
**PATIENT**

Buttons Avalos

**PRESENTING CLINICAL SIGNS**

Follow up echo.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: Alk. Phos. 509, glucose 44, potassium 6, Na/K ratio.

**BREED**

Maltese

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**
**SEX**

FS

**AGE**

12yr

**WEIGHT**

7.4lb

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	5.6		1.7	1.4	41.4	76	0.2
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	133	1.5	1.2		3.1	2.87	

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

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

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 with mild prolapse of the septal leaflet. Doppler indicated measurable moderate eccentric insufficiency. The left ventricle presented thicknesses with mild a linear contour with minor 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 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.

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Companion AH

**REFERRING VET**

Dr. Tsai

**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (ACVIM B2)

**INVOICE**

12294ag

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Mild progressive LA/LV enlargement compared to the previous study was present indicates mild progressive chronic mitral valve disease. The mild LA/LV enlargement indicate that the risk of complication is mildly elevated although the heart appears to be compensated. Pimobendan 0.3 mg/kg

**DATE**

11/28/2022



**PATIENT**

Buttons Avalos

PO BID is warranted at this stage. Prognosis is highly variable and serial sonographic monitoring is required for further prognosis. Baseline resting respiration rate is suggested. Recheck echocardiogram recommended in 6 months, sooner if clinical signs arise.

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FS

**AGE**

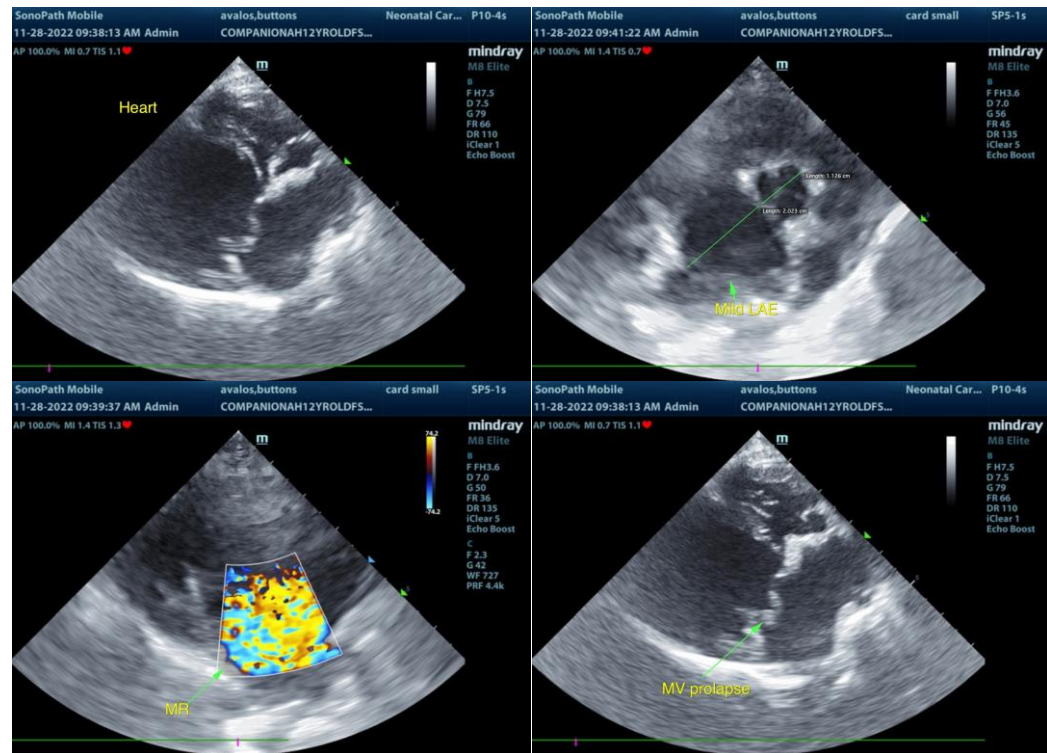
12yr

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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.

**IMAGING PERFORMED BY**

Kelly Vazquez

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.

**HOSPITAL NAME**

Companion AH

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
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**REFERRING VET**

Dr. Tsai

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