



PATIENT

Maggie Graham

PRESENTING CLINICAL SIGNS

History: Elevated Pro-BNP. Lethargic. Cardiomegaly on radiographs.

SPECIES

Canine

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Trace mitral regurgitation with no left atrial dilation. Normal LV diameter with borderline myocardial function. The tricuspid valve appears normal with no tricuspid regurgitation. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

BREED

Lab

SEX

Female Spayed

CARDIAC CHART

AGE

9 years

WEIGHT

92lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway Animal
Hospital

REFERRING VET

Dr. Maniar

INVOICE

24277

DATE

5/18/22

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	NM	NA	NM	1.2	26	50	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	0.74	41.7	3.2	4.3	3.2
*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)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cardiac structure and function in this patient is overtly normal. No significant valvular regurgitation is noted, and the cardiac dimensions and function are normal. The systolic function is borderline which should be monitored going forward; however, a normal variant is certainly possible. Avoid non-traditional diets lifelong and consider assessing a thyroid status.

No obvious reason for NT-ProBNP elevation is seen, most likely making this a false positive result (a known weakness of the test) which is common in this particular breed. Other possible causes should be considered, including arrhythmias, hypertension or renal disease. If no obvious cause is identified, reassessing this patient in 6-12 months is recommended to ensure early disease was not missed.



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These findings would suggest cardiomegaly is a normal variant. These films should be used as a baseline for future comparison.

SPECIES

Canine

No cardiac medications are indicated at this time. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

BREED

Lab

No cardiac contraindication for general anesthesia.

SEX

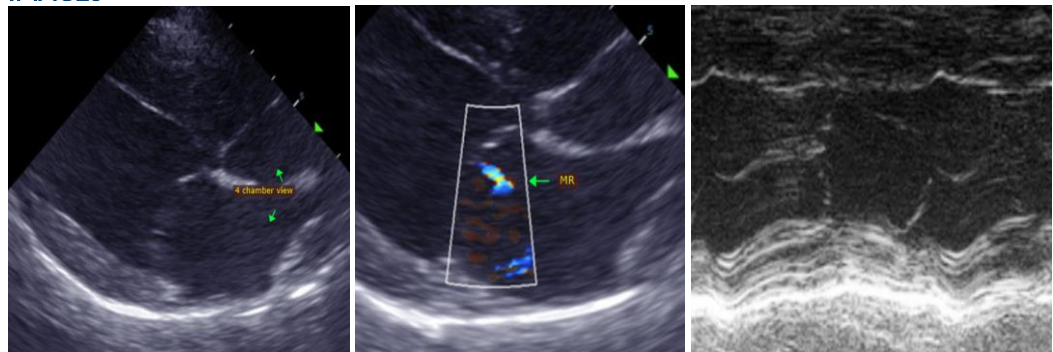
Female Spayed

A recheck is recommended in 6-12 months to ensure no progressive issues are identified, sooner should a murmur or any clinical signs of cardiac compromise be noted at home.

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IMAGES



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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.

IMAGING PERFORMED BY

Jenn

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.

HOSPITAL NAME

Rockaway Animal
Hospital

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