



PATIENT

Bailey Messina

SPECIES

Canine

BREED

Lab X

SEX

Female Spayed

AGE

5y 6m

WEIGHT

50.2 lbs

INTERPRETED BY

R. McKenzie Daniel,
 DVM, DABVP
 (Canine and Feline)

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Heart + Paw

REFERRING VET

Dr. Marmolejo

INVOICE

12781

DATE

11/6/25

PRESENTING CLINICAL SIGNS

History: Exercise fatigue, hx of HW dz, completed tx. Currently HW neg. No obvious abnormalities on exam

Abnormal PE/Chem/CBC/UA Results: NSF

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	--	--	--	1.3	30	58	0.3
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX 4 Chamber	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				
PATIENT	139	1.4	0.9	--	3.3	3.4	--

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 2 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was borderline subnormal yet subjectively adequate as evidenced by the fracture shortening measurement. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window. No evidence of arrhythmia present.

ULTRASONOGRAPHIC FINDINGS

- Normal echocardiogram with borderline subnormal yet adequate LV contractility



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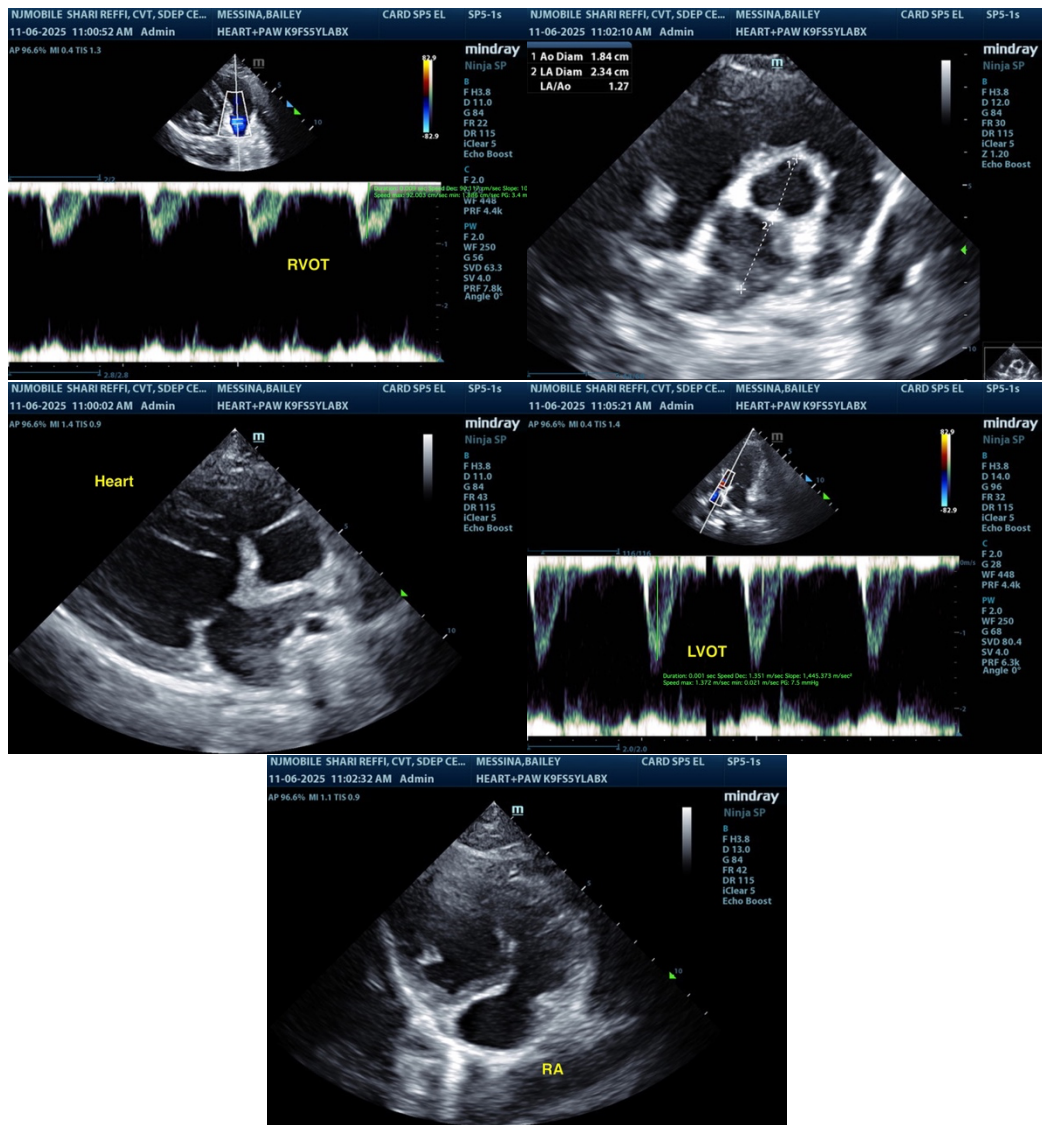
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of clinical issues such as left or right heart chamber enlargement, arrhythmia, DCM criteria or right heart disease secondary to previous heartworm disease. The borderline subnormal LV contractility is not overtly consistent with clinical issue at this stage and potentially secondary to non-obvious systemic disease, hypothyroidism, athletic state or patient variant. Overall, no evidence of definitive cardiomyopathy as a contributing factor to the exercise fatigue. No indication for cardiac medications. T4 level and screening cortisol levels suggested if not recently done. Correlation with neurological and musculoskeletal exam is recommended. No anesthetic contraindications.



The information and recommendations provided are based on the images presented by the referring



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veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com