

**PATIENT**

Harley Bouckley

**SPECIES**

Canine

**BREED**

Lab X Potcake

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

19.6 kg

**INTERPRETED BY**

James Wood, DVM,  
 DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Novel Vet

**REFERRING VET**

Dr. Knap

**INVOICE**

37166

**DATE**

5/21/26

**PRESENTING CLINICAL SIGNS**

History: Suspected collapsing episode noted by owner. No history of heart murmur and no known arrhythmia. Gabapentin, Proin and Cranberry capsules.

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

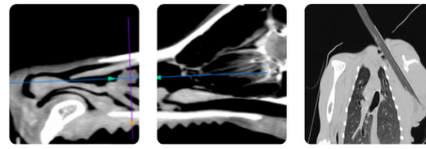
<b>CANINE CARDIAC PARAMETERS</b>	<b>LA long axis</b>	<b>LAmxN</b>	<b>Ao long axis</b>	<b>LA/AO (Heart Base; Swe, short axis)</b>	<b>LA/AO long axis</b>	<b>LVIDd</b>	<b>LVIDdN</b>
<b>NORMAL PARAMETER</b>		<1.57		<1.6	<2.5		<1.7
<b>PATIENT</b>	3.44	1.38	1.54	--	2.23	4.05	1.58
<b>CARDIAC PARAMETERS</b>	<b>Body Weight (kg)</b>	<b>AV VMAX (m/s)</b>	<b>PV MAX (m/s)</b>	<b>MR VMAX (m/s)</b>	<b>TR VMAX (m/s)</b>	<b>FS (%)</b>	<b>LVIDsN</b>
<b>NORMAL PARAMETER</b>		0.7-1.7	0.7-1.6			22 - 49%	<0.9
<b>PATIENT</b>	19.6	1.9	0.8	5.9	1.16	27.2	0.92
<b>CARDIAC PARAMETERS</b>	<b>HR (bpm)</b>	<b>MV E (m/s)</b>	<b>MV A (m/s)</b>	<b>MV E/A (m/s)</b>	<b>EF (%)</b>	<b>IVSdN</b>	<b>LVFWdN</b>
<b>NORMAL PARAMETER</b>						<0.6	<0.6
<b>PATIENT</b>	90	--	--	--	53	0.47	0.47

**ECG Interpretation**

There is a supraventricular rhythm with an average rate of 70 bpm. While some normal P waves are captured, the majority of the rhythm has negative P waves in the inferior limb leads. This rhythm is regularly irregular and appears as a sinus arrhythmia. There are occasional single APCs. No sustained runs of SVT, ventricular ectopy, or AV block is identified. Differentials for these inverted P waves include an ectopic atrial rhythm, such as those coming from the coronary sinus versus sinus origin with a lower atrial exit pathway, interatrial conduction block.

**Cardiac Presentation**

The mitral valve leaflets are mildly thickened and there is mild eccentric and anteriorly directed mitral valve insufficiency towards the interatrial septum. There is no prolapse of the mitral valve leaflets. The



**PATIENT**

Harley Bouckley

**SPECIES**

Canine

**BREED**

Lab X Potcake

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

19.6 kg

**INTERPRETED BY**

James Wood, DVM,  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Novel Vet

**REFERRING VET**

Dr. Knap

**INVOICE**

37166

**DATE**

5/21/26

left atrial size is normal; however, the left auricle is mildly dilated. Left ventricular internal dimensions during diastole are within normal limits and the global left ventricular systolic function is normal. There is normal right atrial size with mild tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension based upon tricuspid regurgitant velocities. The right ventricle subjectively appears normal in structure and function. The aortic valve leaflets are mildly thickened and there is a linear structure seen associated with the aortic valve on the ventricular aspect of the valve, seen on loop 6. The pulmonary valve has normal appearance and motion, and the corresponding outflow velocities are within normal limits. There is no evidence of pulmonary or aortic valve insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

