



## PATIENT

Harley Coxen

## SPECIES

Canine

## BREED

Maltese Mix

## SEX

Male Neutered

## AGE

14 years

## WEIGHT

20.7lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Alastair Westcott,  
DVM

## HOSPITAL NAME

Dr. Alastair Westcott

## REFERRING VET

Dr. Westcott

## INVOICE

25533

## DATE

7/25/22

## PRESENTING CLINICAL SIGNS

History: Referred for echocardiogram based upon cardiomegaly and a systolic murmur. Asymptomatic. Reportedly normal BP.

-Current medications: Benazepril 5mg q24h and an NSAID every 24 hours.

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets (anterior>posterior) with minimal prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with moderate left atrial dilation. Normal MR velocity. Mildly increased LV diameter with hyperdynamic myocardial function. The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Velocity consistent with borderline pulmonary hypertension. Normal right atrial and ventricular diameter. The pulmonic valve is normal in morphology and mobility. The aortic valve is mildly thickened. Normal pulmonic and mildly elevated aortic outflow velocities. Mild aortic and pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

## CARDIAC CHART

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	6.2	2.7	NM	1.85	54	86	0.3
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	BELOW	BELOW	BELOW	BELOW
PATIENT	NM	2.0	0.8	9.4	2.3	3.4	2.0
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing moderate mitral and mild tricuspid regurgitation. Moderate left atrial enlargement indicates there is relatively low risk for imminent complication, however risk for progression to spontaneous congestive heart failure in the future is elevated. Early pulmonary hypertension is suspected, which is of unknown significance in an asymptomatic dog. Finally, an aortic leak is visualized; however, the blood pressure is reportedly normal. No additional issues are identified.



## PATIENT

Harley Coxen

Given the risk for progression and results of the EPIC trial, Pimobendan is indicated in this patient as below. Additionally, given an aortic leak it is reasonable to continue ACE-I therapy as prescribed. Assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).

## SPECIES

Canine

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

## BREED

Maltese Mix

Once on the medication for 3-5 days, anesthetic risk is considered mildly elevated. Cardiac protective drug choices (opioid/benzodiazepine premedication, Propofol or alfaxalone induction, iso or sevo gas) are recommended. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Judicious IV fluid rates are recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

## SEX

Male Neutered

## AGE

14 years

## PLAN

Continue Benazepril as prescribed. Institute heart muscle support Pimobendan 0.25-0.3mg/kg PO q12h.

## WEIGHT

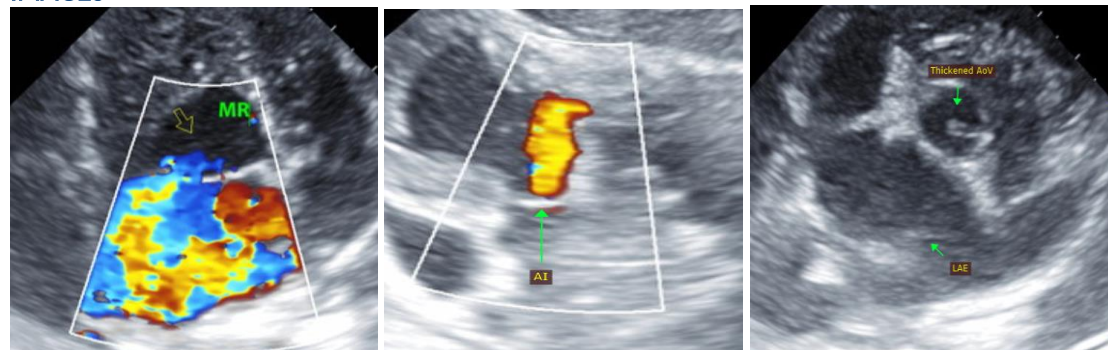
20.7lbs

Recommend monitor for progression with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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(Cardiology)

## IMAGES



## IMAGING PERFORMED BY

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DVM

## HOSPITAL NAME

Dr. Alastair Westcott

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

## REFERRING VET

Dr. Westcott

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

## INVOICE

25533

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## DATE

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