

**PATIENT**

Fortune Hunter

SPECIES

Canine

BREED

Toy Poodle

SEX

Male Neutered

AGE

1.27.07

WEIGHT

11.8lbs

INTERPRETED BYMaggie Machen Lamy,
DVM, DACVIM
(Cardiology)**HOSPITAL NAME**Chadwell Animal
Hospital**REFERRING VET**

Dr. Mengers

INVOICE

28159

DATE

1.6.23

PRESENTING CLINICAL SIGNS

History: Recheck echo. Presented 12/26/22 for L hind leg giving out and worsening cough. Grade V/VI heart murmur heard upon auscultation. Physical exam consistent with LH cranial cruciate ligament rupture.

-Pertinent abnormal PE/Chem/CBC/UA Results: 12/16/22 Radiographic - medial luxating patellas 9/1/22 BW - BUN 41 (9-31), ALT 243 (18-121), ALP 338 (5-160)

-Current medications: Denamarin Advanced 1 chew SID, Hydrocodone Tabs (5mg) - 1/4 BID PRN, vetmedin (1.25mg) - 1 BID, hydrocodone syrup (5mg/ml) - 1ml TID, Advantix, Heartgard.

-Blood pressure: 162/112, 159/111 and 151/111mmHg.

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

-Pertinent previous ultrasound results (11/2021 MML): Moderate MR, moderate LAE, borderline LV, mild PAH, mild TR. TR: 3.1, LA: 2.3, LV: 2.9.

-STAT: Not requested.

-Imaging performed by: Stephanie Warga RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with mild prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with moderate left atrial dilation. Elevated MR velocity. Mild LV dilation with adequate myocardial function. The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Velocity consistent with moderate pulmonary hypertension. Mild right heart enlargement. The pulmonic valve is normal in morphology and mobility. Aortic valve is mildly thickened with trace AI. Normal pulmonic and aortic outflow velocities with laminar flow. No obvious 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	4.0	NM	1.8	46	79	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	170	1.2	1.1	5.4	2.3	3.1	1.6
*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, the left heart disease appears similar with moderate MR and moderate left heart enlargement. The pulmonary hypertension appears mildly progressed, likely secondary to the reported cough. The aortic leak remains trivial, and no additional issues are identified.

Given these findings, the cough should be further addressed as previously discussed. Baseline CXR are recommended.

No exertional syncope or dyspnea is noted in the history; however, should this develop in the future Sildenafil may become warranted. Otherwise, no indication for additional cardiac medications.

Continue to monitor for progressive cough, labored breathing, exercise intolerance or collapse at home. Monitoring of sleeping respiratory rates (SRRs) is recommended to screen for progression to CHF at home.

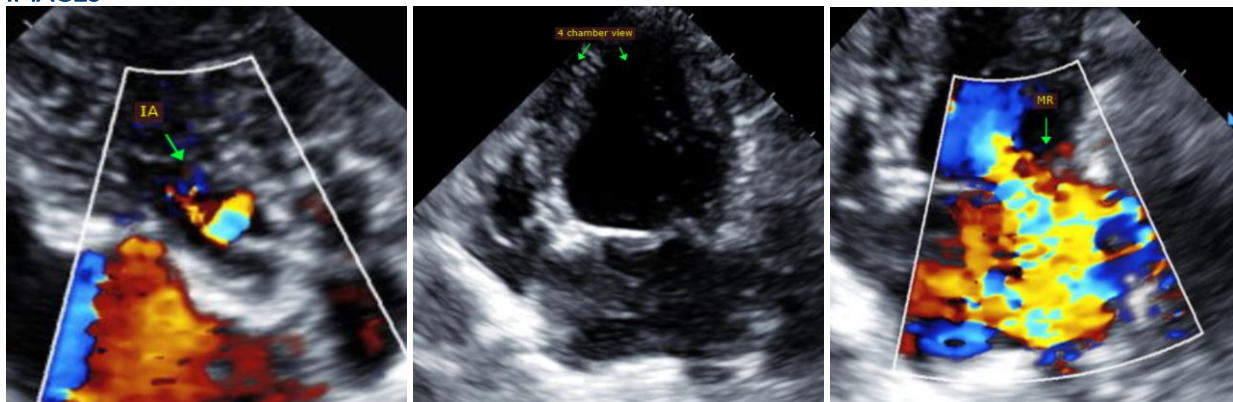
Anesthetic risk is considered moderate if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

PLAN

Continue Pimobendan as prescribed. If any exertional syncope or dyspnea develops, institute Sildenafil 1-2mg/kg PO q12h. Monitor BP every 6 months.

Recheck echocardiogram in 6 months, sooner if any clinical signs arise.

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.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com