



PATIENT

Gertrude Johnson

PRESENTING CLINICAL SIGNS

History: Coughing; grade III/VI systolic murmur; arrhythmia. Not on grain free diet. BP: 117. 121, 122mmHg. Started Pimobendan 5mg, 1.5 t BID; Hydrocodone 5mg, 2 t BID if needed.

SPECIES

Canine

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only. Left-sided cardiomegaly. Concern for impending CHF.

BREED

Doberman Pinscher

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

SEX

Female Spayed

A single lead ECG is available; 25mm/s, 20mm/mV. The underlying rhythm is sinus in origin with an average heart rate of 120bpm. P and QRS morphologies are positive. Isolated VPCs throughout; singles only, polymorphic. No supraventricular premature beats, pauses or other dysrhythmias observed. ECG diagnosis: Normal sinus rhythm with isolated polymorphic VPCs.

AGE

9 years

ECHOCARDIOGRAM FINDINGS

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

WEIGHT

63.3lbs

Left ventricle: The LV diameter is increased with severe systolic dysfunction. LV wall thicknesses are decreased with increased sphericity.

Left atrium: The left atrium is severely dilated.

Mitral valve: The mitral valve is minimally thickened with no prolapse into the left atrial lumen. Moderate central mitral regurgitation. Decreased velocity.

Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. Mild aortic insufficiency.

Right ventricle: Mildly dilated right ventricle.

Right atrium: Mild RA dilation.

Tricuspid valve: The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Borderline velocity.

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 effusion noted. Scant pleural and peritoneal effusion. No obvious cardiac masses.

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan,
RDCS

2-Dimensional Measurements

Ao diam (cm)	2.0
LA diam (cm)	5.7
LA:Ao (Swe)	2.8
IVS thickness (cm)	0.7
LVID diastole (cm)	5.9
PW thickness (cm)	0.7
LVID systole (cm)	5.2
FS (%)	11

Doppler Measurements

PV Vmax (m/s)	0.63
AoV Vmax (m/s)	1.0
MR Vmax (m/s)	4.3
TR Vmax (m/s)	2.7
TR PG (mmHg)	30

HOSPITAL NAME

Chase Veterinary
Clinic

REFERRING VET

Dr. Caffarella

INVOICE

22037

DATE

11/15/21

INTERPRETATION OF THE FINDINGS

Severe LV dilation and systolic dysfunction are identified. MR and TR are likely secondary to dilation, although a primary valve issue is not entirely ruled out. The LA is severely enlarged as well, indicating high risk for congestive heart failure. The right heart is also mildly affected, although to a lesser extent. A small amount of peritoneal and pleural



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effusion is identified, which is consistent with congestive heart failure. Immediate lifelong cardiac support is recommended as below in order to stabilize the patient going forward. If the patient is or becomes unstable, immediate hospitalization is advised.

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Systolic failure can be primary in nature (DCM) or secondary to taurine deficiency, myocarditis, tachycardia-induced cardiomyopathy, or infiltrative disease such as lymphoma. In a senior Doberman, DCM is likely. Regardless, prognosis is poor at this stage in the disease process, with an average survival time of <6 months. Patient will always be at risk for recurrent CHF, development of malignant arrhythmias and/or sudden death in the future.

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As a complicating factor, the patient has also developed isolated VPCs, which should be monitored going forward. The VPCs are multiform in appearance puts the patient at high risk for decompensation going forward.

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Given that the patient is currently in crisis, no treatment for the VPCs is warranted at this time. It is important to note that this patient is at high risk for sustained VT/VF and sudden death going forward and anti-arrhythmic medications may be warranted in the future. A holter monitor would be ideal once the patient is stabilized to ensure no sustained arrhythmias are appreciated. Close monitoring going forward is advised.

WEIGHT

63.3lbs

Monitoring of sleeping respiratory rates will be paramount to screen for recurrent congestive heart failure at home in the future. Cough suppression to improve QOL can also be considered once diuretics are on board for any residual mechanical cough in the face of normal sleeping respiratory rates.

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 Lamy, DVM
 DACVIM (Cardiology)

Prognosis is poor at this stage, with risk for recurrent congestive heart failure, malignant arrhythmias (AF, VT), collapse and/or sudden death in the future.

RECOMMENDATIONS

IMAGING PERFORMED BY

Pamela Harrigan,
 RDCS

- If the patient is or becomes unstable, immediate hospitalization is advised for ECG monitoring, O2 support and injectable medications.
- Institute Furosemide to 1-2mg/kg PO q12h.
- Institute Spironolactone 1-2mg/kg PO q12h.
- Institute Pimobendan 0.3mg/kg PO q12h.
- Consider hydrocodone with homatropine, 0.2 – 0.4 mg/kg PO up to q4-6 hours PRN for cough (available in 5/1.5mg tablets or 5mg/5ml solution).
- Once stable, consider a holter monitor as discussed, particularly should any collapse be noted in the future.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Elective anesthesia is not advised.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes. Monitoring of sleeping breathing rates is recommended as the best way to screen for CHF going forward.
- Lifelong activity restriction is advised.

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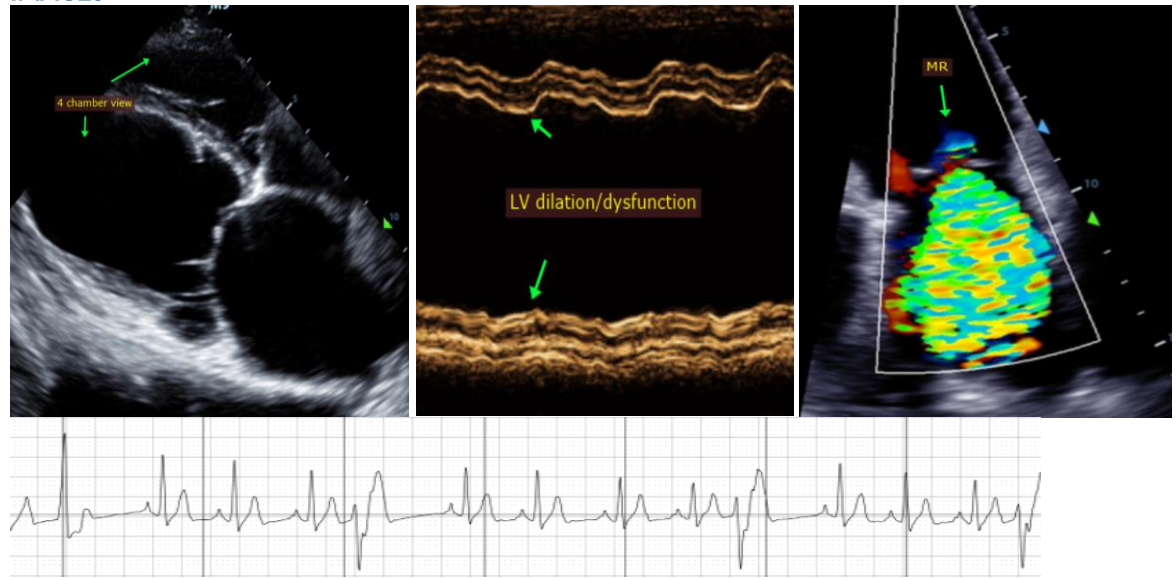
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PLAN

- Monitor renal values, ECG and blood pressure in 1-2 weeks, then every 3-4 months lifelong. If doing well at that time and BP is >130mmHg, institute ACE-I 0.5mg/kg PO q12h.
- 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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