



PATIENT

Charlotte Bettencourt

PRESENTING CLINICAL SIGNS

History: Asymptomatic grade II/VI systolic murmur. Needs dental procedure. BP: 140mmHg.
Diet: Purina ProPlan *Sedated with gabapentin

SPECIES

Canine

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.

Left ventricle: The LV diameter is normal diastole; however, increased in systole. Mild to moderate LV dysfunction. LV wall thicknesses are normal.

BREED

Golden Retriever

Left atrium: The left atrium is normal.

Mitral valve: The mitral valve mildly thickened with no prolapse into the left atrial lumen. Trace/mild central mitral regurgitation.

SEX

Female Intact

Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.

Right ventricle: Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.

AGE

4 years

Right atrium: Normal RA dimension.

Tricuspid valve: The tricuspid valve appears mildly thickened with trace tricuspid regurgitation. Normal velocity.

WEIGHT

58.9lbs

Pulmonary valve/Pulmonary artery: The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.

Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.

Heart rhythm: ECG shows a sinus bradycardia, HR range is 50-90bpm.

INTERPRETED BY

Maggie Machen Lamy, DVM
DACVIM (Cardiology)

2-Dimensional Measurements

Ao diam (cm)	2.5
LA diam (cm)	2.7
LA:Ao (Swe)	1.1
IVS thickness (cm)	1.1
LVID diastole (cm)	4.1
PW thickness (cm)	1.1
LVID systole (cm)	3.2
FS (%)	22

Doppler Measurements

PV Vmax (m/s)	0.73
AoV Vmax (m/s)	1.6
MR Vmax (m/s)	NM
TR Vmax (m/s)	2.0
TR PG (mmHg)	16

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

INTERPRETATION OF THE FINDINGS

Several mild abnormalities are identified. First, mild to moderate systolic dysfunction is noted, with largely normal cardiac dimensions. While there is concern for early cardiomyopathy, a normal variant is also possible. Serial monitoring is advised. The only cause of a murmur identified is mild mitral regurgitation, which likely reflects early chronic degenerative valve disease. Finally, the ECG does show a significant bradycardia which is unexpected for a non-sedated young animal. If bradycardia persists without Gabapentin, highly recommend an Atropine Challenge, particularly prior to anesthesia. No additional issues are identified.

HOSPITAL NAME

Wignall Animal Hospital

REFERRING VET

Dr.Detelich

INVOICE

20960

DATE

9/9/21

Given that the patient is on a standard (i.e., non-grain free) diet, other possibilities should be considered. A taurine supplement should be utilized on the off chance of a malabsorption issue. A thyroid level is recommended if not recently assessed as this can present with dysfunction as well. Monitoring for progression is advised. No clear indication for Pimobendan at this juncture; however, if any progression is noted this will be advised.



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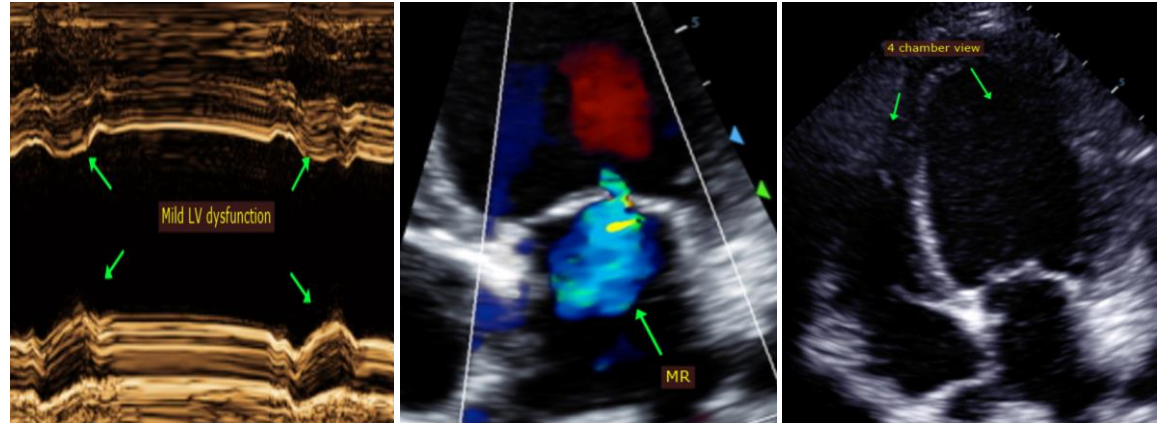
RECOMMENDATIONS

- Reassess heart rate in the future; if persistently bradycardic further evaluation is advised including an Atropine Challenge, etc.
- No cardiac medications are clearly indicated.
- Thyroid level.
- Institute Taurine supplement, 1000mg PO q12h.
- Omega fatty acid supplementation may be of some long-term benefit.
- **Pending further heart rate assessment**, 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.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

PLAN

- Recommend conservative monitoring 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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