



**PATIENT PRESENTING CLINICAL SIGNS**

Riley Zalla History: chronic cough, enlarged heart compared to January

**SPECIES BREED SEX AGE WEIGHT** **ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Canine

BREED

Maltese

SEX

Neutered male

AGE

10 years

WEIGHT

8.6 lbs

INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Bednar

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. Prolapse of the anterior mitral valve leaflet was noted. 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/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.

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base;)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.4	1.8	49	82	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	190		0.7	8.6 lbs	3.03 max	2.62	

**ULTRASONOGRAPHIC FINDINGS**

Mitral insufficiency and mild left atrial enlargement.

INVOICE

43875

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

DATE

4/19/23

The cough may be mainstem bronchus impingement by the left atrium; however, primary bronchial disease is likely playing a role as the left atrial enlargement was minor. This is most consistent with early



**PATIENT**

stage B2 valvular disease and justification to Pimobendan at 0.3 mg/kg can be considered; however, primary respiratory protocol is also warranted based on radiographic findings.

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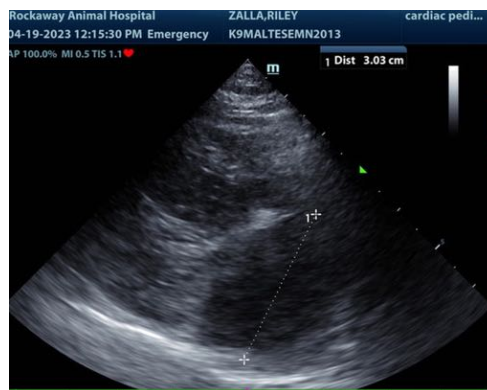
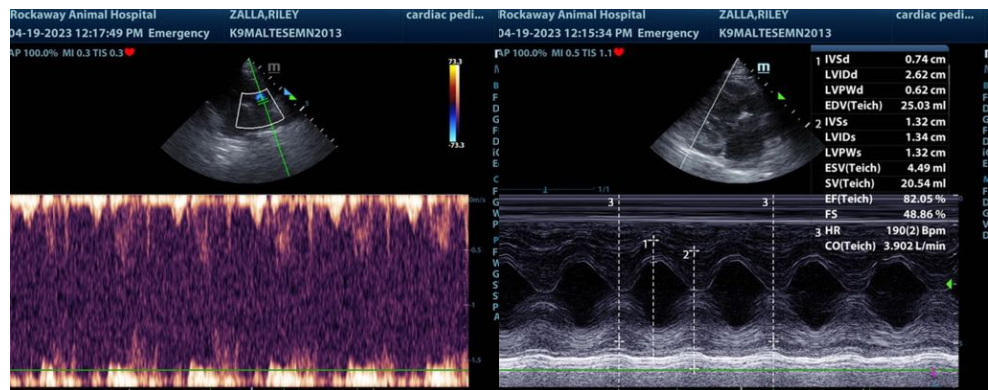
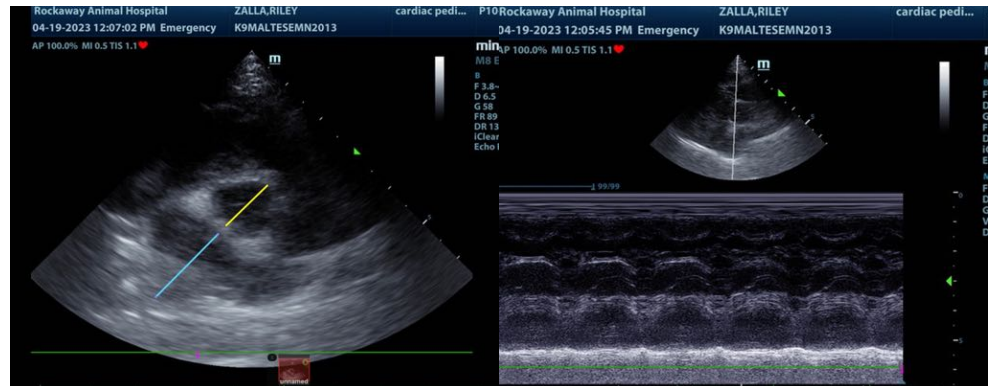
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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