



PATIENT

Indy Boiteau

PRESENTING CLINICAL SIGNS

History: Grade 4/6 systolic heart murmur. Owner reported that the pet was on a grain-free diet Acana. -Radiographs: Moderately enlarged heart.

SPECIES

Canine

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Significant left ventricular dilation with decreased systolic function and increased sphericity. Increased EPSS. Severe left atrial enlargement. The mitral valve appears mildly thickened with lack of coaptation in systole, minimal prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation, normal velocity. The tricuspid valve appears mildly thickened. Moderate right atrial and ventricular dilation. Mild tricuspid regurgitation. Velocity consistent with mild pulmonary arterial hypertension. The aortic valve is normal in morphology and mobility. No subvalvular ridge present; normal LVOT velocity. No aortic insufficiency. Normal pulmonic valve with no pulmonic insufficiency seen. No pericardial or pleural effusion noted. No obvious cardiac tumors.

BREED

Beagle

SEX

Female Spayed

AGE

8 years

CARDIAC CHART

WEIGHT

33.3lbs

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	5.2	3.2	NM	2.7	19	39	1.3
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	1.5	1.2	15.1	4.1	6.5	5.3
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				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)

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY

Jacque Pankatz, DVM

HOSPITAL NAME

Mountain Vista Veterinary Hospital

REFERRING VET

Dr. Pankatz

INVOICE

28857

DATE

2/8/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Unfortunately, this patient has significant 4 chamber dilation and dysfunction, with significant leaks in both the mitral and tricuspid valves. Mild pulmonary hypertension is also noted, presumed to be secondary to LA pressure elevation rather than a primary issue. The academic diagnosis of chronic degenerative valve disease leading to systolic dysfunction versus true primary cardiomyopathy (DCM) could be argued in this case. Regardless, the treatment is the same and this patient is at high risk for development of congestive heart failure, malignant arrhythmias (AF/VT), collapse and/or sudden death in the future. Even without clinical signs, full cardiac supportive medications are recommended as below.



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A grain free diet is mentioned in the history, which has recently been associated with systolic dysfunction in some but certainly not all dogs. Highly recommend change to a more standard well formulated diet and administer a taurine supplement as below. A taurine level can be submitted; however, changing the diet and supplementing is advised regardless of results.

SPECIES

Canine

Medications and close monitoring will help give the best prognosis possible, however the average survival time with this condition is <6 months. Monitoring of sleeping respiratory rates will be paramount to screen for recurrent congestive heart failure at home in the future. Cough suppression to improve QOL can also be considered once diuretics are on board for any residual mechanical cough in the face of normal sleeping respiratory rates.

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Monitor for development of a cough, labored breathing, exercise intolerance or collapse. episodes in the future. Monitoring of sleeping breathing rates at home is recommended to screen for progression to CHF. Omega fatty acid supplementation (1000mg once to twice daily) and mild salt restriction may be of some long-term benefit.

AGE

8 years

PLAN

Institute Pimobendan 0.25-0.3mg/kg PO q12h. Institute low dose Lasix 1mg/kg PO q12h. Institute Spironolactone 1-2mg/kg PO q12h. Screening BP recommended. If BP>130mmHg, institute Enalapril or Benazepril 0.5mg/kg PO q12h. If hypotensive, do not utilize. Institute taurine 1000mg. Diet change as discussed.

WEIGHT

33.3lbs

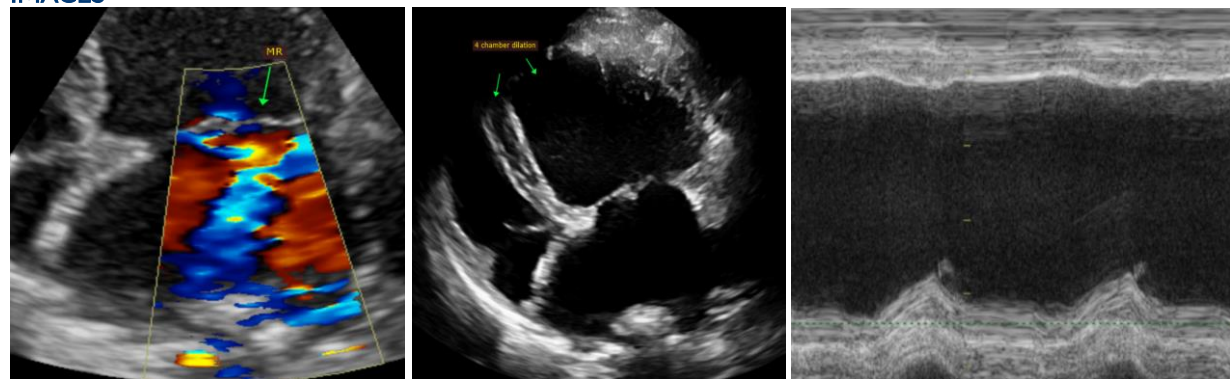
Recheck BP, heart rate/ECG and renal values in 10-14 days. Monitor renal values/BP/HR every 3-4 months lifelong.

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Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

A recheck echocardiogram is recommended in 4-6 months to assess for progression and monitor PAH, sooner if clinical signs arise.

IMAGES



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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.

SPECIES

Canine

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.

BREED

Beagle

Maggie Machen Lamy, DVM
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info@sonopath.com

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