



**PATIENT**

Theo Stout

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

MN

**AGE**

9 yrs, 10 mons

**WEIGHT**

13.5 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kerri Becker

**HOSPITAL NAME**

Newbridge Vets

**REFERRING VET**

Dr. Glennon

**INVOICE**

10470

**DATE**

12/17/25

**PRESENTING CLINICAL SIGNS**

Chronic cough (mitral dz) See sonopath rad report. Meds- enalapril, spiron,pimo, hydrocodone, clavamox.

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	6.0			2.0	47	79	0.2
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX4 Chamber	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	117	1.0	0.9		3.9	3.5	

**Cardiac Presentation**

The echocardiogram in this patient demonstrated moderate to significant increased **left atrial** size based on 2 different LA measurement methods with mild associated interatrial septal deviation. The cranial and caudal **mitral** valve leaflets presented thickening (anterior > posterior) consistent with endocardiosis with mild septal leaflet prolapse. Doppler indicated measurable severe eccentric insufficiency, (borderline increased MR velocity 6.0 m/s). The **left ventricle** presented Moderate increased LV dimension. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment revealed mildly thickening with mild TR 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). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible. No evidence of arrhythmia was noted.



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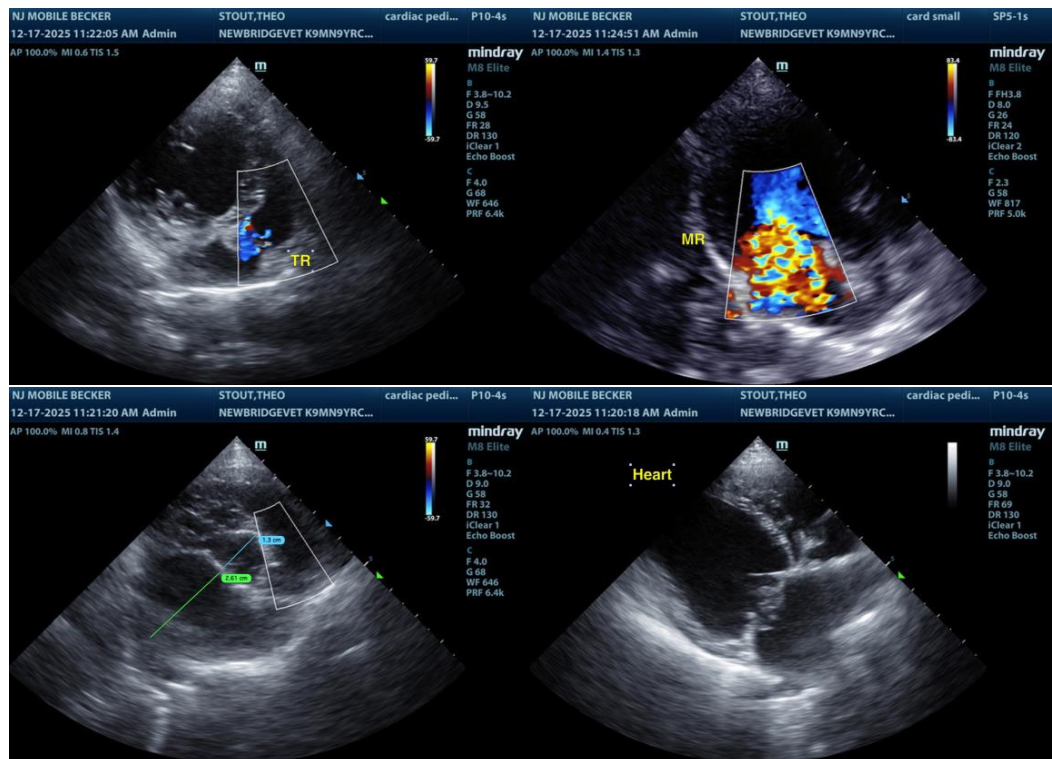
**ULTRASONOGRAPHIC FINDINGS**

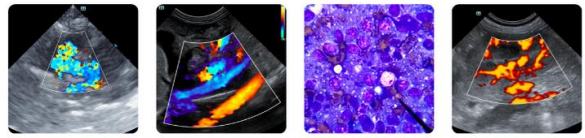
- Chronic mitral valve disease with mitral valve prolapse (ACVIM B2 – B2+)
- Mild TV insufficiency – no overt clinical pulmonary hypertension

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The degree of LA / LV enlargement indicates that the current and future risk of complications secondary to MR is at least moderately elevated with emerging left heart volume overload. Continued Pimobendan with weak diuretic spironolactone, given no current radiographic evidence of congestion, along with ACE inhibitor at the appropriate dose, is warranted. Concurrent respiratory therapy, including antitussive medication with baseline monitoring of resting respiration rate going forward is advised. Elective anesthesia is not advised unless absolutely necessary. If required, the following protocol is recommended with limited anesthetic time and judicious IV fluid use with close clinical monitoring. Prognosis is guarded going forward with sonographic monitoring indicated. Recheck echocardiogram is suggested in 6 months, sooner if clinically indicated.

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.

**BREED**

Chihuahua

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.

**SEX**

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

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