



**PATIENT**

Rocky Pace

**SPECIES**

Feline

**BREED**

Showshoe

**SEX**

Male Neutered

**AGE**

10 years

**WEIGHT**

13.87lbs

**INTERPRETED BY**

Maggie Machen  
 Lamy, DVM, DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

Reid Veterinary  
 Hospital

**REFERRING VET**

Dr. Popowich

**INVOICE**

22447

**DATE**

2/8/22

**PRESENTING CLINICAL SIGNS**

History: Owner concerned about asthma, signs starting approx. 1 year ago. Patient has productive cough with terminal retch. No syncope or dyspnea, but some increased inspiratory effort after intense coughing episode, episodes occur 2-5 times/day. Allergic airway disease, parasitic, infectious tracheobronchitis, cardiogenic, neoplasia.  
 -Current medications: Fluticasone inhaler 110mcg/puff.

**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, 10mm/mV. The average heart rate is 188bpm with a largely regular rhythm. The underlying rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. Isolated VPCs (3) are noted. No supraventricular ectopic 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. The left ventricular wall is largely normal in dimension with regions of thinning. The LV is mildly dilated. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are remodeled with regions of atrophy. The left atrium is mildly dilated and bulbous in appearance. No obvious smoke. The right atrium is moderately dilated. The right ventricle appears prominent. The mitral valve is mildly thickened with moderate MR. Mild TR seen. Blood flow through both the LVOT and RVOT is normal in velocity. Trace pericardial effusion seen. No pericardial or pleural effusion. No obvious cardiac tumors.

**CARDIAC CHART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LWVd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	6.3	160	0.45	1.75	0.54	41	80
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	2.3	2.0		1.0	0.6	NM

*\*Note: All measurements based upon multi-modal images and methods. An average value is reported.  
 Adapted from June Boon, Veterinary Echocardiography, 1998  
 Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.*

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The finding of severe left atrial enlargement in the face of normal LV wall thickness and intact function is most consistent with Unclassified Cardiomyopathy (UCM); however, some infectious or inflammatory insult to the myocardium, or end-stage HCM can also have this appearance. There is also significant LV remodeling and fibrosis which indicates diastolic dysfunction. MR and



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TR are likely secondary to annular stretch and are of little hemodynamic significance. Most importantly the LA is severely dilated, putting the patient at risk for decompensation.

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Regardless of categorical classification, the finding of this degree of biatrial dilation puts the patient at high risk for spontaneous congestive heart failure, and lifelong medications are warranted as below including low dose Lasix. Concurrent asthma will make differentiating the cause of labored breathing difficult going forward, although a cough is more likely respiratory in origin.

**BREED**

Showshoe

The mean survival time for cats with CHF is <8 months, however most are able to maintain a good quality of life on medications. There will always remain risk for recurrent episodes of CHF, development of blood clots and/or malignant arrhythmias/sudden death in the future.

**SEX**

Male Neutered

Monitoring of sleeping breathing rates at home is recommended as the best way to screen for recurrent CHF at home.

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The ECG does show isolated VPCs, which is not surprising given severe structural disease in a stressed atmosphere. Single beats only are identified, without obvious sustained tachyarrhythmias. No treatment is indicated at this time; however, monitor for signs of sustained arrhythmias such as acute lethargy or collapse. Any arrhythmic patient is at risk for sudden death, and this should be expressed to the owner.

**WEIGHT**

13.87lbs

**PLAN**

A baseline blood pressure is recommended. Institute diuretic Lasix 1-2mg/mg PO q12h. Institute blood thinner Clopidogrel (Plavix) 75mg tabs; Give ¼ tab by mouth every 24 hours (NOTE: bitter along cut edge, may cause foaming at the mouth; coat in entirety). Institute off label Pimobendan 1.25mg PO q12h. Once doing well on these medications, normotensive and eating well at home, institute vasodilator ACE-I (benazepril or enalapril) 0.5mg/kg PO q12h.

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Recheck renal values in 10-14 days than every 3-4 months to ensure tolerance of medications.

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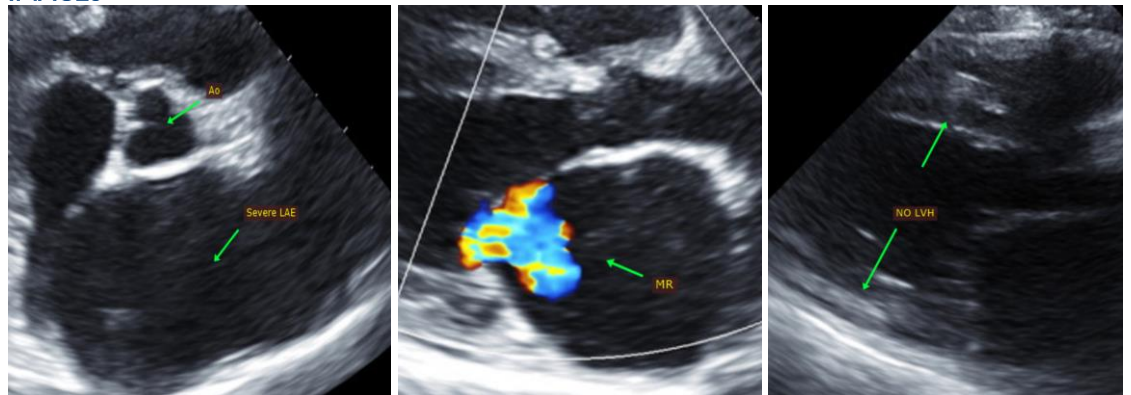
Jenna Walsh, CVT

A recheck echocardiogram and ECG are recommended in 6 months to assess progression.

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**IMAGES**



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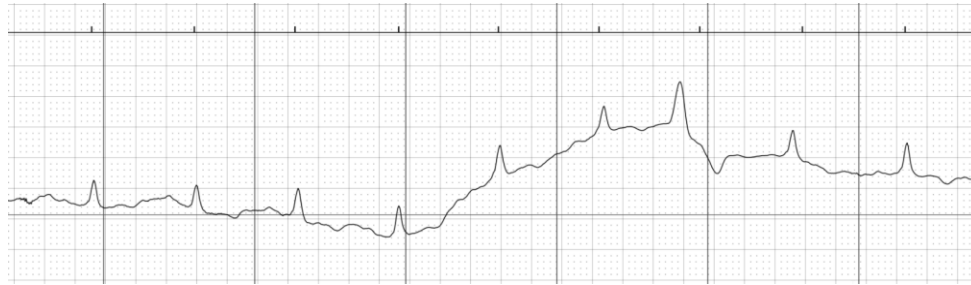
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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