



PATIENT PRESENTING CLINICAL SIGNS

Yogi Storm Grade III/VI heart murmur noted on exam. Dog appears healthy otherwise.
 Abnormal PE/Chem/CBC/UA Results: All WNL. Anaplasmosis and Lyme positive - no symptoms

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Bernese Mtn Dog

SEX

Neutered Male

AGE

2 Years

WEIGHT

102 Pounds

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			1.3	1.2	47.8	82.8	0.4
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				
PATIENT	115	2.4 max	1.4		4.0	4.6	

Cardiac Presentation

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Blairstown AH

REFERRING VET

Dr. Leal

INVOICE

25719

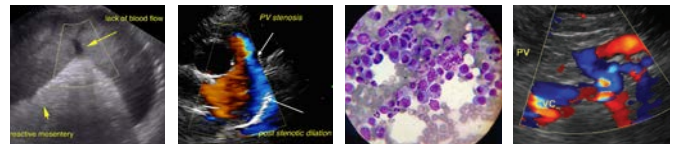
DATE

9/22/21

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 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. Color doppler assessment of the mitral valve revealed potential for minor mitral valve insufficiency. 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 adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. 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/a0 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.

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function
- Mildly elevated LVOT velocity
- Potential minor mitral valve insufficiency



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of structural or functional cardiomyopathy, including no overt evidence of significant valvular insufficiencies, overt stenotic disease, shunt, or systolic dysfunction. Potential trivial mitral valve insufficiency was noted. However, this is unlikely to be heard on physical exam. Potential considerations for the murmur may include physiologic or flow murmur. A small flow abnormality not seen in this study, and if the murmur is chronic the mildly elevated LVOT velocity, although not definitive, may suggest some degree of low-grade subaortic stenosis. Baseline lab work to assess for evidence of anemia may be considered. Regardless, the lack of structural or functional cardiomyopathy indicates that the risk of complication is low, and continued monitoring at this time would be appropriate. No indication for cardiac medications. No overt anesthetic contraindications if anesthesia is needed. Conservative monitoring of the murmur is recommended with recheck echocardiogram suggested in 6 months, sooner if murmur intensity increases or clinical signs suggestive of heart disease are noted.

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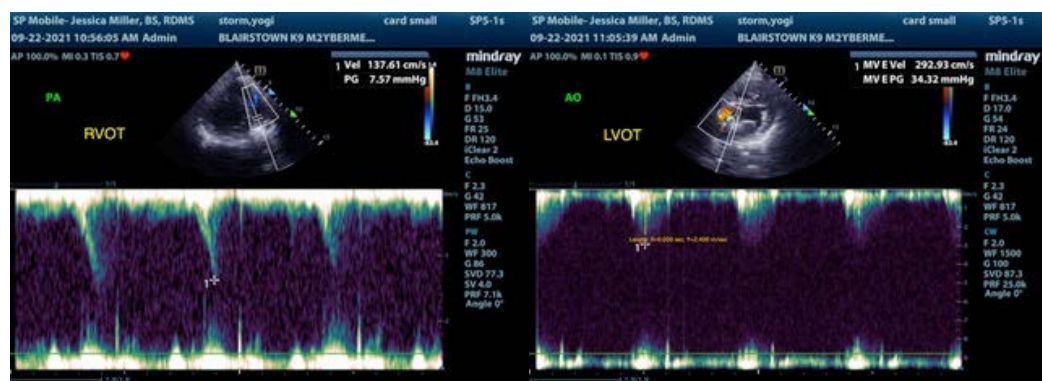
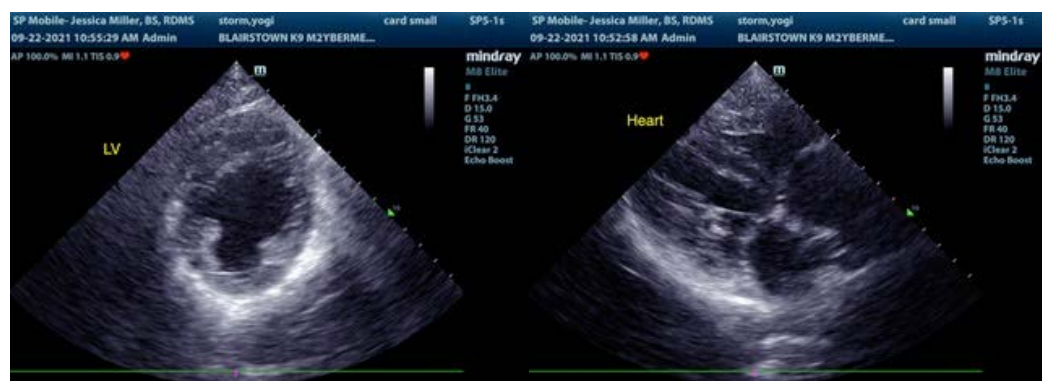
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)
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