



DATE

4.13.26

PATIENT

Sunny Zulty

SPECIES

Canine

BREED

Labrador Retriever

SEX

MN

AGE

10.20.20

WEIGHT

85lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Sunny Zulty

REFERRING VET

Dr. Zulty

INVOICE

47538

CLINICAL BACKGROUND & STUDY DETAILS

History: History of total left lung lobectomy in March 2023 - foreign body suspected but diagnosis was unable to be confirmed with biopsy. Has done well since. 4/6/26 was noted to have very pale mucus membranes in the mouth after being outside (was freezing outside). Color improved to normal after 15-30 minutes. Historically, patient has had a few instance paler mucus membranes but resolves. Unsure if related to patient only have 1 lung. Otherwise doing well at home. Recently injured 104 tooth - pulpitis noted. Rest of PE unremarkable.

Pertinent abnormal PE/Chem/CBC/UA Results: Lab work WNL.
CXR (2/13/26 AI): increased VHS.

Current medications: None listed.

Sedation used: Torbugesic.

Pertinent previous ultrasound result: (3/2025 EM) Evaluated for exercise intolerance. Normal. LV: 4.9/3.8, FS: 33%, LA/AO: 1.2, TR: 1.7.

STAT: Not requested.

Imaging performed by: Stephanie Warga RDCS, RVT.

ELECTROCARDIOGRAPHIC FINDINGS

A six lead ECG is available at both 25 and 50mm/s; 2mm/mV. The average heart rate is 88bpm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is normal. No ectopic beats, pauses or dysrhythmias observed.

ECG diagnosis: Sinus bradycardia with respiratory variation.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. No mitral regurgitation; normal left atrial dimension. Slight LV dilation in both systole and diastole with borderline myocardial dysfunction. (LVIDdN: 1.77, LVIDsN: 1.20). Mild increase in sphericity. The tricuspid valve appears normal with no tricuspid regurgitation. Normal right atrial and ventricular diameter and morphology; no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. No AI or PI appreciated. 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	NA	NA	NM	1.3	27	50	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	50	1.5	0.8	38.6	3.3	5.2	3.8
*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. 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	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)			

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Compared to the prior study, findings are largely similar. The LV dimension in diastole is unchanged and remains slightly enlarged; while the dimension in systole has increased comparatively. The LV function is borderline for this signalment and should be monitored going forward. These findings may be enough to suggest early DCM phenotype; however, a normal variant is also possible. No significant valve leaks are noted, and the remainder of the study is unremarkable. The ECG is normal with a sinus bradycardia and respiratory variation.

Consider ruling out contributing issues to these findings, such as an atypical diet or hypothyroidism. A Taurine supplement could be considered.

Prognosis is guarded prior to assessing for progression in the future.

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

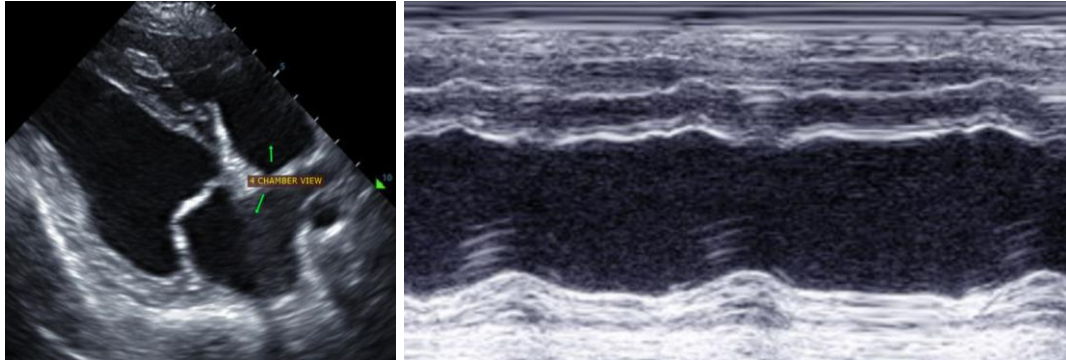
Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively 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. Avoid alpha 2 agonists such as Dexdomitor in this patient.

PLAN

Consider a diet history/thyroid status. Consider a Taurine supplement 1000mg PO q12h.

Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs or a heart murmur.

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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