



PATIENT

Jaxon Kraus

SPECIES

Canine

BREED

Jack Russell Terrier

SEX

Male Neutered

AGE

8.7.08

WEIGHT

13.7lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Chadwell Animal
Hospital

REFERRING VET

Dr. Jones

INVOICE

23990

DATE

5.3.22

PRESENTING CLINICAL SIGNS

History: Recheck echo. Intermittent wheezing increasing in frequency lately. Grade 3/6 murmur, lungs clear on exam 4/21/22.

-Pertinent abnormal PE/Chem/CBC/UA Results: CBC/Chem/T4 on 4/21/22- SDMA 17, BUN 39, Creat 1.2.

-Current medications: Vetmedin 2.5mg BID since 2017.

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

-Pertinent previous ultrasound results (5/2020 MML): Moderate MR, moderate LAE, mild LVE, no TR. LA: 2.8, LV: 3.2.

-STAT: Not requested

-Imaging performed by: Andi Parkinson, RDMS.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with prolapse into the left atrial lumen. Severe eccentric mitral regurgitation with severe progressive left atrial dilation. Normal MR velocity. Moderate LV dilation with hyperdynamic myocardial function. The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Velocity consistent with early pulmonary hypertension. Mild right heart enlargement. The pulmonic valve is normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. The pulmonic valve appears normal. The aortic valve is mildly thickened. No aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

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	5.4	30	NM	2.4	47	80	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	120	1.1	1.0	6.2	3.4	3.8	2.0
*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)

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 severe mitral and mild tricuspid regurgitation persists with evidence of progression. Severe left atrial enlargement is noted compared to what is seen in the prior study indicating progressive disease and the risk for spontaneous congestive heart failure is elevated going forward. Early pulmonary hypertension has also developed. Even without significant respiratory changes, it is reasonable to initiate an ACE-I and Spironolactone at this time as below given apparent progression. A baseline blood pressure is recommended.

The patient is noted to have increased wheezing, which is unlikely to be cardiac in origin. Baseline chest radiographs are recommended to screen for pulmonary disease.

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.

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.

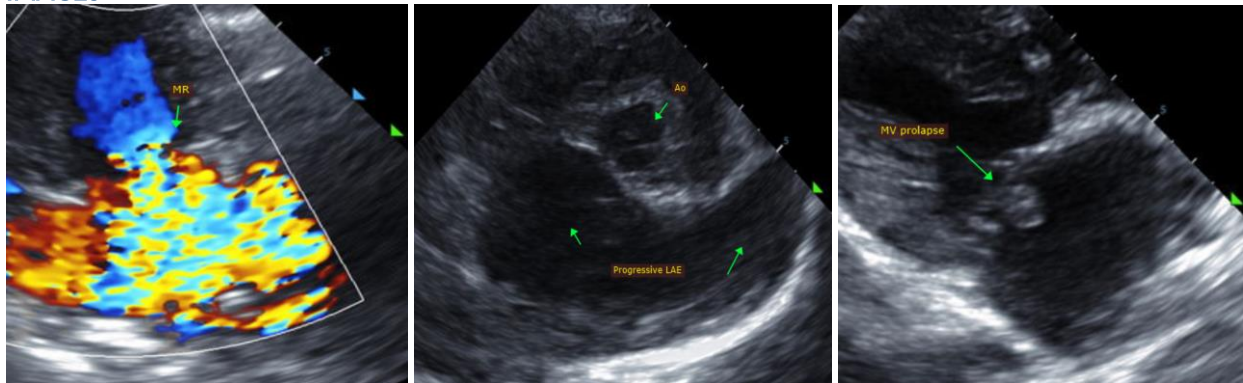
Elective anesthesia is not advised.

PLAN

Screening blood pressure and CXR are recommended. Continue Pimobendan as prescribed. Institute ACEI 0.5mg/kg PO q12h. Institute spironolactone 1-2mg/kg PO q12h.

Recommend conservative monitoring with a recheck echocardiogram 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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