


**PATIENT PRESENTING CLINICAL SIGNS**

Nelly Monk  
 History: Gallop rhythm and heart murmur at recheck for hyperthyroid status. Has had reduced appetite. BP: 203/141 HR 257 193/139 HR 225.  
 -Current medications: Transdermal, Methimazole, Gabapentin, Famotidine.  
 -Abnormal PE/Chem/CBC/UA Results: CBC very slight neutrophilia, low MCV/MCH, normal HCT and RBC. Chem - Albumin 22(23-39) Globulin 60 (28-51) and TT4 88. Normal U/A and urine specific grav - 1.017.

**BREED ECHOCARDIOGRAM FINDINGS**

DLH  
 SEX Female Spayed  
 AGE 16 years  
 2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled and hyperechoic. The endocardium also appears remodeled. The left atrium is severely enlarged. No obvious smoke. The right atrium is mildly dilated. The right ventricle appears normal. The mitral valve is normal in structure and mobility. Blood flow through both the LVOT and RVOT is normal in velocity. Scant pericardial effusion. Moderate Scant pleural effusion. No obvious cardiac tumors. Tachycardia throughout.

**CARDIAC CHART**
**WEIGHT**

9.9lbs

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

Crystal Hill, RVT

**HOSPITAL NAME**

 New Hamburg Vet  
 Clinic

**REFERRING VET**

NP

**INVOICE**

25628

**DATE**

8/8/22

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	4.47	240	0.48	1.7	0.46	45	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	2.1	2.0	1.7		1.3	1.1	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 significant biatrial dilation in the face of normal LV wall thickness may suggest Unclassified Cardiomyopathy (UCM); however, tachycardia-induced cardiomyopathy should be considered in light of the elevated HR and presumably uncontrolled hyperthyroidism. There is normal wall thickness noted today, ruling out typical chronic hypertrophic disease. No additional issues are identified.

The patient is also presumed to be a poorly controlled hyperthyroid, and the resultant tachycardia may be contributing to development of effusions and LA dilation. Full cardiac support is recommended as below, including atenolol for HR control. Going forward once the T4 is controlled, we may be able to wean off cardiac medications depending on



**PATIENT**  
Nelly Monk  
response. Controlling the thyroid ASAP is also clearly indicated. Finally, the BP is elevated and should be reassessed for persistence once the thyroid/CHF are stabilized.

**SPECIES**  
Feline  
Going forward, there may remain risk for recurrent CHF, development of blood clots, and/or malignant arrhythmias/sudden death in the future. Monitoring of sleeping breathing rates at home is recommended as the best way to screen for recurrent/impending CHF at home.

**BREED**  
DLH  
Monitor at home for any progressive labored breathing and/or signs of clot recurrence (limb paralysis, neurologic changes, etc.).

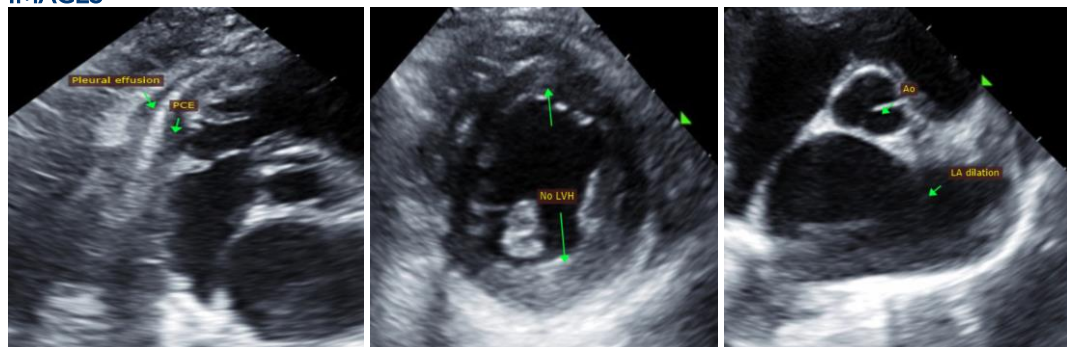
**SEX**  
Female Spayed  
**PLAN**  
Institute Lasix 1mg/kg PO q12h. Alter thyroid medication ASAP. Institute Plavix/Clopidogrel 75mg tabs; Give ¼ tab by mouth every 24 hours (NOTE: bitter along cut edge, may cause foaming at the mouth; coat in entirety). A baseline ECG is recommended if possible. Assuming the HR is documented to be persistently elevated (>220bpm in hospital), consider low dose atenolol until the thyroid is controlled. Wean as able.

**AGE**  
16 years  
Recheck renal values, HR and BP in 10-14 days, then every 3-4 months lifelong. Target BP is <160mmHg in hospital.

**WEIGHT**  
9.9lbs  
Recheck echocardiogram in 6 months once stable on oral medications to assess for progression.

**INTERPRETED BY**  
Maggie Machen Lamy,  
DVM DACVIM  
(Cardiology)

**IMAGES**



**IMAGING PERFORMED BY**  
Crystal Hill, RVT

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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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