



## PATIENT PRESENTING CLINICAL SIGNS

Hayley Marshall Recheck echo from one year ago. Has a heart murmur. Has been doing well. Not currently on any meds.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: ALT elevated 162, ALP elevated 214.

## Canine ULTRASONOGRAPHIC EXAMINATION OF THE HEART

### BREED

Shep X

### SEX

FS

### AGE

12.5 years

### WEIGHT

73.8 lbs.

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
<b>PATIENT</b>				1.68	43	75	0.38
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
<b>CARDIAC PARAMETERS</b>	(BPM)	<b>VMAX</b> (m/s)	<b>MAX</b> (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6				
<b>PATIENT</b>	NM	2.2	1.7		4.8	4.0	

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP

## IMAGING PERFORMED BY

Crystal Hill

## HOSPITAL NAME

Halton Peel AH

## REFERRING VET

Dr. Walters

## INVOICE

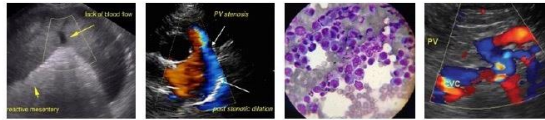
13753

## DATE

4/28/22

## Cardiac Presentation

The echocardiogram in this patient demonstrated mildly enlarged **left atrial** size based on 3 different LA measurement methods. Minor deviation of the interatrial septum towards the right atrium, suggestive of mild elevated left atrial pressure, was present. The cranial and caudal **mitral** valve leaflets presented mild vegetative thickening suggestive of endocardiosis. No evidence of valvular prolapse was noted. Doppler indicated measurable eccentric insufficiency. The **left ventricle** presented thicknesses with linear contour with subjective minor 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. Mild elevated LVOT velocity was noted. 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.



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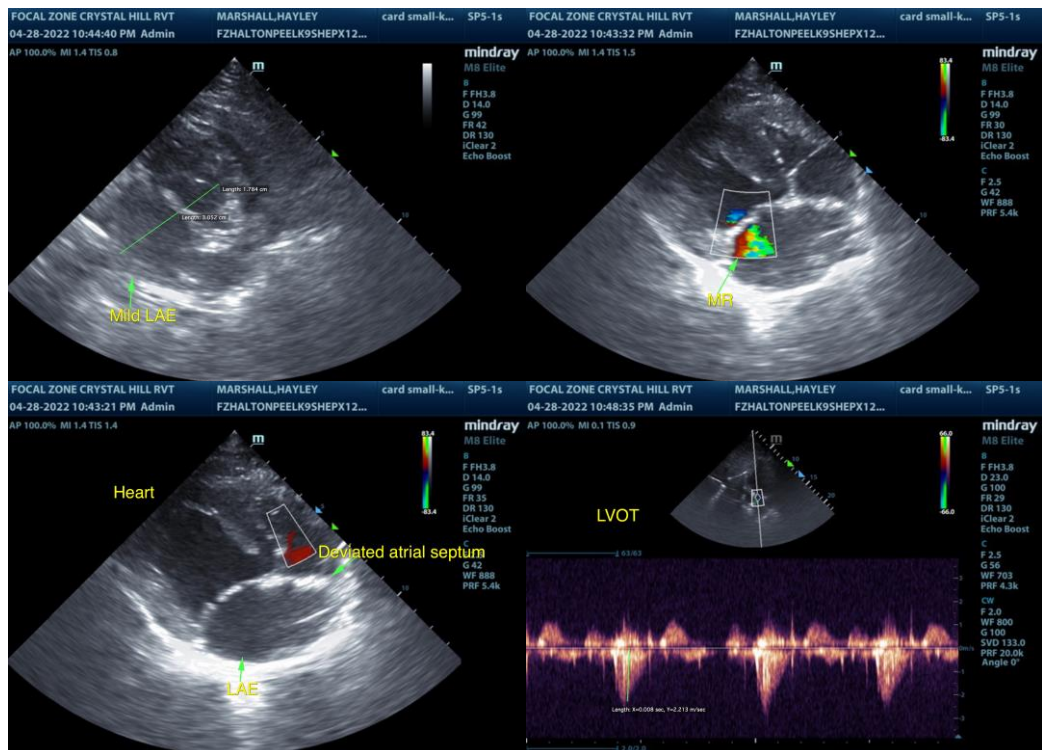
**ULTRASONOGRAPHIC FINDINGS**

- Eccentric mitral valve insufficiency
- Mild LA/LV enlargement
- Mild elevated LVOT

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

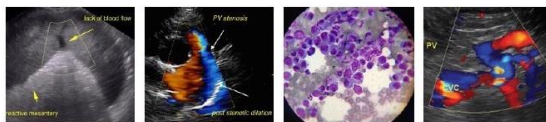
The cause of the murmur is most consistent with mild chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency. The mild LA and LV enlargement indicate that the current and future risk going forward of complication is mildly elevated, yet overall, the heart appears to be compensated at this stage.

Pimobendan 0.3 mg/kg PO BID could be considered, as this medication may help prolong emerging cardiac changes associated with mitral valve insufficiency, although given this presentation, continued conservative monitoring would also be reasonable. No other additional clinical issues such as systolic dysfunction or evidence of clinical pulmonary hypertension were noted. Serial sonographic monitoring is recommended for further prognosis. Recheck echocardiogram is suggested in 6 months, 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



**PATIENT**

can be of any further assistance please contact me.

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