



**PATIENT**

Steven Roberts

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. Heart murmur is worse with arrhythmia.  
-Pertinent previous echo findings (3/2020 MML): Normal/remodeling unknown murmur.

**SPECIES**

Feline

**ECHOCARDIOGRAM FINDINGS**

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 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, trace TR and trace AI. Blood flow through both the LVOT and RVOT is normal in velocity. No pleural or pericardial effusion seen. No obvious cardiac tumors. Occasional premature beats noted throughout.

**BREED**

DSH

**SEX**

Male Neutered

**CARDIAC CHART**

**AGE**

16 years

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
<b>NORMAL PARAMETER</b>	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
<b>PATIENT</b>	3.8	134	0.49	1.5	0.46	48	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)	
<b>NORMAL</b>	<1.5	<1.3	<1.2	<1.6	<1.3	<0.9	
<b>PATIENT</b>	1.4	1.3	1.3	0.76	0.8	NM	

**WEIGHT**

8.3lbs

*\*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.

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Kim Liedberg

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Normal geriatric cardiac structure and function persists. Compared to the prior study, there is minimal evidence of progression with borderline left atrial enlargement. Follow up is advised as a form of unclassified cardiomyopathy may be present in this case. Trace leaks are noted in the mitral, tricuspid and aortic valves, none are which hemodynamically significant and none of which would be ausculted on exam. A baseline BP is strongly recommended. No additional issues are identified, and no cause of the murmur remains apparent.

**HOSPITAL NAME**

SVS Imaging

**REFERRING VET**

Dr. Scarbeck

**INVOICE**

20790

**DATE**

8/31/21

Given these findings, no medications are indicated. Intermittent premature beats are noted throughout the study and a **baseline ECG is strongly recommended**. Assuming this finding is confirmed, full systemic evaluation is advised to screen for possible contributing issues.

Anesthetic risk is considered mild. With this degree of remodeling and diastolic stiffening, there



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is an elevated risk for fluid overload in this patient and judicious IV fluid use is recommended. Heart rate stimulating drugs such as atropine, glycopyrrolate or ketamine should be avoided unless medically necessary.

**SPECIES**

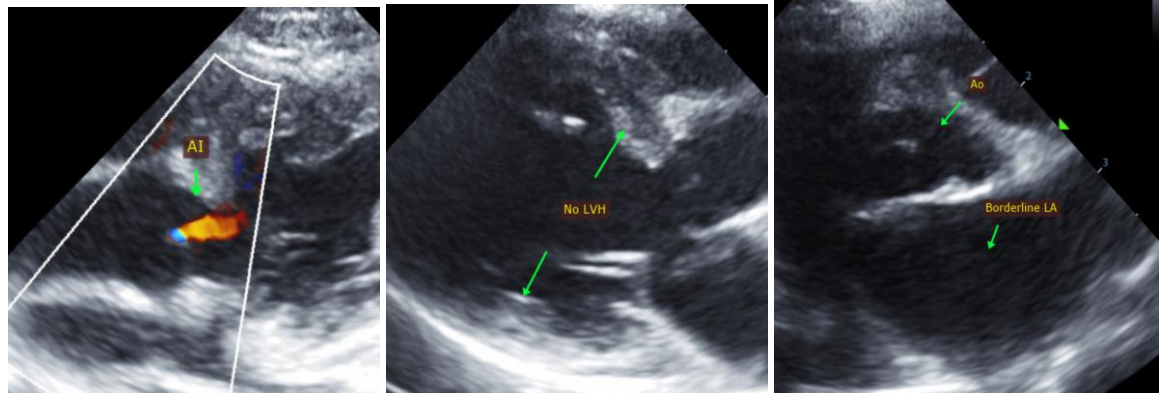
Feline

Recommend recheck echocardiogram in 6-12 months to screen for any progressive changes.

**IMAGES**

**BREED**

DSH



**SEX**

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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.**

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

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.

**IMAGING PERFORMED BY**

Kim Liedberg

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