


**PATIENT**

Bailey Zendzian

**PRESENTING CLINICAL SIGNS**

Grade III/VI murmur, recheck from 11/2021 (report attached).

Current meds: Pimobendan 2.5mg 1/2 tab am/pm.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**
**BREED**

Chihuahua

**SEX**

FS

**AGE**

10yr

**WEIGHT**

9.1lb

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT	5.3	<2.0	1.7	1.6	51	85	0.27
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)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	185	1.4	0.9		2.7	2.6	

**Cardiac Presentation**
**INTERPRETED BY**

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

The echocardiogram in this patient demonstrated mild progressive left atrial enlargement based on 3 different LA measurement methods. Subtle deviation of the interatrial septum towards the right atrium suggestive of mild increased left atrial pressure was noted. The cranial and caudal mitral valve leaflets presented moderate thickening consistent with moderate endocardiosis. Doppler indicated measurable moderate eccentric insufficiency. The left ventricle presented thicknesses with linear contour and was not dilated nor restricted. 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 mild 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 infiltrative disease was visible. The cranial mediastinum and pericardial regions were free of masses in the visible window. No arrhythmia noted.

**IMAGING PERFORMED BY**

Shari Reffi CVT

**HOSPITAL NAME**

Newton Vet

**REFERRING VET**

Dr. Wyman-Greenwald

**ULTRASONOGRAPHIC FINDINGS**
**INVOICE**

12601ag

- Chronic mitral valve disease (ACVIM B2)
- Mild TR-no evidence of clinical pulmonary hypertension

**DATE**

01/06/2023



## PATIENT

Bailey Zendzian

## SPECIES

Canine

## BREED

Chihuahua

## SEX

FS

## AGE

10yr

## WEIGHT

9.1lb

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Shari Reffi CVT

## HOSPITAL NAME

Newton Vet

## REFERRING VET

Dr. Wyman-Greenwald

## INVOICE

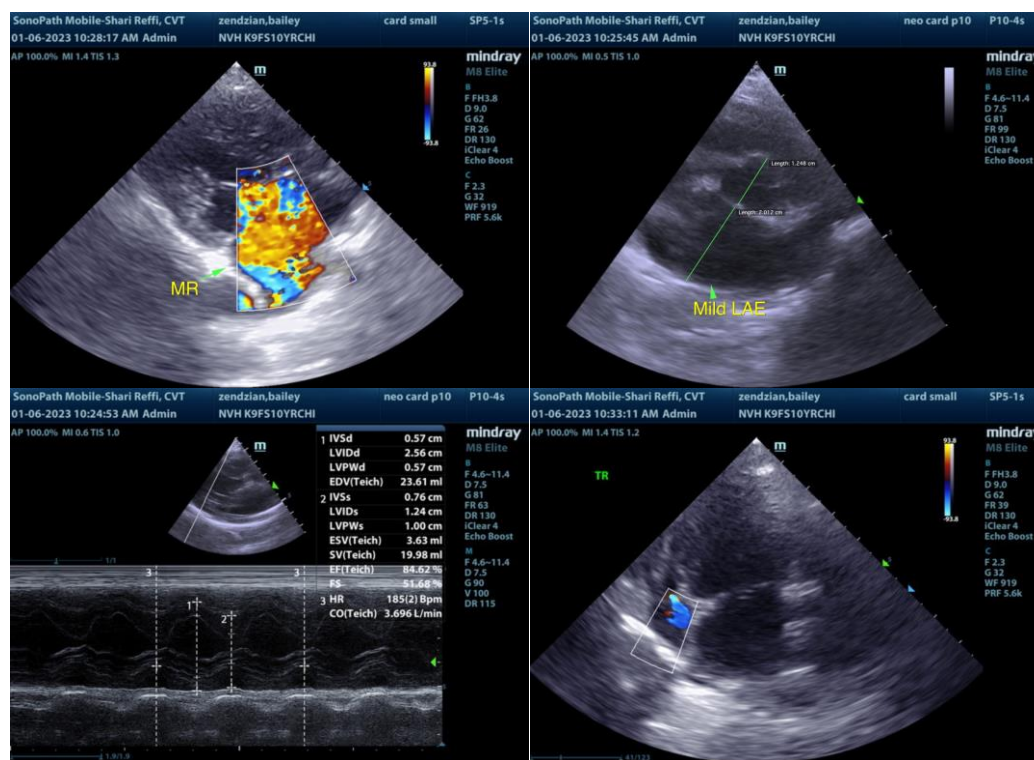
12601ag

## DATE

01/06/2023

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Persistent to mildly progressive chronic degenerative valvular changes with secondary MR and mild TR are present. The left atrium measurement at this stage indicates mild progressive LA enlargement yet overall, the heart appears to be compensated without additional clinical issues such as LV systolic dysfunction or evidence of clinical pulmonary hypertension. Continued Pimobendan 0.3 mg/kg PO BID is recommended. Assuming no evidence of clinical signs of congestion i.e. resting respiration rate, exercise intolerance etc., no overt indication for additional cardiac medications. Prognosis is highly variable and serial sonographic monitoring is required for further prognosis. Recheck echocardiogram recommended in 6 months given mild progressive LA enlargement, sooner if clinical signs arise.



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)  
[mac.daniel@sonopath.com](mailto:mac.daniel@sonopath.com)