

**PATIENT**

Roo Lu

**PRESENTING CLINICAL SIGNS**

History: Transfer from ER this am. Seen for sudden loss of appetite, hiding behaviour. Diagnosed with pulmonary edema and pleural effusion. No history of trauma or electrocution. No history of heart murmur. One dose of Lasix given.

**SPECIES**

Feline

**RADIOGRAPHIC FINDINGS** \*NOTE: Images submitted for supplemental cardiac information only. Cardiomegaly with evidence of CHF.

**BREED**

DSH

**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 136bpm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. No ectopic beats, pauses or other dysrhythmias observed. ECG diagnosis: Sinus bradycardia.

**SEX**

FS

**ECHOCARDIOGRAM FINDINGS**

**AGE**

2 years

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is irregular without obvious hypertrophy. There is a mildly hyperechoic endocardium consistent with fibrosis. The LV chamber is normal in dimension. Adequate myocardial function. The papillary muscles are mildly remodeled. The left atrium is mild to moderately dilated and bulbous in appearance. Spontaneous contrast visualized. The right atrium is normal. The right ventricle appears normal. The MPA appears normal. The mitral valve is normal with no MR. No TR. Blood flow through both the LVOT and RVOT is decreased in velocity. No TR. Small volume pericardial effusion seen. No pleural effusion. No obvious cardiac tumors.

**WEIGHT**

3.9kgs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM DACVIM  
(Cardiology)

**CARDIAC CHART**

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

East Credit VH

**REFERRING VET**

Dr. Webster

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (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	3.9	134	0.48	1.1	0.45	42	77
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	2.1	1.9	1.6		0.6	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.

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**DATE**

9/16/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The finding of any degree of atrial enlargement in the face of normal LV wall thickness is most consistent with Unclassified Cardiomyopathy (UCM); however, some prior infectious or inflammatory insult to the myocardium cannot be definitively ruled out. Serial



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echocardiography will be necessary to confirm the diagnosis and assess for progression. Regardless of categorical classification, the finding of left atrial dilation is concerning for progression in the future. Significant spontaneous contrast is seen, which is unexpected given this degree of LA dilation. Additionally, small volume pericardial effusion is suspected to be secondary to CHF which is again unexpected. Finally, the ECG confirms a sinus bradycardia which is unusual for a stressed cat in crisis.

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Assuming the patient has improved with Lasix therapy, continued treatment for CHF is recommended. If there is any question on response, highly recommend repeat CXR with a Radiologist review as the presentation is atypical as discussed. If the patient remains dull or tachypneic, continued overnight hospitalization is strongly recommended with ECG and BP monitoring. Discussion with the owner is advised.

**SEX**

FS

If able to be stabilized, patient will always remain risk for CHF and/or development of blood clots in the future. Monitoring of sleeping respiratory rates (SRRs) at home is recommended as the best way to screen for recurrent CHF at home. High risk for fluid overload if utilized in the future, and cautious up-titration with SRR monitoring is advised.

**AGE**

2 years

**PLAN**

**WEIGHT**

3.9kgs

Highly recommend continued hospitalization if the patient is not improved (ideally at a facility with an attending Cardiologist), with repeat films, Radiologist review, BP/ECG/HR monitoring, etc. If patient is improved, discharge on the following: Administer Lasix 1-2mg/kg PO q12h. Institute blood thinner Clopidogrel (Plavix) 75mg tablets; give ¼ tab orally once daily (NOTE: this medication is very bitter on the cut edges). Institute Pimobendan (off label use) 1.25mg PO q12h.

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(Cardiology)

Once stabilized, eating well at home and BP >130mmHg, consider addition of vasodilator ACE-I (benazepril or enalapril) 0.5mg/kg PO q12h.

**IMAGING PERFORMED BY**

Crystal Hill

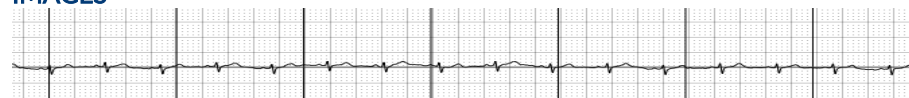
Recheck renal values in 10-14 days to ensure tolerance of medications, then every 3-4 months lifelong.

A recheck echocardiogram is recommended in 4-6 months to assess for progression.

**HOSPITAL NAME**

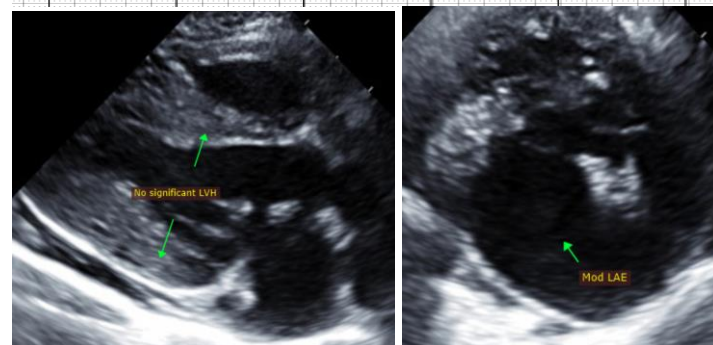
East Credit VH

**IMAGES**



**REFERRING VET**

Dr. Webster

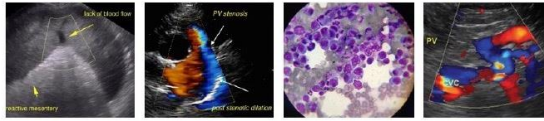


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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**SPECIES**

Feline

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

**BREED**

DSH

Maggie Machen Lamy, DVM  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
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**SEX**

FS

**AGE**

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**WEIGHT**

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