


**PATIENT**

Beau Puleo

**PRESENTING CLINICAL SIGNS**

 Grade IV/VI murmur, progressively louder, currently asymptomatic. HX bladder stones (Oxalates)  
 Current meds: Vetriscience cardio canine, glycoflex, Balance it supp

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: T4 3.7 ua: pH 8, struvite 4-10

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

Cavapoo

**SEX**

MN

**AGE**

8yr

**WEIGHT**

24.6lb

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	<1.6	28-40	40-100	<0.6
PATIENT	5.7			1.9	48	81	0.25
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	130	2.0	1.0		3.7	3.0	

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Val Shumskaya

**HOSPITAL NAME**

 Westwood Regional  
 Veterinary Hospital

**REFERRING VET**

Dr. Hartwick

**INVOICE**

14571ag

**DATE**

08/11/2023

**Cardiac Presentation**

The echocardiogram for this patient presented moderately increased left atrial size expressed both in the LA/AO and LA max measurements. 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 (anterior>posterior) thickening consistent with endocardiosis. Doppler indicated measurable moderate eccentric insufficiency. The left ventricle presented normal thicknesses with linear contour and mild increased LV 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.

**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (ACVIM B2)



**PATIENT**

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Beau Puleo

The cause of the murmur is chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency. The mild to moderate left atrial enlargement implies that the risk of complication secondary to mitral valve insufficiency is mild to moderately elevated. Given evidence of LA enlargement with subjective increased LV volume, Pimobendan 0.3 mg/kg PO BID is warranted at this stage. Baseline monitoring of resting RR is advised.

**SPECIES**

Canine

Prognosis at this stage is variable and serial sonographic monitoring is recommended with a recheck echocardiogram in 6 months, sooner if clinical signs suggestive of left heart disease develop.

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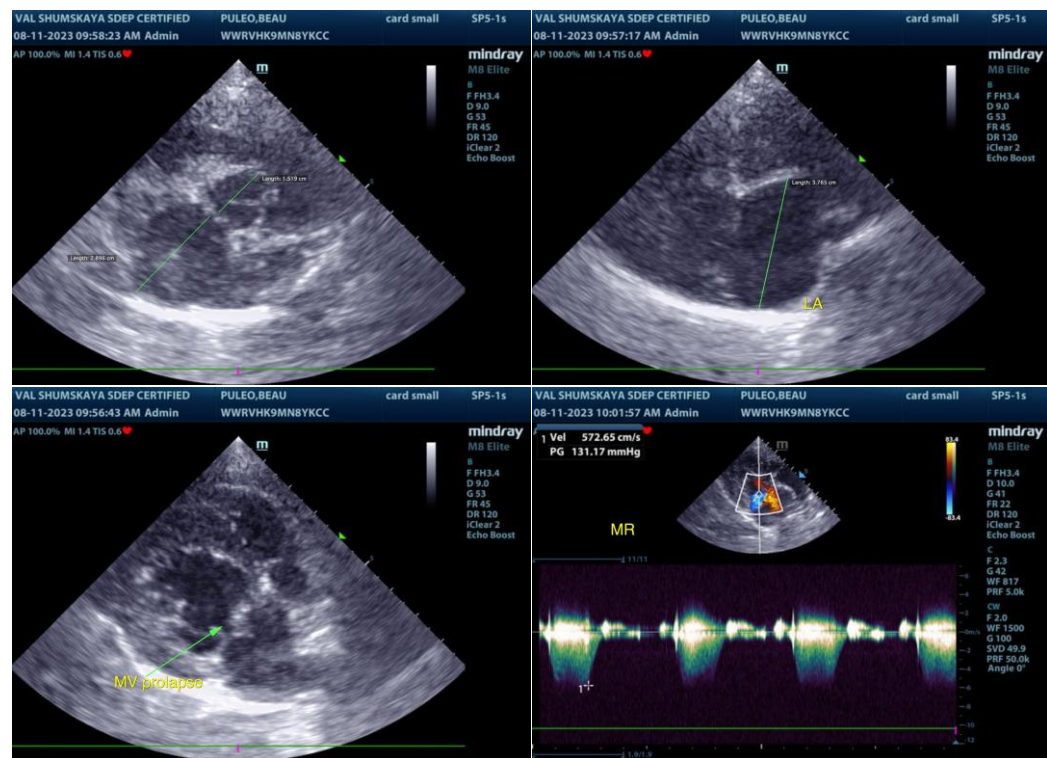
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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