

IMAGING PERFORMED BY

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Clinical Sonography & Telectyology

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**PATIENT**

Clementine Sternberg

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Female Spayed

**AGE**

2.19.12

**WEIGHT**

8.2lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**HOSPITAL NAME**

Cat Hospital at Towson

**REFERRING VET**

Dr.Brunt

**INVOICE**

28231

**DATE**

1.10.23

**PRESENTING CLINICAL SIGNS**

History: Elevated BP (200mmHg). Cardiac murmur, grade 1-2.  
 -Pertinent abnormal PE/Chem/CBC/UA Results: Elevated glucose/evidence of FIC.  
 -Current medications: Mirataz ointment PRN, Revolution q30d.  
 -Blood pressure: 200mmHg.  
 -Sedation used: Alfaxan IV.  
 -Pertinent previous ultrasound results: No previous.  
 -STAT: Not requested.  
 -Imaging performed by: Stephanie Warga RDCS, RVT.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is remodeled with a focal septal thickening. The remainder of the LV wall measures normal. 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 normal in size. The right atrium is normal in size. The right ventricle appears normal. The mitral valve is normal in structure and mobility. Trace MR. No TR. Trivial AI. Blood flow through the RVOT and LVOT is normal in velocity. No pleural or pericardial effusion seen. 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	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	3.7	NM	0.65	1.1	0.48	49	84
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	1.2	1.0		1.2	1.2	NM

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

Focal LV hypertrophy is present in addition to LV remodeling, which may be indicative of early hypertrophic disease or may simply represent a normal variant. Regardless, the LA remains normal which would indicate clinical stability. Serial echocardiography will be necessary to determine progression and clinical significance. Additionally, no definitive cause is identified for the murmur in this study, making it likely benign and secondary to tachycardia/stress.

With a normal LA dimension, no medications are indicated.

The reported blood pressure is elevated and should be reassessed for persistence. This may be enough to explain focal LV hypertrophy and a small aortic leak if considered accurate. Ideally obtain serial measurements in a controlled, low stress environment and continue until 3 consecutive readings plateau within 5mmHg of variability. If persistently >180mmHg despite a relatively calm demeanor, recommend institution of amlodipine to effect. Additionally if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushings, PLN, adrenal tumor, etc.), as primary disease is relatively uncommon and a rule out diagnosis.

Anesthetic risk is mild, however any cat with this degree of fibrosis and diastolic dysfunction will be at risk for iatrogenic IV fluid overload should they be needed in the future.

Monitor for any development of clinical signs, including labored breathing or signs of a blood clot (paralysis, neurologic change).

### PLAN

Reassess BP as discussed and treat if indicated.

A recheck echocardiogram is recommended in 6-12 months to screen for any evidence of progression.

### 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