



PATIENT

Bentley Loskot

SPECIES

Canine

BREED

Chihuahua

SEX

Male Neutered

AGE

12.24.10

WEIGHT

8.9lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Perry Hall Animal
Hospital

REFERRING VET

Dr. Baer

INVOICE

31921

DATE

7.18.23

PRESENTING CLINICAL SIGNS

History: Recheck echo. Intermittent collapsing/fainting episodes with complete recovery within 10-20 seconds after episode 3 in the past 2 months. Grade 3/6 holosystolic murmur.

-Pertinent abnormal PE/Chem/CBC/UA Results: 03/06/23 CBC- Plt mild increase 474 K/uL

Chem- CK mild increase 270 U/L, 1+ hemolysis. UA free catch 1.049, pH 7.5, prot 1+, ketone trace occ amm mg phos crystal. T4 wnl.

-Current medications: Pimobendan 1.25mg BID.

-Sedation used: Patient sedated with Torbugesic.

-Pertinent previous ultrasound results (1/2023 MML): Mild to moderate MR, moderate LAE, mild to moderate TR, moderate PAH, mild RHE. TR: 3.3, LA: 2.0, LV: 2.9.

-STAT: Not requested

-Imaging performed by: Andi Parkinson, BS, RDMS.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with minimal prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with moderate left atrial dilation. Normal MR velocity. Minimal LV dilation with adequate myocardial function. The tricuspid valve appears mildly thickened with mild to moderate tricuspid regurgitation. TR velocity consistent with moderate pulmonary hypertension. Mild right atrial and ventricular prominence. MPA is prominent. 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

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	6.5	3.7	NM	1.8	46	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	150	1.2	1.1	4.0	2.2	3.1	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)

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, findings are similar. Quantitatively the MR is slightly increased; however, the left heart dimensions appear stable. Moderate pulmonary hypertension is slightly progressed as well, although the right heart remains relatively unremarkable. No additional issues are identified.

Given these findings, continue Pimobendan as previously recommended. It is unclear as to the cause of syncope as this was noted prior to the initial evaluation as well. If the episodes are purely exertional in origin, a trial of Sildenafil could be utilized to assess response.

Anesthetic risk is considered mildly elevated. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, iso or sevoflurane gas) are recommended. Pre-oxygenate 5-10 minutes prior to induction. 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.

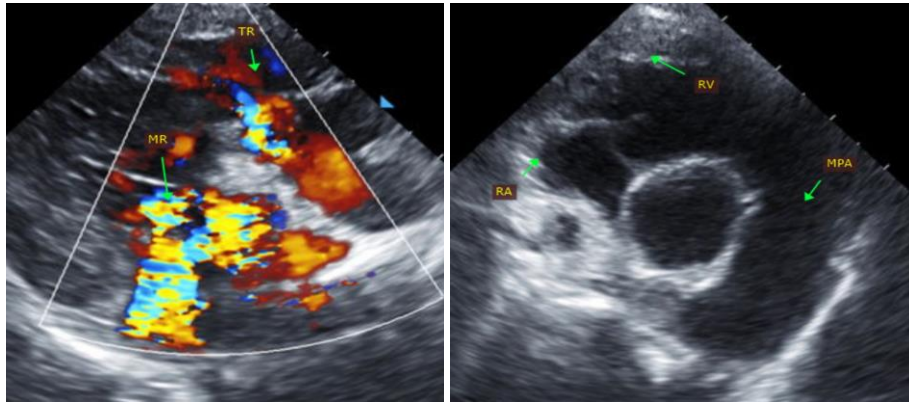
Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

PLAN

Baseline BP recommended. Continue Pimobendan 0.3mg/kg PO q12h. If the episodes are exertional in nature, a trial of Sildenafil may be warranted: 1-2mg/kg PO q8-12h and assess response.

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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