


PATIENT

Miss Molly King

PRESENTING CLINICAL SIGNS

History: Recheck echo. Short of breath. Coughing. Decreased appetite. Increased heart murmur, now grade 5/6 with thrill.

SPECIES

Canine

-Current medications: Gabapentin, Benazepril, Vetmedin, Prednisone

-Radiographs: Shows a mildly enlarged heart and redundant tracheal membrane as already suspected/known as well as her bladder stones. Additionally, her liver is slightly enlarged.

-Penitent previous echo findings (11/2022 MML): LV 3.0, LA 1.6, LA:AO Swe 1.3, TR 2.0

BREED

Havanese

ECHOCARDIOGRAM FINDINGS

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

SEX

Female Spayed

AGE

12 years

CARDIAC CHART
WEIGHT

19lbs

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	6.4	3.0	1.5	1.7	48	80	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	217	0.9	1.4	8.6	2.3	3.8	2.5
*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)

 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

HOSPITAL NAME

 Beattie Pet Hospital
 Ancaster

REFERRING VET

Dr. Davis

INVOICE

31848

DATE

7/14/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease persists with evidence of progression. Previously mild MR has advanced to moderate, with increasing left heart dimensions. The tricuspid leak is stable, although early pulmonary hypertension has developed. Moderate left atrial



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enlargement indicates there is relatively low risk for imminent complication, however risk for progression to spontaneous congestive heart failure in the future is elevated.

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Based upon these findings, recommend continuation of Pimobendan as below. An ACEI is also reasonable, pending baseline BP assessment. Continued assessment of progression is recommended, with a guarded prognosis going forward (stage B2). Patient may be at risk for development of CHF, arrhythmias, and/or sudden death going forward.

BREED

Havanese

Even with changes seen here, the radiograph report does not suggest CHF, and a cardiac cause of clinical signs is unlikely. Primary respiratory disease should be considered, with further evaluation as indicated. Consider hydrocodone for any mechanical component due to cardiomegaly.

SEX

Female Spayed

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.

AGE

12 years

Once on the medication for 3-5 days, anesthetic risk remains 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.

WEIGHT

19lbs

INTERPRETED BY

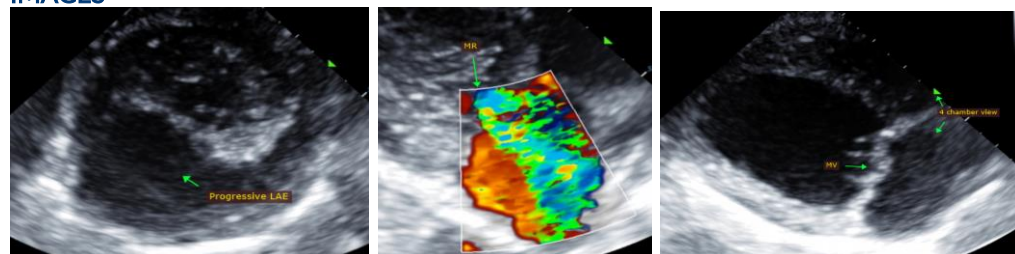
Maggie Machen Lamy,
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(Cardiology)

Plan: Baseline BP recommended every 6 months. Continue Pimobendan 0.25-0.3mg/kg PO q12h. Pending BP >130mmHg, reasonable to continue ACEI 0.5mg/kg PO q12h. Further respiratory evaluation as indicated. Recommend monitor for progression with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

IMAGING PERFORMED BY

Kelly Reschny, RVT

IMAGES



HOSPITAL NAME

Beattie Pet Hospital
Ancaster

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.

REFERRING VET

Dr. Davis

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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31848

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