



**PATIENT**

Milo (Solo) Knight

**SPECIES**

Canine

**BREED**

Boxer

**SEX**

Male Intact

**AGE**

5 years

**WEIGHT**

63.4lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Holly Burleson, LVT

**HOSPITAL NAME**

All Pets Medical  
Center

**REFERRING VET**

Dr. Rupley

**INVOICE**

26282

**DATE**

9/8/22

**PRESENTING CLINICAL SIGNS**

History: Previously presented (Aug 2022) for urinating blood, decreased appetite, and mild lethargy. Coughs with activity. Grade 4/6 heart murmur. Ascites noted on exam. Heartworm positive. Began Doxycycline 300mg PO q12h; Enalapril 15mg PO BID, Spironolactone 50mg PO q12h, prednisone, Sildenafil.

\*No follow up history provided since initial echocardiogram.

Pertinent previous echo results: mod TR, severe PAH, severe RHE/RVH/MPAE, adults suspected

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve with no prolapse into the left atrial lumen. No mitral regurgitation, normal left atrial dimension. Normal LV diameter with adequate function. The TV appears mildly thickened. Severe right atrial and ventricular dilation with evidence of hypertrophy. Papillary muscles seen in cross section and appear hyperechoic. The MPA and branches are severely dilated. Adult heartworm and infestation suspected at the bifurcation extending into the right branch of the pulmonary artery. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. No pericardial or pleural effusion noted.

**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	NA	NM	NM	1.1	50	94	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	NM	1.2	0.9	29	2.4	3.4	1.7
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				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**

No change from the prior study, with persistent HW infestation and right heart/MPA enlargement. The lesions in question appear to be hyperechoic RV papillary musculature, likely more obvious given RV enlargement. No additional pathology is seen.



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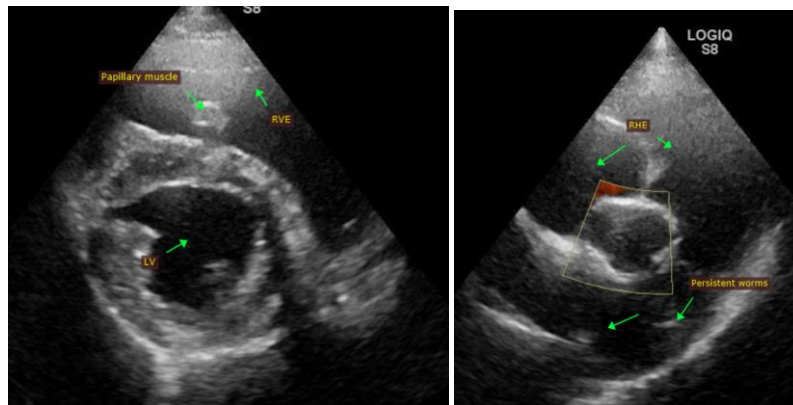
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**PLAN**

Follow up as dictated by the prior report.

**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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