



**PATIENT PRESENTING CLINICAL SIGNS**

Wrigley Stubblefield

Wrigley presented for cardiac work-up today due to recent finding of a grade III/VI cardiac murmur (September 2021). He did well with anesthesia at that time for an anal mass excision, and chest radiographs at that time were unremarkable. He was given 1.4mg butorphanol IV to lightly sedate for the cardiac ultrasound exam today. His BP was normal to borderline high today immediately after the ultrasound, ranging from 149/83 (91) to 170/98 (116) mmHg systolic/ diastolic (MAP).

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: General health profile showed mild stress hyperglycemia of 117, mild AlkP elevation of 448 (normal ALT of 78) and mild hypophosphatemia of 2.5 in 9/2021.

**BREED**

Havanese

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**SEX**

Neutered male

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. Trivial **mitral** valve insufficiency was noted. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (pprox..1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

**AGE**

10 years

**WEIGHT**

14.9 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. McFeely

**HOSPITAL NAME**

Straley VA

**REFERRING VET**

Dr. McFeely

**INVOICE**

95170

**DATE**

1/11/22

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.2	1.2	30		0.1
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
<b>CARDIAC PARAMETERS</b>	(BPM)	<b>VMAX</b> (m/s)	<b>MAX</b> (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT		1.2	0.9	14.9 lbs	2.7 max	3.0	



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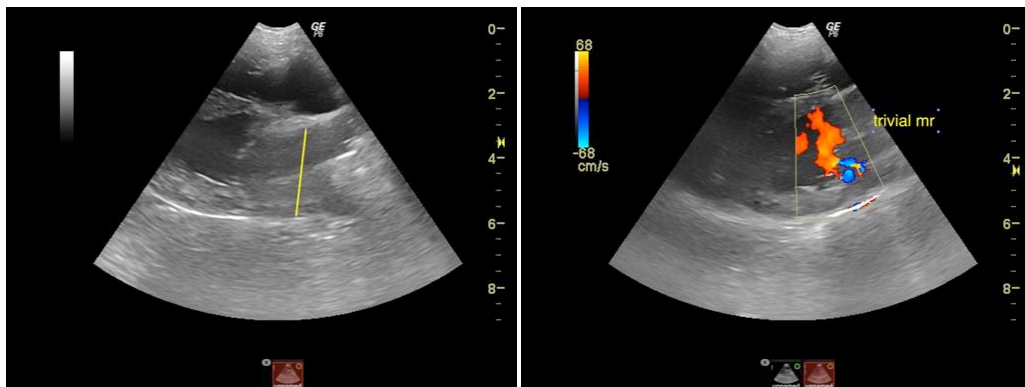
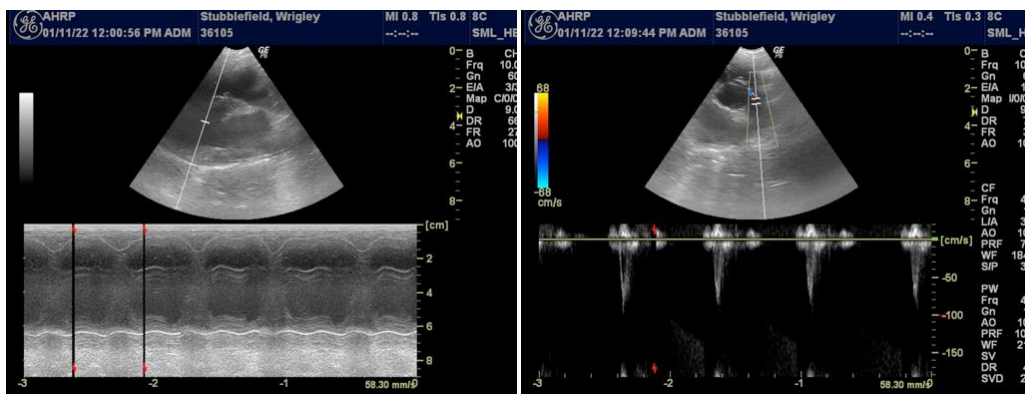
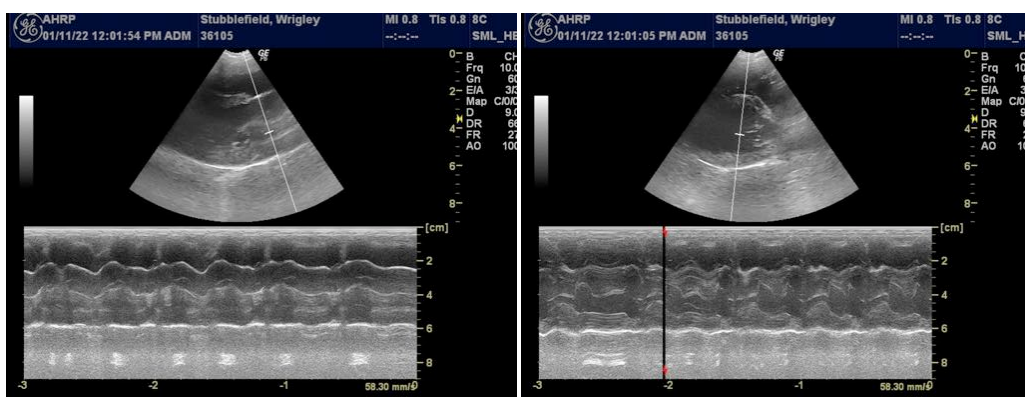
**ULTRASONOGRAPHIC FINDINGS**

Normal echocardiogram.

Possible arrhythmogenic disease.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There was no evidence of volume overload or functional issues.





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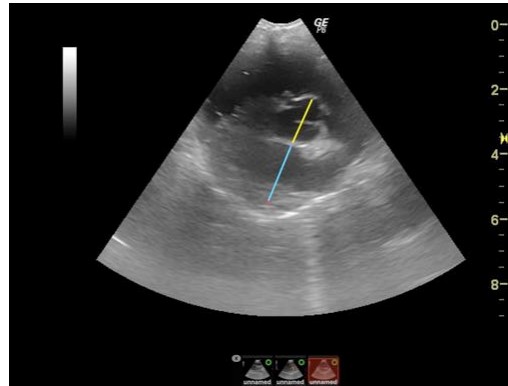
Dr. McFeely

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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. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
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