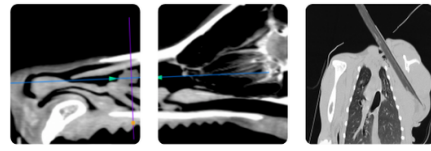
**ULTRASONOGRAPHIC FINDINGS**

- Myxomatous mitral valve disease, ACM stage B1
- Aortic valve thickening - R/O endocardiosis versus less likely endocarditis
- Supraventricular ectopy - single APCs
- Inverted P waves – R/O ectopic atrial rhythm versus sinus rhythm with aberrant atrial conduction
- Collapse episode - open

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The echocardiogram showed evidence of myxomatous mitral valve disease. Based on this echocardiogram, the left atrial and left ventricular chamber sizes do not meet the criteria for the initiation of pimobendan. No medications are recommended at this time. The overall risk of adverse cardiovascular outcomes is considered very low in the near future. This is, however, a progressive disease, and as such repeat echocardiogram in ~9-12 months is recommended to screen for progression. Recheck sooner if there is a new cough, increase in the resting RR, or other concern for progressive cardiac disease. Recheck for an echocardiogram in 9-12 months or sooner if concerns arise.

A definitive cause of the collapse episodes was not identified on the study, such as pulmonary hypertension, pericardial effusion, or significant sustained arrhythmia. A Holter monitor is recommended to rule out an arrhythmic cause of these episodes, particularly given the ECG findings. Additionally, the aortic valve thickening and linear structure are suspected to be reflective of mild degenerative valve disease. However, if there are clinical signs consistent with endocarditis, they should be considered as a differential, i.e., fever, inflammatory leukogram, hyporexia and lethargy.



**PATIENT**

Harley Bouckley

**SPECIES**

Canine

**BREED**

Lab X Potcake

**SEX**

Spayed Female

**AGE**

10 Years

**WEIGHT**

19.6 kg

**INTERPRETED BY**

James Wood, DVM,  
 DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Novel Vet

**REFERRING VET**

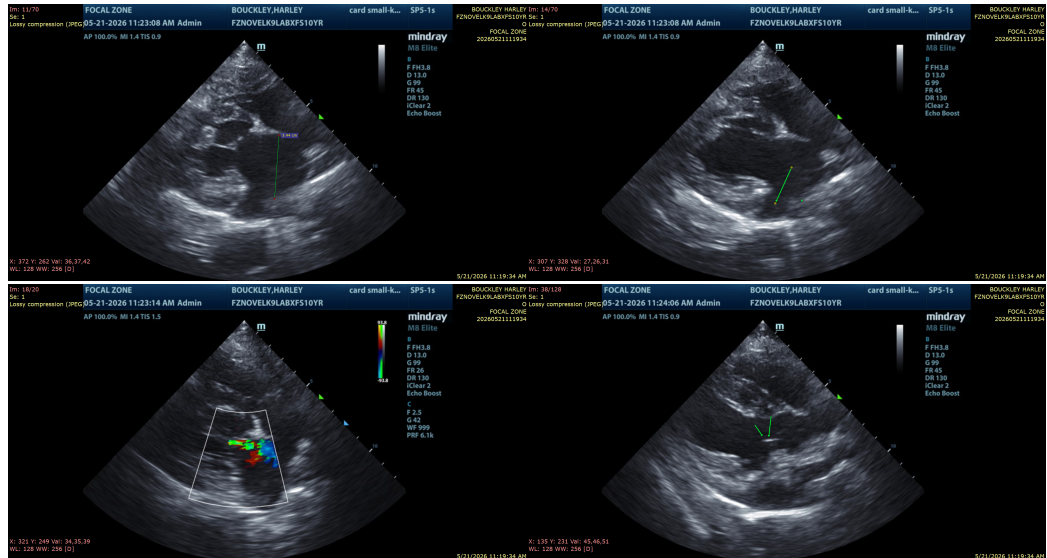
Dr. Knap

**INVOICE**

37166

**DATE**

5/21/26



The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

James Wood, DVM, DACVIM (Cardiology)

[info@SonoPath.com](mailto:info@SonoPath.com)