Recommend conservative monitoring with a recheck echocardiogram in 6-12 months to assess rate of progression, sooner if any development of clinical signs 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.

**Maggie Machen Lamy, DVM**

**Diplomate of the American College of Veterinary Internal Medicine (Cardiology)**

**info@sonopath.com**