



**PATIENT**

Larry Gonsalves

**SPECIES**

Feline

**BREED**

Siamese

**SEX**

Male Neutered

**AGE**

13 years

**WEIGHT**

13.6lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**PRESENTING CLINICAL SIGNS**

History: Patient has a history of intermittent hacking/gagging cough present for several years. This has not progressed. Patient has never had a heart murmur but has had an elevated ProBNP (469) for last 1.5 years. Radiographs: Query pulmonary edema vs. asthma. BP: 160-170mmHg.

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

A single lead ECG is available; 25mm/s, 20mm/mV. The average heart rate is 188bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. P and QRS morphologies are positive. Frequent VPCs throughout; singles only, monomorphic. No couplets, triplets or VT are appreciated. No supraventricular premature beats, pauses or other dysrhythmias observed. ECG diagnosis: Normal sinus rhythm with isolated VPCs.

**ECHOCARDIOGRAM FINDINGS**

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

**Left ventricle:** The LV diameter is normal with adequate myocardial function. The LV wall thicknesses are normal with regions of asymmetry. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are remodeled and hyperechoic. The endocardium appears remodeled.

**Left atrium:** The left atrium and auricle are markedly dilated with subtle spontaneous contrast. No obvious thrombi seen.

**Mitral valve:** The mitral valve is normal in structure and mobility. No obvious systolic anterior motion is seen. Mild eccentric MR.

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

**Right ventricle:** No right ventricular dilation.

**Right atrium:** The right atrium is normal.

**Tricuspid valve:** The tricuspid valve appears normal with no tricuspid regurgitation.

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

**Pericardium/other:** Small volume pericardial effusion. No pleural effusion noted. No obvious cardiac masses.

**HOSPITAL NAME**

Anchor Animal  
Hospital

**REFERRING VET**

Dr. Pietsch

**INVOICE**

30084

**DATE**

4/6/23

**2-Dimensional Measurements**

Ao diam (cm)	0.9
LA diam (cm)	2.1
LA:Ao (Swe)	2.4
IVS thickness (cm)	0.42
LVID diastole (cm)	1.9
PW thickness (cm)	0.54
LVID systole (cm)	0.94
FS (%)	50

**Doppler Measurements**

PV Vmax (m/s)	0.93
AoV Vmax (m/s)	0.94
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA



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**INTERPRETATION OF THE FINDINGS**

The finding of severe left atrial enlargement in the face of normal LV wall thickness is most consistent with Unclassified Cardiomyopathy (UCM). Marked left atrial dilation is present, in addition to subtle smoke which raises the risk of a blood clot event. No additional underlying issues are seen.

Regardless of categorical classification, this degree of atrial dilation in addition to pericardial effusion reflects early congestive heart failure, and immediate lifelong medications are warranted as below. The long-term prognosis is guarded to poor even with medications and no reported symptoms; however, most cats are able to maintain a good quality of life for some time. There will always remain risk for progression to CHF and development of blood clots in the future. The development of VPC's is concerning, and sudden death is certainly possible in the future. Monitoring is certainly advised; particularly should any collapse or significant lethargy be noted in the future.

As a complicating factor, there is also a significant ventricular arrhythmia present. Frequent VPCs are diagnosed, No sustained arrhythmias are documented, however this cat is at high risk for development of VT and potentially VF leading to sudden death at any time. My hope is that these arrhythmias are exacerbated by the current crisis and will improve without specific anti-arrhythmic therapy following stabilization. Anti-arrhythmic are often difficult to use in cats; however, follow up is certainly advised.

Even with severe disease/CHF seen here, a chronic cough likely reflects a concurrent primary airway issue. Going forward the cough must always be differentiated from recurrent CHF and repeat CXR will be extremely important. Further respiratory treatment may be necessary should the symptom worsen.

**RECOMMENDATIONS**

- If patient appears or becomes unstable, consider hospitalization.
- Institute Lasix 1-2mg/kg PO q12h.
- Institute pimobendan off label use 1.25mg PO q12h.
- Institute Plavix 18.75mg PO q24h (NOTE: Medication is bitter along the cut edge; coat in entirety).
- Recheck renal panel, BP and ECG in 5-7 days post-stabilization. Do not utilize ACEI until the patient is doing well at home and BP is >130mmHg.
- If frequent VPCs persists, a low dose of Atenolol can be considered; however, a full ECG evaluation is recommended.
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).
- Elective anesthesia, fluid or steroid therapy are contra-indicated in this patient.

**PLAN**

- Recommend recheck echocardiogram in 6 months to screen for progressive issues.



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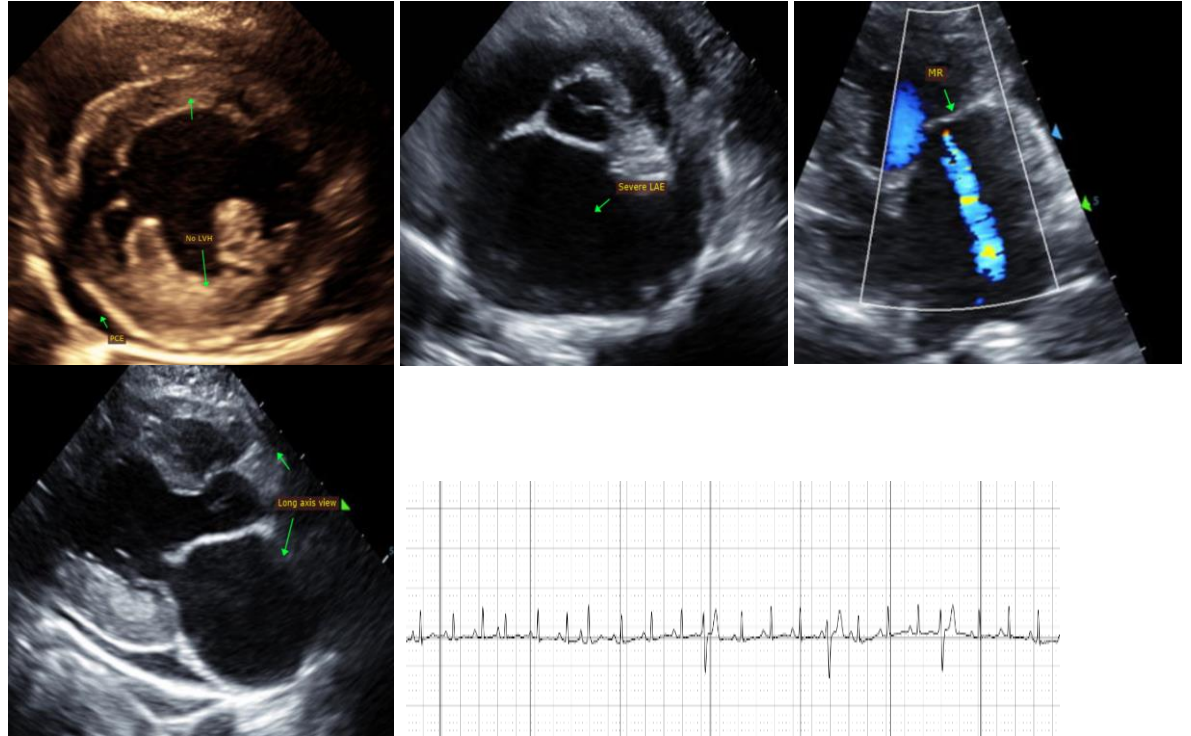
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**IMAGES**



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

**Echocardiogram performed by:** Pamela Harrigan, RDCS  
 Pet Animal Ultrasound Service ([4paus.com](http://4paus.com))