



PATIENT

Lola Wittig

SPECIES

Canine

BREED

Wheaten

SEX

Female Spayed

AGE

12 years

WEIGHT

41.8lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Sands Hill Mobile
Veterinary Ultrasound

HOSPITAL NAME

Whole Pet Vet

REFERRING VET

Dr. Rubendall

PRESENTING CLINICAL SIGNS

History: Recheck echo. Panting more, needs to rest more frequently than before. Murmur.
-Current medications: Furosemide 20mg 1 tab SID, recently increased to one tablet twice at day 10/4/22. Vetmedin 5mg-1 tablet BID, Cardio plus 2 tablets BID. Enalapril 5mg 1 tablet BID added at 10/4/22.
-Pertinent previous echo findings (Vital Rads 1/2022): CVD B2. LA/AO: 1.65, LVIDd: 1.8. Mild PAH, PI/AI. Recommend Pimobendan.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets (anterior>posterior) with minimal prolapse into the left atrial lumen. Moderate anterior-directed mitral regurgitation with moderate left atrial dilation. Normal MR velocity. Borderline LV diameter with adequate myocardial function. The tricuspid valve appears mildly thickened with mild 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. No aortic and trace pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

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	5.8	2.6	1.4	1.6	34	63	0.6
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	150	1.2	0.7	19.0	3.4	4.2	2.8
*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)
<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)

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

INVOICE

26731

DATE

10/5/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing moderate mitral and mild tricuspid regurgitation persists. Compared to what is available from the prior study, there is no evidence of progression. Moderate left atrial enlargement indicates there is relatively low risk for imminent complication, however risk for progression to spontaneous congestive heart failure in the future is elevated. No additional issues are identified.



PATIENT

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Given these findings, reasonable to continue Pimobendan going forward. Enalapril is likely of little consequence, assuming blood pressure is normal. No indication for Lasix in this case and this can be safely discontinued. Assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).

SPECIES

Canine

No cause for increased panting is seen in this study. Baseline chest radiographs and further systemic/respiratory evaluation is advised.

BREED

Wheaten

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.

SEX

Female Spayed

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.

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12 years

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41.8lbs

PLAN

Continue Pimobendan 0.25-0.3mg/kg PO q12h. Baseline BP recommended, if >130mmHg, reasonable to continue Enalapril as prescribed. Discontinue Lasix as discussed. Consider further evaluation of panting.

INTERPRETED BY

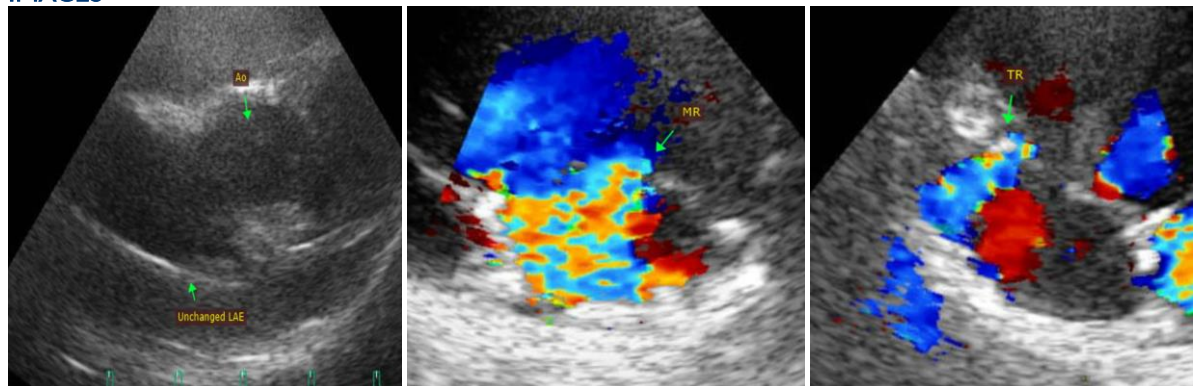
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DVM, DACVIM
(Cardiology)

Recommend monitor for progression with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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IMAGES



HOSPITAL NAME

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Dr. Rubendall

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.

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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.

DATE

10/5/22

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