



PATIENT

Dog 59705A

PRESENTING CLINICAL SIGNS

History: Grade 4/6 heart murmur. CXR: Show questionable right-sided cardiomegaly.

SPECIES

Canine

BREED

Terrier

SEX

Female

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Mild mitral regurgitation with no left atrial dilation. Normal LV diameter with adequate myocardial function. The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Mild right heart enlargement. TR velocity indicative of early pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

CARDIAC CHART

AGE	CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)	
8 years	NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6	
	PATIENT	5.0	3.1	NM	1.3	43	80	NM	
WEIGHT	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)	
17lbs	NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW	
	PATIENT	NM	2.0	0.8	7.7	1.6	2.3	1.3	
	*Normal chamber parameters expressed as a mean value (SD)					3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
	BODY WEIGHT DEPENDENT PARAMETERS					5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
	<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>					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)
	Adapted from June Boon, Veterinary Echocardiography, 1998					25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
	Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435					30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
	Hansson et al, Vet Rad and Ultrasound 2002					35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
	Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995					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)

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY

A Nicastro, DVM

HOSPITAL NAME

Charleston Animal Society

REFERRING VET

Dr. Fuller

INVOICE

27730

DATE

11/30/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing mild mitral and tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. Mild pulmonary hypertension is noted with mild right heart enlargement. This is of unknown significance in a dog without respiratory disease. No concurrent issues such as systolic dysfunction are noted in this study.

Given these findings, any future cough should be addressed as a separate issue. Respiratory disease would be likely, given the signalment and radiographs may be helpful as a baseline.



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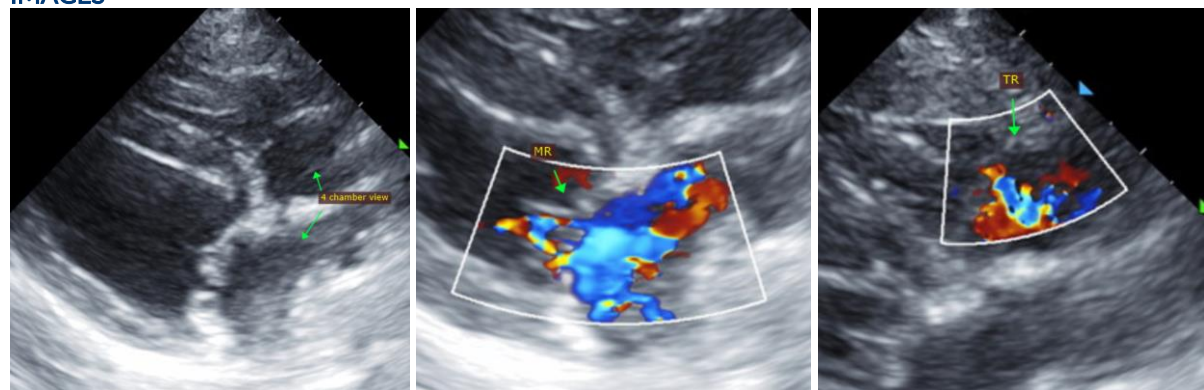
11/30/22

In a dog without 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.

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.

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

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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