



PATIENT

Ella Tardif

SPECIES

Canine

BREED

Pomeranian

SEX

Female Spayed

AGE

11 years

WEIGHT

8.8lbs

PRESENTING CLINICAL SIGNS

History: Recheck echo. History of PS and ascites. BP: 146mmHg.

-Current treatment: Furosemide 20 mg x 1/2 tablet BID or as directed, Spironolactone 25 mg x 1/4 tablet BID or as directed, Fortekor 5 mg x 1/2 BID or as directed, Vetmedin 1.25 mg BID on an empty stomach, Sildenafil 10 mg 1 capsule BID or as directed.

Abnormal PE/Chem/CBC/UA Results: CBC< WNL, except increased PIT, Chem: urea 13.4 (N 2.5 9.6) Previous 13.2 Chol 8.7 (N 2.84-8.26) USG 1.017, Proteinuria, UPCR 1.09 (values 1<2 sig protein).

-Sedation: Ace and Torb IV.

-Pertinent previous echo findings (2/2022 MML): Mild MR, moderate TR, moderate RAH, moderate RVE. TR: 3.6m/s.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no obvious prolapse into the left atrial lumen. Mild to moderate mitral regurgitation with mild left atrial enlargement. Normal LV diameter with adequate myocardial function. The tricuspid valve appears mildly thickened with severe tricuspid regurgitation. Moderate right atrial enlargement; moderate right ventricular dilation and hypertrophy consistent with significant pulmonary arterial hypertension. TR velocity supports moderate PAH. Subtle systolic flattening of the IVS consistent with pressure overload. The pulmonic and aortic valves are normal in morphology and mobility. Mild pulmonic insufficiency. MPA and branch dilation. Normal pulmonic and aortic outflow velocities. No pericardial or pleural effusion noted. No cardiac tumors observed.

CARDIAC CHART

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Brian Barnes, DVM

HOSPITAL NAME

Westview Veterinary
Hospital

REFERRING VET

Dr. Barnes

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9/26/22

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	4.5	3.9	1.4	1.3	65	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	1.3	0.9	4.0	1.8	1.9	0.7
*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



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease persists with overall stability. The left heart disease is slightly progressed with mild left atrial enlargement. The right heart disease appears similar with moderately elevated pulmonary pressures and secondary right heart enlargement. No obvious additional issues are identified.

Given these findings and a patient without reported clinical signs, no change to current medications are warranted at this time. It is important to note that respiratory signs that may develop in the future likely warrant additional treatment, such as Hydrocodone, Baytril, etc. Signs of progressive/poorly controlled PAH include exertional dyspnea or collapse and may warrant an increase in Sildenafil therapy in the future.

Patients with this degree of PAH can develop right-sided congestive heart failure (ascites, pleural effusion) as was seen in this case, debilitating cyanosis/labored breathing and exertional syncope as was seen previously in this case and no obvious recurrent ascites is seen today. The prognosis is guarded to poor with an MST of <1 year after the onset of CHF, and respiratory disease may limit QOL if significant.

Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a labored breathing, exercise intolerance or collapse episodes.

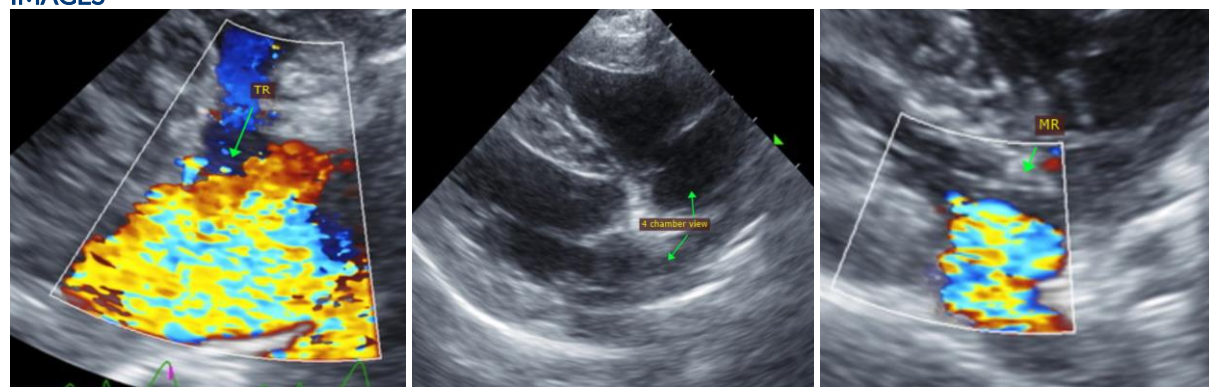
PLAN

Continue medications as previously prescribed.

Recommend renal panel and BP every 3-4 months lifelong on diuretics.

Recommend recheck echocardiogram in 6 months to reassess structure and function, sooner if any recurrent clinical signs.

IMAGES





PATIENT

Ella Tardif

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.

SPECIES

Canine

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.

BREED

Pomeranian

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com

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