



PATIENT

Theo Shulman

PRESENTING CLINICAL SIGNS

History: Patient recently adopted from Texas rescue presents for echo due to loud murmur.
Current med: Pimobendan 0.3 mgs/kg BID. Bloods WNL. Had Anaplasma/Ehrlichia while in Texas.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Chihuahua

SEX

MN

AGE

6 yr

WEIGHT

13 lb

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			1.3	1.4	40.4	73	0.16
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	92	1.6	0.96		3.2	2.8	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal mitral valve leaflets presented vegetative thickening consistent with endocardiosis. No evidence of valvular prolapse or chordae tendineae rupture was noted. Doppler indicated measurable 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 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 infiltrative disease was visible. The cranial mediastinum and pericardial regions were free of masses in the visible window.

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

New Bridge
Veterinary Practice

REFERRING VET

Dr. Glennon

INVOICE

11013ag

DATE

06/29/2022

ULTRASONOGRAPHIC FINDINGS

- Thickened mitral valve with secondary eccentric mitral valve insufficiency
- Overall normal cardiac structure and function



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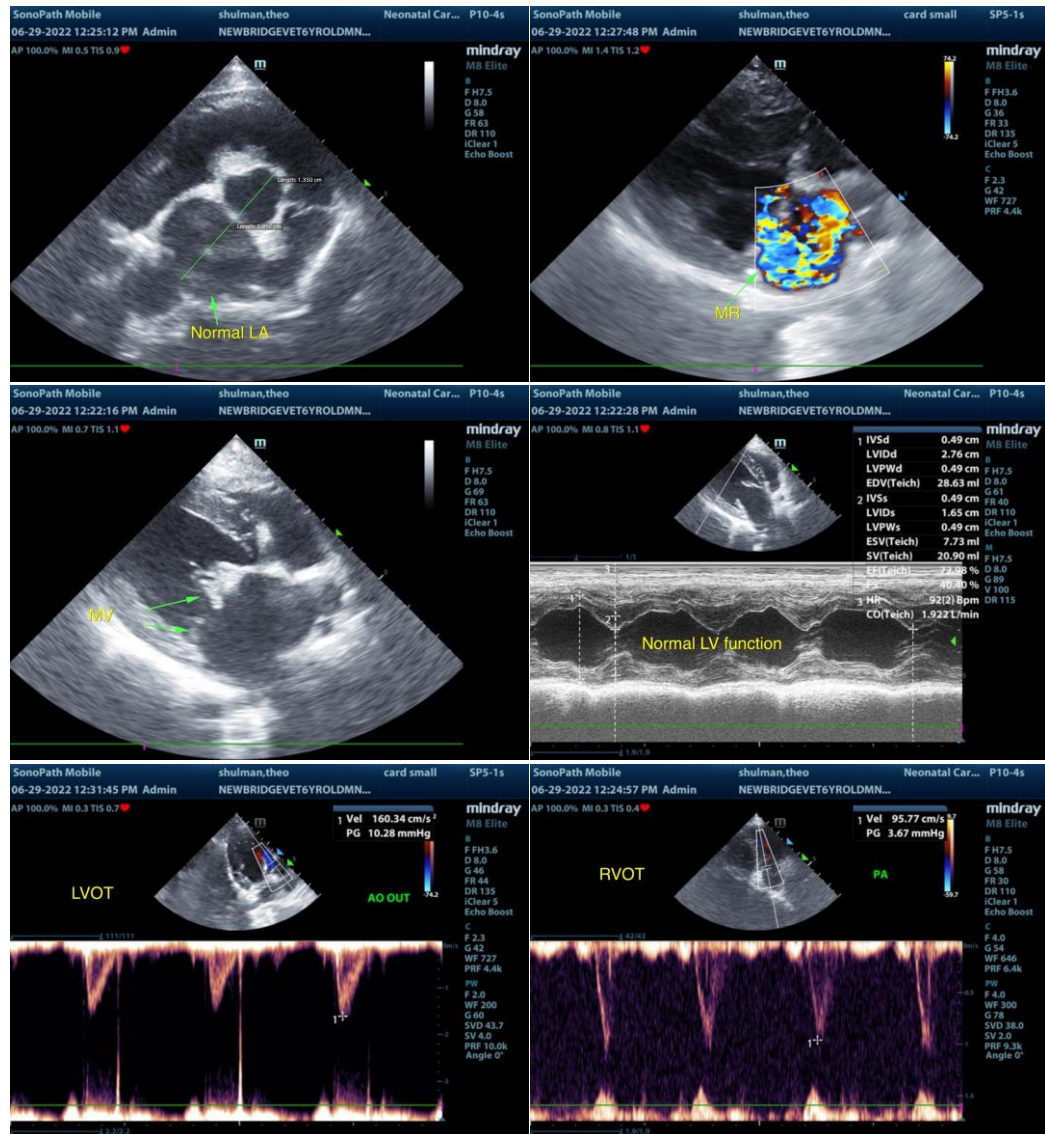
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is secondary to thickened mitral valve leaflets with secondary eccentric mitral valve insufficiency. This is suggestive of probable early onset chronic degenerative mitral valve changes. The lack of LA enlargement indicates that the risk of complication is low however, prognosis at this stage is highly variable. Serial sonographic monitoring is required for further prognosis. In a non-clinical patient without evidence of chamber enlargement, cardiac medication is not overtly indicated. Pimobendan would not be unreasonable since this medication may prolong cardiac changes associated with mitral valve insufficiency. Recheck echocardiogram suggested in 6 months, sooner if signs of cardiac disease arise.





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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.

SPECIES

Canine

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.

BREED

Chihuahua

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info@SonoPath.com

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