

**PATIENT**

Buddy Tracey

**PRESENTING CLINICAL SIGNS**

Mast cell tumor removal scheduled for 12/21/22. Need echo for anesthetic risk assessment and recommendations.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Grade 2/6 heart murmur Chest x-rays are WNL.

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

BREED	CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
Chihuahua								
SEX	NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
MN	PATIENT	5.0	2.0		1.54	45	78.2	0.21
AGE	CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
11yr								
WEIGHT	NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
7.6lb	PATIENT	140	1.1	1.2		2.7	2.7	

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Sarah Pender CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr. Kelly/Dr.  
Ruegsegger

**Cardiac Presentation**

The echocardiogram for this patient presented excessive left atrial size expressed both in the LA/AO and LA max measurements. The cranial and caudal mitral valve leaflets presented moderate thickening consistent with endocardiosis. Minor prolapse of the septal leaflets was present without evidence of chordae tendinea rupture. Doppler indicated measurable mild to moderate eccentric insufficiency. The left ventricle presented thicknesses with linear contour and subtle increased left ventricle volume. 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 minor thickening with minor 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 infiltrative disease was visible. The cranial mediastinum and pericardial regions were free of masses in the visible. No evidence of arrhythmia.

**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease with mild valvular prolapse (ACVIM early to mild B2)
- TR-no overt clinical pulmonary hypertension

**INVOICE**

12481ag

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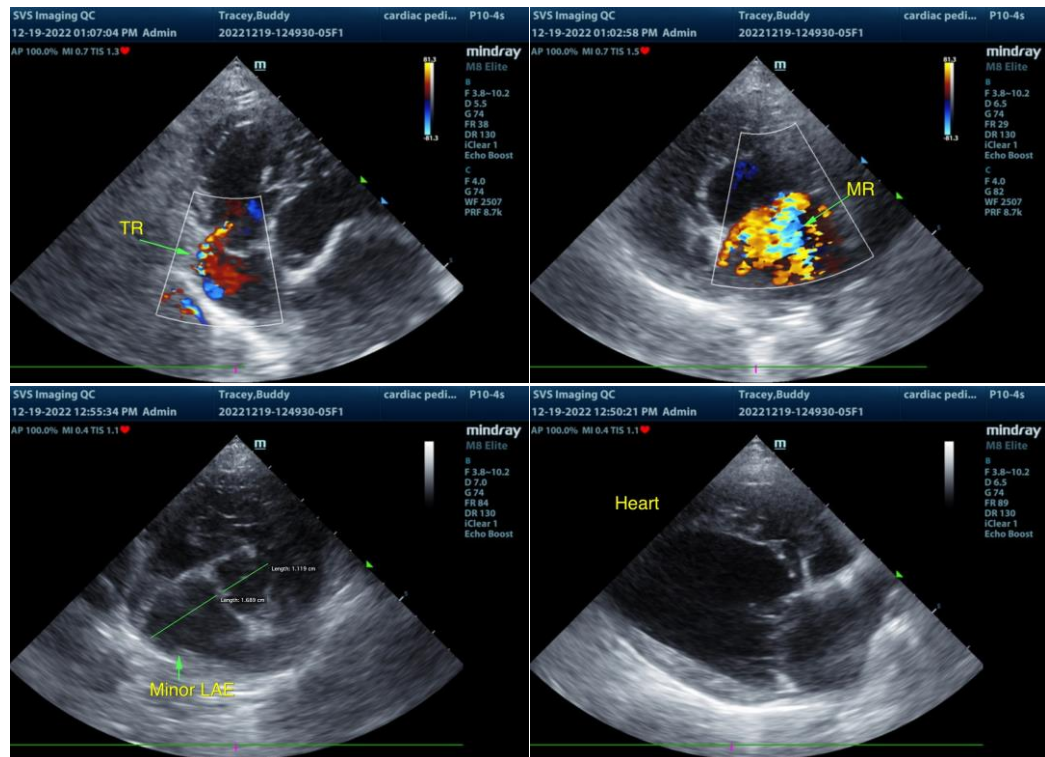
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cause of the murmur is secondary to mild to moderate chronic degenerative changes with primary eccentric mitral valve and mild tricuspid valve insufficiency. The lack of significant LA/LV enlargement indicate that the risk of complication is relatively low. Prognosis is highly variable and serial sonographic monitoring is required for further prognosis. In a non-clinical patient with minor LA/LV changes, there is no overt indication for cardiac medications. Anesthetic risk is considered low to mild yet not contraindicated. Recheck echocardiogram recommended in 6 months, sooner if clinical signs arise.

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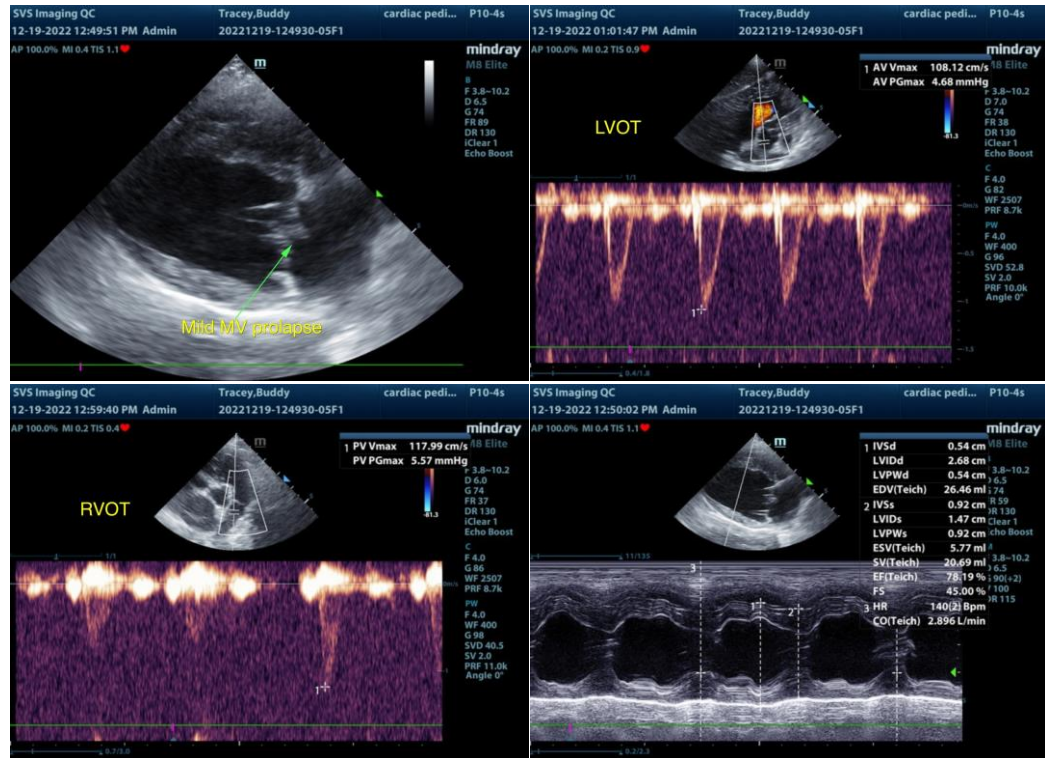
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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