



**PATIENT**

Jasper Blagg

**SPECIES**

Canine

**BREED**

Terrier Mix

**SEX**

MN

**AGE**

5 years

**WEIGHT**

20 lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Dana Alterman,  
RDCS, LVT

**HOSPITAL NAME**

Eubank Animal Clinic

**REFERRING VET**

Dr. Garb

**INVOICE**

25913

**DATE**

8/22/22

**PRESENTING CLINICAL SIGNS**

History: Murmur. Assess prior to dental procedure.

**ELECTROCARDIOGRAPHIC FINDINGS** \*Note: Single lead ECGs are evaluated as a rhythm strip.

Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 50mm/s, 20mm/mV. The average heart rate is 100bpm (range 88-150bpm). The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. No ectopic beats, pauses or other 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. Mild eccentric mitral regurgitation with no left atrial dilatation. Normal LV diameter with adequate myocardial function. The tricuspid valve appears normal with trace 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 no 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		2.0	1.4	1.2	43	75	0.24
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		1.0	1.1	19	1.1	2.4	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)
*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)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Chronic degenerative valve disease causing mild mitral and trace tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. A small aortic leak is noted, and a baseline BP recommended. No concurrent issues such as systolic dysfunction or



**PATIENT**

Jasper Blagg

pulmonary hypertension are noted in this study. The ECG is unremarkable with a respiratory sinus arrhythmia.

**SPECIES**

Canine

In an asymptomatic dog with no significant left atrial enlargement, no cardiac medications are clearly indicated. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1). Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

**BREED**

Terrier Mix

Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-medicate with a vagolytic due to high vagal tone. 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.

**SEX**

MN

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

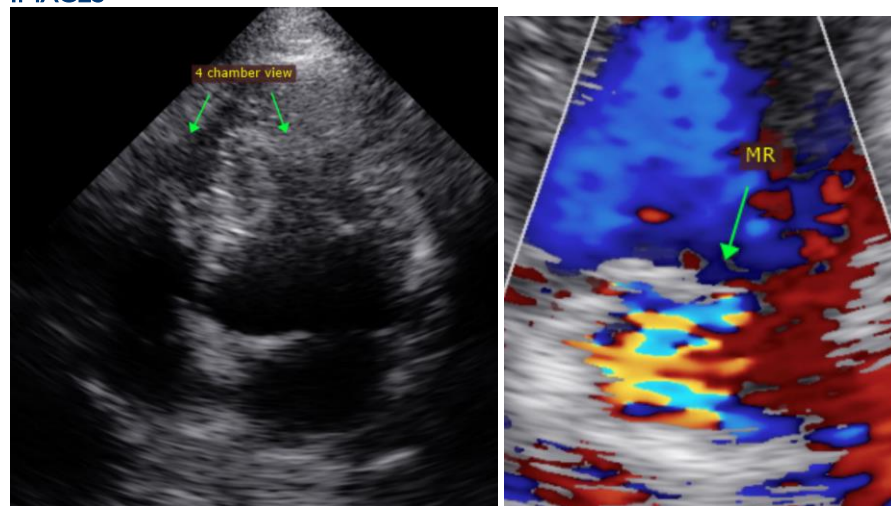
**AGE**

5 years

**IMAGES**

**WEIGHT**

20 lbs



**INTERPRETED BY**

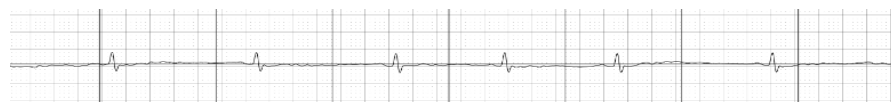
Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Dana Alterman,  
RDCS, LVT

**HOSPITAL NAME**

Eubank Animal Clinic



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.

**REFERRING VET**

Dr. Garb

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.

**INVOICE**

25913

Maggie Machen Lamy, DVM  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com

**DATE**

8/22/22



**PATIENT**

Jasper Blagg

**SPECIES**

Canine

**BREED**

Terrier Mix

**SEX**

MN

**AGE**

5 years

**WEIGHT**

20 lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING  
PERFORMED BY**

Dana Alterman,  
RDCS, LVT

**HOSPITAL NAME**

Eubank Animal Clinic

**REFERRING VET**

Dr. Garb

**INVOICE**

25913

**DATE**

8/22/22