


**PATIENT**

Callie Mixer

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Female Spayed

**AGE**

10.5 years

**WEIGHT**

7.1lbs

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM, DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

Amanda Lacey-Crook, SDCP

**PRESENTING CLINICAL SIGNS**

History: Dental work was recommended in October. No murmur noted at that time. Came in last week for weight loss and difficulty eating. Noted new murmur, Grade 3/6. No palpable thyroid. Cat lost 1# in last 6 months. Severe periodontal disease. Doppler BP: 170, 168, 162mmHg.

-Current Medications: Clindamycin and oral buprenorphine,

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is irregular with regions of borderline hypertrophy. There is a diffusely hyperechoic endocardium consistent with fibrosis and remodeling. The endocardium also appears mildly remodeled. The MV appears normal. An obstruction is not captured on 2D or color flow, however doppler is >2.0m/s with a dynamic profile depending on HR. Mild MR suspected to be associated with abnormal valve motion. Normal velocity. The left atrium is normal in size. The right atrium is normal in size. The right ventricle appears normal. Blood flow through the RVOT is mildly elevated in the velocity. There is no pleural or pericardial effusion seen. There are 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	3.2	NM	0.53	1.1	0.54	67	95
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	1.3	1.2		2.6	2.2	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.

**HOSPITAL NAME**

Rivers Edge Pet Medical Center

**REFERRING VET**

Dr. Hayes

**INVOICE**

22992

**DATE**

3/8/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Essentially normal cardiac structure and function. The murmur is presumed to be due to a dynamic LVOT obstruction, secondary to abnormal valve movement and elevated heart rates. This is presumptive as Doppler flows were only suggestive. There are also borderline LV wall dimensions, in addition to mild remodeling and fibrosis of the left ventricular wall. These changes may be indicative of early hypertrophic disease or may simply represent a normal variant. Serial echocardiography will be necessary to determine progression and clinical relevance of both findings. A screening BP and T4 are recommended. Finally, a dynamic RVOT obstruction is noted as well which is a benign finding that will contribute to murmur intensity.

In patients with persistent LVOT obstruction and an elevated pressure gradient, a beta blocker is often prescribed to lower heart rate and decrease the gradient. In this patient with a mild obstruction and borderline normal LA/LV dimensions, no medications are clearly indicated.



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Anesthetic risk is currently low. Avoid heart rate stimulating drugs (atropine, glycopyrrolate) unless clinically necessary. Avoid vasodilators such as acepromazine as this can worsen obstruction. Judicious IV fluid rates are recommended to avoid fluid overload in this patient with diastolic dysfunction.

**SPECIES**

Feline

A recheck echocardiogram is recommended in 6-12 months, sooner if any clinical signs arise.

**BREED**

DSH

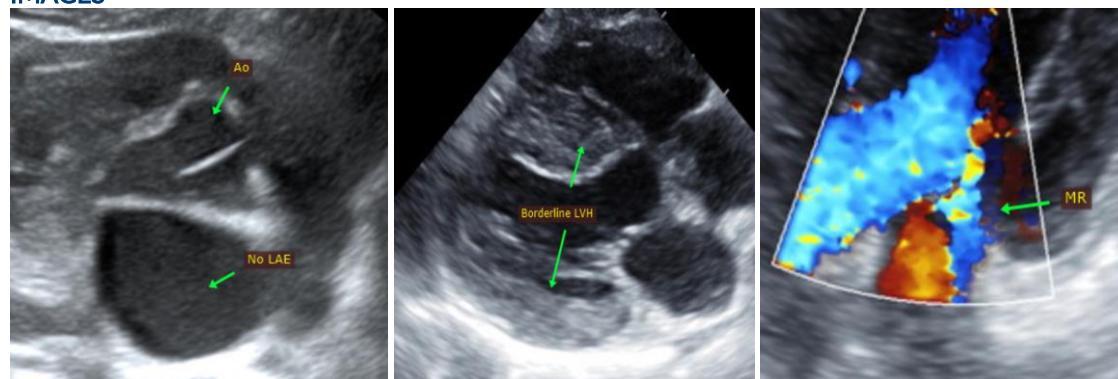
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**IMAGES**



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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**

Amanda Lacey-Crook, SDCP

**Maggie Machen Lamy, DVM**  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com

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Rivers Edge Pet  
Medical Center

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