

PATIENT

Maya Cubillo

SPECIES

Canine

BREED

Border Collie

SEX

Female Spayed

PRESENTING CLINICAL SIGNS

History: New heart murmur. Cough at home. Presented for vomiting and diarrhea. History of diabetes. -CXR/ECG report (Idexx): Cardiomegaly. No CHF; NSR with tall R waves.

ECHOCARDIOGRAM FINDINGS

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

CARDIAC CHART

AGE

12.10 years

WEIGHT

28lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Pine Creek Veterinary
Clinic

REFERRING VET

Dr. Nolet

INVOICE

24038

DATE

5/4/22

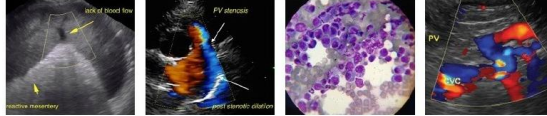
CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	5.9	2.9	NM	1.9	44	73	0.3
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short 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	87	1.4	1.2	12.7	3.1	4.4	2.3
*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)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				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)

Adapted from June Boon, Veterinary Echocardiography, 1998
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435
Hansson et al, Vet Rad and Ultrasound 2002
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing moderate to severe mitral and trace 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 noted, which is of unknown significance in an asymptomatic dog. No additional issues are identified.

Given the risk for progression and results of the EPIC trial, Pimobendan is indicated in this patient as below. **It is important to note that this is for long-term benefit and should not be instituted**



PATIENT

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until GI signs have completely resolved. Assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).

SPECIES

Canine

While mainstem bronchi compression may certainly be contributing to a chronic increase in coughing, other primary airway contributions should also be considered (tracheal collapse, COPD/chronic bronchitis, etc). Consider hydrocodone for any mechanical component due to cardiomegaly. Screening chest radiographs are recommended.

BREED

Border Collie

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.

SEX

Female Spayed

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.

AGE

12.10 years

PLAN

Baseline BP recommended. Once systemically well, institute heart muscle support Pimobendan 0.25-0.3mg/kg PO q12h. Consider CXR, hydrocodone, etc.

WEIGHT

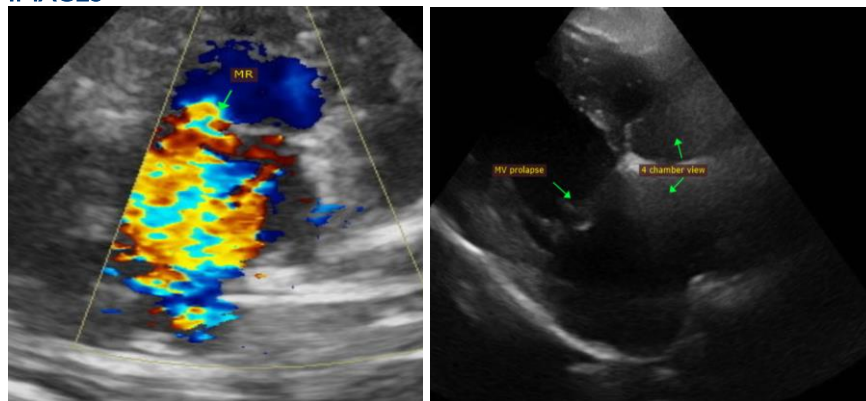
28lbs

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

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Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGES



IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

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.

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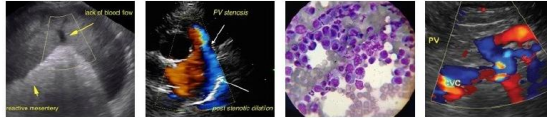
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Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please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

DATE

5/4/22

Maggie Machen Lamy, DVM



Portable Animal Western Sonography, Inc.

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