

**PATIENT**

Calliope Phelps

SPECIES

Canine

BREED

Australian Shepherd

SEX

Female Spayed

AGE

12.12.10

WEIGHT

75.4lbs

PRESENTING CLINICAL SIGNS

History: Recheck echo. Hacking. Heavy breathing/panting. Grade 4/6 left apical systolic heart murmur.

-Current medications: Pimobendan Flex tabs 30mg- 1/3 tab (10mg) every 12 hours (started around 08/15/2022), Thyro-tabs 0.5mg- 1 tab every 12 hours (11/27/2022), Interceptor 50-100lbs- 1 chewable every 30 days, Galliprant 60mg- 1 tab every 24 hours (added 7/19/2022)

-Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results (8/2022 MML): Moderate MR, moderate LAE, borderline LV, trace TR: 2.6m/s. LA: 4.0, LV: 4.1/2.7.

-STAT: Not requested

-Imaging performed by: Stephanie Warga RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse mild thickening of mitral valve leaflets (anterior>posterior) with no prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with no left atrial dilation. Elevated MR velocity. Decreased LV diameter with increased wall thickness and adequate myocardial function. The tricuspid valve appears subjectively normal, with trace tricuspid regurgitation. Normal velocity. Normal right atrial and ventricular diameter. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities. Mild aortic and no pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

CARDIAC CHART**INTERPRETED BY**Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)**HOSPITAL NAME**Animal Hospital of
Southgate**REFERRING VET**

Dr. Alexander

INVOICE

32298

DATE

8.10.23

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	>7.0	2.7	NM	1.2	39	70	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	2.5	1.4	34.0	3.2	2.8	1.8
*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)
*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)

Adapted from June Boon, Veterinary Echocardiography, 1998
 Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435
 Hansson et al, Vet Rad and Ultrasound 2002
 Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Compared to the prior study, there is evidence of significant volume contraction. Both the LA and LV are significantly decreased in size comparatively with evidence of pseudohypertrophy. **Baseline lab work is strongly recommended. Additionally, the aortic leak is increased with an elevated MR velocity and a baseline BP is also indicated.** No additional issues are identified, and no progressive chamber enlargement is seen.

These findings would suggest the respiratory signs are noncardiac in origin. They were also noted in the 2022 study, suggesting a chronic respiratory issue. **Baseline CXR are strongly recommended.** Continue Pimobendan for now; however, reassessment is advised once the patient is stabilized. Prognosis remains guarded long-term, stage (B1/B2).

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

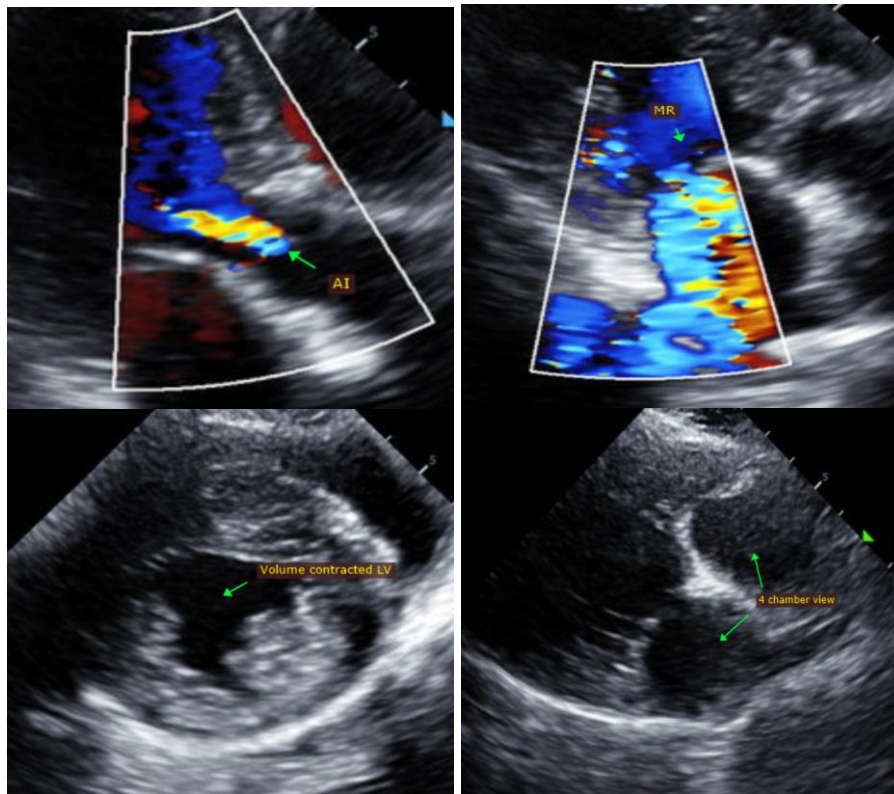
Anesthetic risk is considered mildly elevated. Cardiac protective drug choices (opioid/benzodiazepine premedication, Propofol or alfaxalone induction, iso or sevo gas) are recommended. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Judicious IV fluid rates are recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

PLAN

Baseline BP and lab work are strongly recommended. Continue Pimobendan 0.3mg/kg PO q12h. Consider further respiratory evaluation as discussed.

Recommend monitor for progression 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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