


PATIENT

Luna 58762A

PRESENTING CLINICAL SIGNS

History: Grade 3/6 left apical systolic heart murmur.

SPECIES

Canine

BREED

American Staffordshire

SEX

Female Spayed

AGE

5 months

WEIGHT

NP

INTERPRETED BY

 Maggie Machen Lamy,
 DVM, DACVIM
 (Cardiology)

IMAGING PERFORMED BY

A Nicastro, DVM

HOSPITAL NAME

 Charleston Animal
 Society

REFERRING VET

Dr. Fuller

INVOICE

27728

DATE

11/30/22

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The anterior leaflet of the mitral valve is thickened and elongated no prolapse into the left atrial lumen. The anterior leaflet can be seen occluding the LVOT in systole; however, this is not captured on spectral doppler. Mild to moderate eccentric mitral regurgitation with mild left atrial dilation. Normal LV diameter with adequate myocardial function. Mild LV hypertrophy (1.1cm globally). The tricuspid valve appears normal with trace tricuspid regurgitation. 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 outflow velocities with laminar flow. Mild aortic and trace 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	NM	NM	NM	1.4	54	90	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	1.9	1.4	NP	2.4	3.3	1.5
*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)
				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 diagnosis is mitral valve dysplasia with a secondary LVOT obstruction and mild to moderate mitral regurgitation. There is mild hypertrophy of the LV secondary to pressure overload caused by obstruction to flow. There is no significant left atrial dilation indicating the risk for complication is currently low, however may progress going forward in this young patient. No additional issues are identified.

Heart rate control with atenolol is recommended, as the dynamic nature of the obstruction will be reduced at lower heart rates. No other medications are indicated at this juncture, although



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omega fatty acid supplementation may be useful for anti-arrhythmic benefits. Mild activity restriction is advised. Monitor at home for any respiratory signs or clinical lethargy/collapse.

SPECIES

Canine

Prognosis is guarded until progression and response to atenolol is assessed. This is an uncommon disease in dogs, making it difficult to predict outcome. Patient will be at risk for associated clinical signs including arrhythmias, CHF, and/or sudden death lifelong.

BREED

American Staffordshire

Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance.

SEX

Female Spayed

PLAN

Administer titrating dose of atenolol: 25mg tablets; Give 1/2 tab once daily. Recheck heart rate in 1-2 weeks with target stressed rate of <140bpm, Increase as needed until target reached. Periodic HR monitoring is recommended.

AGE

5 months

Recommend recheck echocardiogram in 6 months to assess for progression, sooner if clinical issues arise.

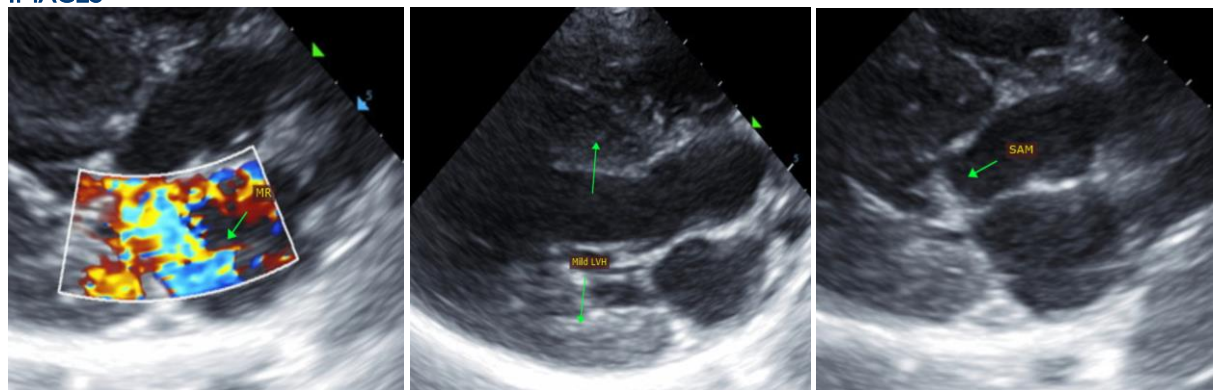
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IMAGES

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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.

HOSPITAL NAME

Charleston Animal Society

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.

REFERRING VET

Dr. Fuller

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