



**PATIENT**

Brimley Lynn

**PRESENTING CLINICAL SIGNS**

New grade 3/6 murmur No current meds

**SPECIES**

Feline

**BREED**

Domestic Shorthair

**SEX**

Male (Neutered)

**AGE**

9 years

**WEIGHT**

10.3 lbs.

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT		NM	0.57	1.58	0.61	48	81
FELINE CARDIAC PARAMETERS	LA/AO (M-mode)	LA/AO HEART BASE (Sisson)	LAD LA MAX 4 Chamber		LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT		1.36	1.4		1.3	1.2	NM
Adapted from June Boon, Veterinary Echocardiography, 1998 Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705							

**INTERPRETED BY**

R. McKenzie Daniel,  
 DVM, DABVP  
 (Canine and Feline)

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal **left atrial** size and structure. No LA spontaneous contrast. The cranial and caudal **mitral** valve leaflets presented mild irregular changes with normal kinetics. Definitive SAM was not obvious yet not excluded. Mild eccentric MR was noted on Doppler. The **left ventricular** septum and free wall revealed adequate contractility and normal left ventricular volume with borderline increased wall dimension. Mildly prominent remodeled papillary muscle was noted. Some echogenic remodeling of the septum and free wall were noted, which does not appear to be a functional issue at this point and is suggestive of some level of **myocardial fibrosis**. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. Normal measured LVOT velocity was noted. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinetics. Minor TR was noted on Doppler. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). Normal measured RVOT velocity was noted. No visible **pericardial** or free pleura fluid was noted or extra cardiac pathology in the visible planes. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. Possible intermittent arrhythmia was noted.

**IMAGING PERFORMED BY**

Meghan Morse, LVT,  
 CVT

**HOSPITAL NAME**

Black River Veterinary  
 Hospital

**REFERRING VET**

Dr. Hewitt

**INVOICE**

10425

**DATE**

12/9/25



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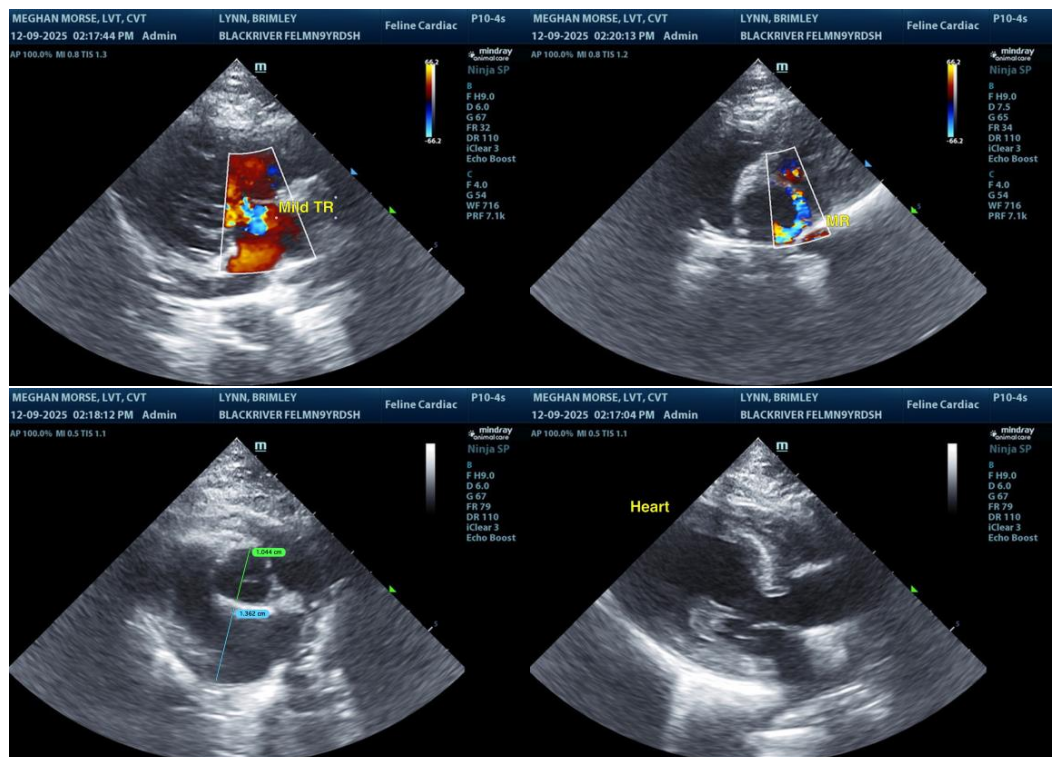
**ULTRASONOGRAPHIC FINDINGS**

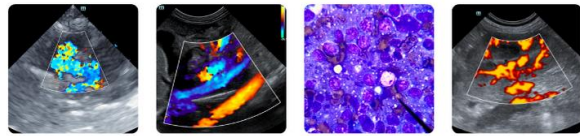
- Borderline increased LV wall dimension with myocardial remodeling, adequate LV systolic function
- Normal LA
- Mild MR / TR
- Possible intermittent arrhythmia

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cardiac presentation is suggestive of borderline to mild HCM criteria with possible non-obvious to mild SAM, given evidence of mild eccentric MR. Regardless of classification, the heart appears to be stable with normal LA dimension and adequate LV systolic function. Assessment of T4 and systemic BP to rule out possible complicating factors is suggested. There is no current indication for cardiac medications. ECG assessment is suggested to assess for possible intermittent arrhythmia. Echocardiographic monitoring is required for further assessment and prognosis. Recheck echocardiogram is suggested in 6 months, sooner if clinically indicated. Current cardiac anesthetic risk is considered mild.

Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.





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

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)  
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