



PATIENT

Rocky Garland

SPECIES

Canine

BREED

German Shepherd
Mix

SEX

MN

AGE

2010

WEIGHT

95.5lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Fullerton AH

REFERRING VET

Dr. Unger

INVOICE

20865

DATE

9/2/21

PRESENTING CLINICAL SIGNS

History: Presented on 7/19 for exam to have some lumps checked and concern for increased panting/breathing harder at night. On exam an arrhythmia was ausculted. Bloodwork was taken and was unremarkable. Chest and abdominal films were unremarkable. ECG revealed frequent single VPC's occurring in a bigeminal pattern. Treatment of arrhythmia has not improved breathing/panting, but VPCs improved. Rare APC on repeat ECG with suggestion of cardiac enlargement.

Pertinent abnormal PE/Chem/CBC/UA Results: Unremarkable.

Current medications: Sotalol 80 mg- 3/4-tab BID, Gabapentin 300mg BID, Trazadone 100mg - 1 tablet 2 hours prior to bed, Carprofen 100mg BID.

Blood pressure Not provided by the veterinarian.

Sedation used: Sedation not required for scan.

Pertinent previous ultrasound results: No previous IntraPet scans.

STAT: Not requested.

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. Mild central mitral regurgitation with minimal left atrial dilation. Normal MR velocity. 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.

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	5.2	NA	NM	1.3	28	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	1.4	0.63	43	3.1	5.0	3.6
*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

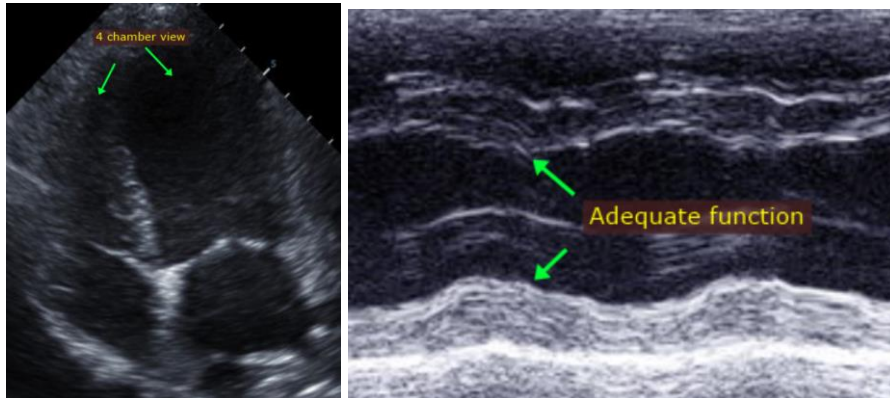
Overtly normal cardiac dimensions and function, with no obvious dysfunction or dilation of the left heart. No significant valvular leaks are visualized, and no evidence of pulmonary hypertension. The systolic function is adequate; albeit, on the low end of normal. Follow up is reasonable to ensure no progressive issues are identified. No obvious cardiac tumors; however, it is important to note that small masses are easily missed particularly in the absence of effusion.

No structural cause for VPCs is identified. Consider systemic or primary arrhythmic causes. Follow up as dictated by the ECG evaluation.

Monitor for development of a heart murmur, cough, labored breathing, exercise intolerance or collapse episodes.

A recheck echocardiogram is recommended in 6-12 months to ensure no progressive dysfunction is identified.

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.

Maggie Machen Lamy, DVM

Diplomate of the American College of Veterinary Internal Medicine (Cardiology)

Email: info@sonopath.com