



**PATIENT**

Dog 65133

**PRESENTING CLINICAL SIGNS**

History: Grade 2/6 left heart murmur. Upper respiratory infection. Concern for pneumonia on radiographs.

**SPECIES**

Canine

**RADIOGRAPHIC FINDINGS** \*NOTE: Images submitted for supplemental cardiac information only.

Mild cardiomegaly. No obvious evidence of CHF.

**BREED**

Staffordshire Terrier  
Mix

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Normal mitral valve leaflets with no obvious prolapse into the left atrial lumen. Mild mitral regurgitation is identified. Normal velocity. Mild left atrial dilation. Mild LV dilation in both systole and diastole with adequate myocardial function. The tricuspid valve appears subjectively normal with no TR. The right heart is prominent. No overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Mild aortic outflow velocity. Normal pulmonic outflow velocities. No aortic insufficiency. Trace pulmonic insufficiency. No obvious shunts visualized. No pericardial or pleural effusion noted. No cardiac tumors observed. Bradycardia throughout.

**AGE**

8 months

**CARDIAC CHART**

**WEIGHT**

32lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

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	4.7	NA	NM	1.4	40	76	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	NM	2.3	1.1	14.5	3.0	4.0	2.4
*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**

The primary abnormality identified is mild 4 chamber dilation without an obvious cause. This is unusual to see in a puppy without an obvious cause, and there is concern the underlying issue may not be visualized in this study (shunt, etc.). A normal variant or some prior insult to the myocardium would be alternative possibilities and a cardiac troponin could be considered. The systolic function appears intact, ruling out juvenile DCM. Mild MR is identified without obvious valve pathology, which is likely physiologic. Monitoring for progression is advised. This may or

**INVOICE**

31537

**DATE**

6/26/23

**HOSPITAL NAME**

Charleston Animal  
Society

**REFERRING VET**

Dr. Jameson



**PATIENT**

Dog 65133

**SPECIES**

Canine

**BREED**

Staffordshire Terrier  
Mix

**SEX**

Female Intact

**AGE**

8 months

**WEIGHT**

32lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING  
PERFORMED BY**

A. Nicastro, DVM

**HOSPITAL NAME**

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may not be contributing to a soft murmur on exam and appears largely hemodynamically insignificant. A mildly elevated aortic outflow velocity is noted, which is also a benign flow abnormality that may lead to murmur development. No obvious additional abnormalities are visualized, such as a VSD or PDA. Consider referral to a local Cardiologist for advanced imaging in this case. As an alternative reassessment in 6 months is recommended.

Based upon what is seen here, no cardiac contribution to current clinical issues is suspected. Further respiratory evaluation is recommended.

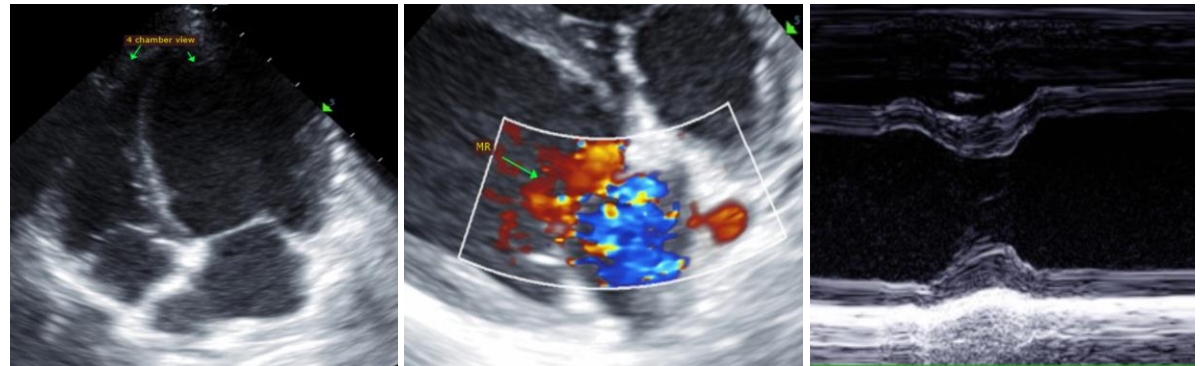
Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

No cardiac medications are indicated at this time. Monitor for any development of cough, labored breathing or exercise intolerance.

**PLAN**

Consider referral versus reassess in 6 months.

**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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