



PATIENT

Newton Humphrey

PRESENTING CLINICAL SIGNS

History: Recheck echo. He has started to have episodes of rapid breathing when resting. Lasts only for a few minutes. BP is 145mmHG.
-Pertinent previous echo findings (5/2021 MML): Moderate MR, moderate LAE, moderate LVE, trace TR. LA: 2.6, LV: 3.7, TR: 2.5

SPECIES

Canine

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only. Cardiomegaly with LA dilation. No obvious evidence of CHF.

BREED

Minature Schnauzer

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets (anterior>posterior) with mild prolapse into the left atrial lumen. Severe eccentric mitral regurgitation with severe left atrial dilation. Normal MR velocity. Severely increased LV diameter with marked sphericity and hyperdynamic myocardial function. The tricuspid valve appears subjectively normal, with trace tricuspid regurgitation. Normal velocity. 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.

SEX

Male Neutered

AGE

12 years

CARDIAC CHART

WEIGHT

18.5lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM DACVIM
(Cardiology)

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	4.7	NM	1.7	2.1	40	72	0.33
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	1.2	0.87	8.4	4.0	4.6	2.5
*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)
Adapted from June Boon, Veterinary Echocardiography, 1998				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
Hansson et al, Vet Rad and Ultrasound 2002				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				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)

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease persists with evidence of progression. Severe mitral regurgitation has increased quantitatively the left heart is progressively dilated. The risk

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HOSPITAL NAME

Hawkins Animal Hospital

REFERRING VET

Dr. Hawkins



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for spontaneous congestive heart failure is elevated going forward. No additional issues such as pulmonary hypertension is identified.

SPECIES

Canine

Even without significant respiratory changes, it is reasonable to initiate an ACE-I and Spironolactone at this time as below given apparent progression. Prognosis is guarded long term (late B2), and patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

BREED

Minature Schnauzer

Intermittent breathing changes are unlikely to be related particularly without obvious CHF on films; however, if any persistent change in symptom is noted repeat CXR and/or a Lasix trial are strongly recommended.

SEX

Male Neutered

Omega fatty acid supplementation and mild salt restriction remain recommended. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes. Serial monitoring of SRRs is recommended as the best way to screen for progression towards CHF at home.

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Elective anesthesia is not advised.

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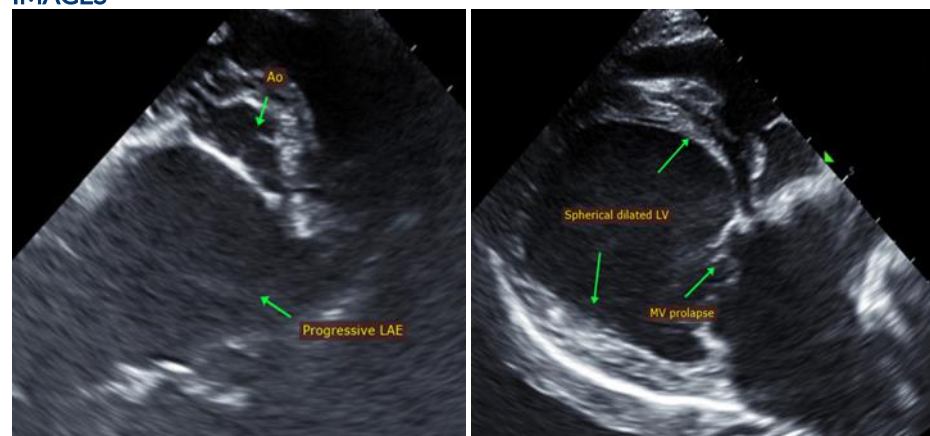
PLAN
Continue Pimobendan as prescribed. Pending BP >130mmHg, institute ACEI 0.5mg/kg PO q12h. Institute spironolactone 1-2mg/kg PO q12h. Consider hydrocodone if needed for QOL.

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(Cardiology)

Recommend conservative monitoring with a recheck echocardiogram in 6 months to screen for progression, sooner if clinical signs arise.

IMAGES



IMAGING PERFORMED BY

Crystal Hill, RVT

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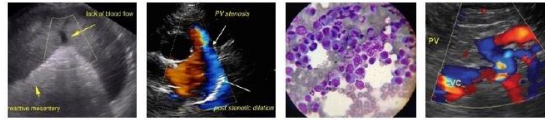
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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.



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