



**PATIENT**

Brandi Sebolao

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Female Spayed

**AGE**

13 yrs

**WEIGHT**

15 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kerri Becker

**HOSPITAL NAME**

All Creatures Fairfield

**REFERRING VET**

Dr. Perez

**INVOICE**

12912

**DATE**

12/11/25

**PRESENTING CLINICAL SIGNS**

History: Brandy has a grade 3-4/6 HM Monday morning pet had a petit mal seizure. BW showed hypercalcemia, elev. BUN, ALT and ALKP.

Meds: Not on any meds.

Abnormal PE/Chem/CBC/UA Results: ALT-337 ALKP-798 BUN-35 Hypercal 12.9

**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	--	--	--	1.55	46	81	0.2
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX 4 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	143	1.2	0.7	--	3.6	2.9	--

**Cardiac Presentation**

The echocardiogram in this patient demonstrated borderline to emerging mild increased **left atrial** size based on 2 different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis. Doppler indicated measurable eccentric insufficiency. MR velocity measured 5.7 m/s. The **left ventricle** presented borderline to emerging mild 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 demonstrated adequate linear morphology. 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 present.



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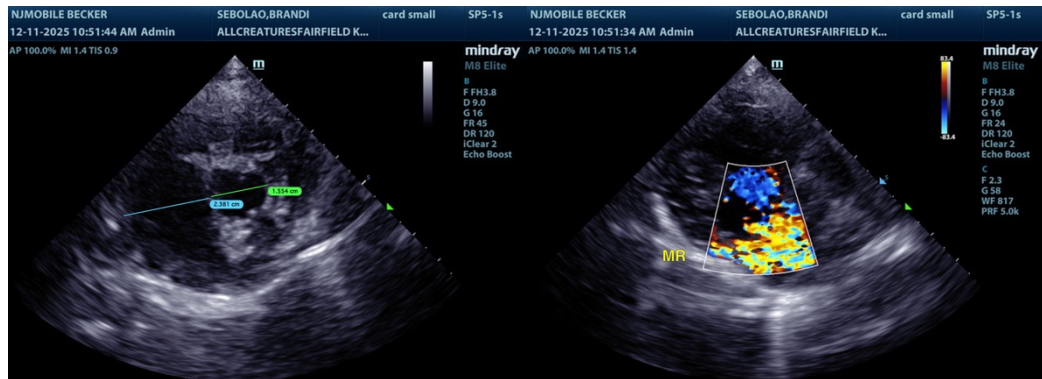
12/11/25

**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (emerging ACVIM B2)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The borderline to emerging enlargement indicates the current and future risk of complications secondary to MR is mildly elevated yet overall, the heart appears to be stable. Pimobendan 0.3 mg/kg BID is warranted at this stage given evidence of early LA enlargement. No indication for cardiac medication. No evidence of significant structural cardiomyopathy or arrhythmia as a contributing factor to a potential seizure episode. Correlation with abdominal ultrasound is recommended. Echocardiographic monitoring required for further prognosis. Recheck echo suggested in 6-12 months, sooner if clinically indicated. Cardiac anesthetic risk is considered mild. If required, the following protocol is recommended. 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)

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