



**PATIENT**

Tugger Searles

**PRESENTING CLINICAL SIGNS**

History: Going for surgery, has murmur, to remove mass.

**SPECIES**

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

DSH

**SEX**

Male Neutered

**AGE**

13 yrs

**WEIGHT**

N/A

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	0.52	1.4	0.56	45	78
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	--	1.1	1.2		--	2.2	--

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. Chamber volume and blood echogenicity were normal. No LA spontaneous contrast. The cranial and caudal **mitral** valve leaflets presented minor irregular age-related changes that are not clinically significant at this time with adequate extension in systole and union in diastole. Mildly eccentric MR noted on doppler. The **left ventricle** presented normal free wall and septal thicknesses with a-linear myocardial contour. Mildly prominent remodeled papillary muscle. The **myocardium** presented some non-uniform, echogenic remodeling consistent with age-related change and/or possible fibrosis. **Contractility** of the ventricular walls was adequate and in normal range for this breed and patient size. The **left ventricular outflow** tract demonstrated mild dynamic outflow pattern with subjective unremarkable structure. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated expected findings for this age patient. The **right ventricle** was of normal size (1/3 diameter of LV), echogenicity and thickness. **Pulmonic** tract assessment revealed overtly normal valve structure, mild dynamic outflow pattern, and normal diameter (approx.1:1 pa/ao ratio). Mild increased measured RV outflow velocity was noted. No visible **pericardial** or free pleural fluid was noted. The **mediastinum** was free of masses in the visible window.

**IMAGING PERFORMED BY**

Kerri Becker

**HOSPITAL NAME**

Mt. Olive VH

**REFERRING VET**

Dr. Loge

**INVOICE**

12874

**DATE**

12/3/25

**ULTRASONOGRAPHIC FINDINGS**

- Normal LA/RA
- LV myocardial remodeling with normal dimension and systolic function
- Mild MR and dynamic LV outflow pattern
- Mild increased measured RV outflow velocity



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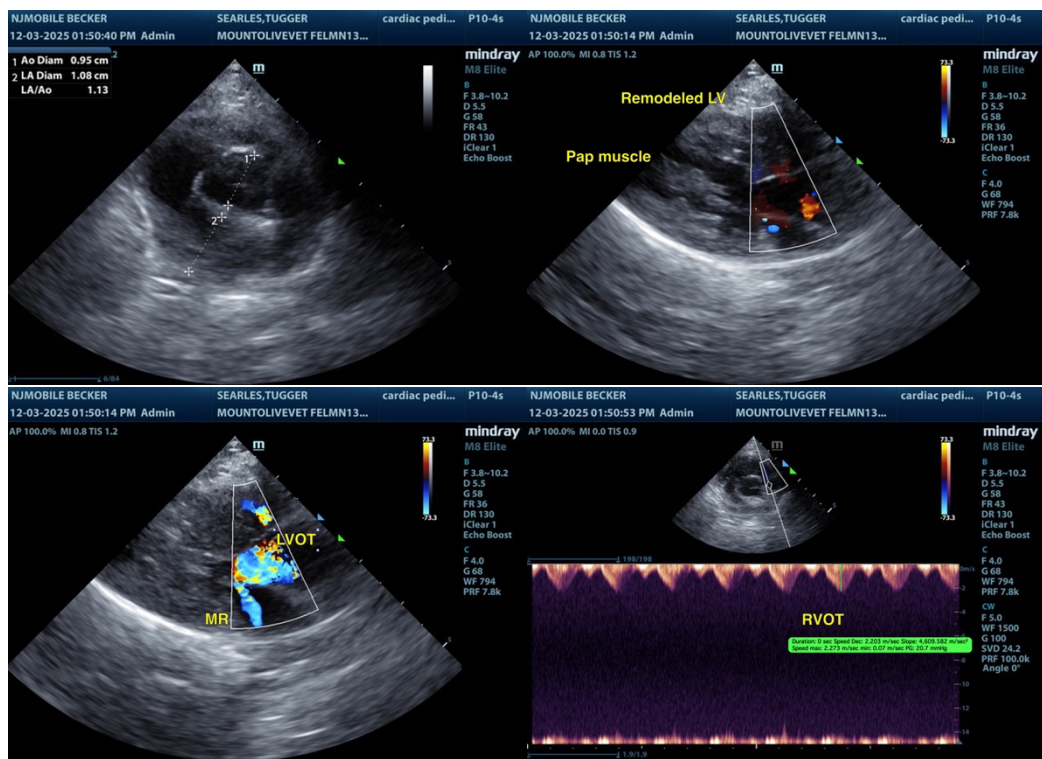
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cause of the murmur may be secondary to eccentric MR or mild increased RV outflow velocity which may suggest mild dynamic right ventricle outflow tract obstruction essentially classified as a flow murmur or combination. Possible mild systolic anterior motion of mitral valve not excluded. Regardless of classification, the current hemodynamic effects of the murmur appear low given lack of left or right heart chamber enlargement. No indication for cardiac medication. Conservative monitoring of the murmur going forward is advised with recheck echo suggested in 6 months, sooner if increase in murmur intensity or if clinical signs arise. Current cardiac anesthetic risk is considered mild. The following protocol is suggested. 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.



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)

[info@sonopath.com](mailto:info@sonopath.com)



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