



PATIENT

Alfie Pennsylv

SPECIES

Canine

BREED

Cavalier

SEX

Male Neutered

AGE

4.14.11

WEIGHT

22lbs

PRESENTING CLINICAL SIGNS

History: Follow up echo- pet has severe mitral DVD. Cough has increased recently. Most recent visit grade 5/6 holosystolic murmur with palpable thrill bilaterally, HR 140, RR 40, lungs were clear with normal respiratory effort.

-Current medications: Vetmedin 2.5mg BID, Spironolactone 25mg SID, Lasix 20mg as needed (O may give every few days a dose at nighttime), Lomotil 2.5mg BID, Gabapentin 100mg PRN for pain.

-Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results (8/21/20 MML): Severe MR, severe LAE, mild LVE, mild TR: 2.5m/s. LA: 3.0, LV: 4.3.

-STAT: Not requested

-Imaging performed by: Stephanie Pearce RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The mitral valve is thickened with prolapse into the left atrial lumen. There is severe eccentric mitral regurgitation present. The MR velocity is normal. There is severe left atrial enlargement. There is mild left ventricular dilation with increased sphericity. Left ventricular systolic function is hyperdynamic. There is normal systolic flow velocity across the aortic valve. The aortic valve appears trileaflet with normal mobility. No obvious AI. The main pulmonary artery is normal in diameter. The pulmonic valve is normal in appearance. No obvious PI. No obvious right atrial or ventricular dilation (subjective). Mild thickening of the tricuspid valve with mild TR. Mildly elevated velocity. No pericardial/pleural effusion or cardiac masses are seen.

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME

Greenbrier Veterinary Clinic

REFERRING VET

Dr. Boccanfuso

INVOICE

22868

DATE

3.1.22

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	5.6	2.9	NM	2.5	39	70	NM
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	160	1.2	0.9	10.0	3.0	4.2	2.6
*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 persists with severe mitral and mild tricuspid regurgitation. Severe MR and left heart enlargement is similar to the prior study. Mild pulmonary hypertension has developed which is not surprising given the chronicity of disease. No additional issues are identified.

Even with relative stability, there will always be risk for congestive heart failure and associated clinical signs going forward. An increase in cough may be due to primary airway issues, mainstem bronchi compression, and/or early recurrent CHF. Repeat chest radiographs are strongly recommended with any change in symptom. Regardless, Lasix should be utilized consistently with at least twice daily dosing, while only increasing the dose or frequency if pulmonary edema is seen or suspected (persistent progressive increase in RR/RE). Hydrocodone can be utilized if the cough is deemed not due to CHF. Additionally, consider increasing Spironolactone to BID as well. No additional changes are recommended at this time. Close monitoring of breathing rates is recommended at home. Prognosis remains guarded long-term.

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit.

Elective anesthesia is not advised.

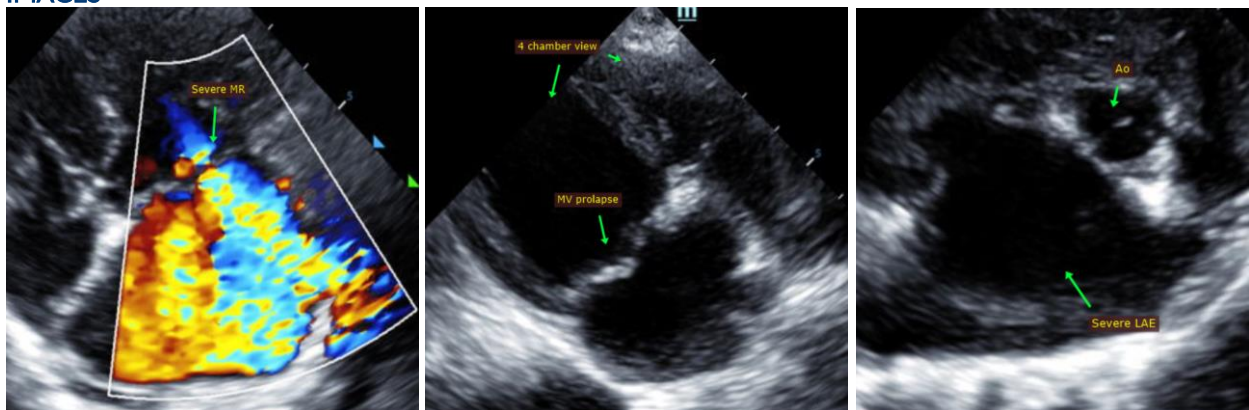
PLAN

A screening BP is recommended every 6 months. Baseline chest radiographs are highly recommended. If pulmonary edema is present, increase Lasix to 20mg am, 10mg mid-day, 20 mg pm. If no pulmonary edema, continue at 20mg PO q12h. Increase Spironolactone to 25mg PO q12h. Continue Pimobendan as prescribed. If BP is >130mmHg, institute ACE-I 0.5mg/kg PO q12h. Consider Hydrocodone if needed for quality of life.

Monitor renal values and BP every 3-4 months lifelong.

A recheck echocardiogram is recommended in 6 months to screen for progression, sooner if clinical signs arise.

IMAGES



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.

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.

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