



**PATIENT PRESENTING CLINICAL SIGNS**

Jack Koroush History: Increased RE noted by owner 10/28 - also eating less. Current Medications Ketoconazole, Starting Furosemide 10/29 Radiographic Findings Lack of cardiac silhouette

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Neutered male

**AGE**

13 years

**WEIGHT**

12.1 lbs

**INTERPRETED BY**

Eric Lindquist, DMV, DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

Countryside AC

**REFERRING VET**

Dr. Cox

**DATE**

11/1/21

Invoice  
92791

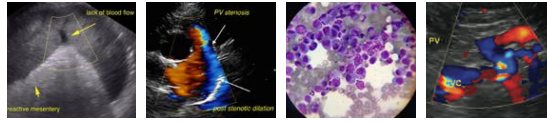
**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

The echocardiogram in this patient demonstrated normal to subnormal **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. 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; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.04	0.95	40	75	0.19
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	105	1.0	0.56	12.1 lbs	1.91	1.82	

**ULTRASONOGRAPHIC FINDINGS**

Normal to subnormal left atrium. No evidence of cardiac disease.



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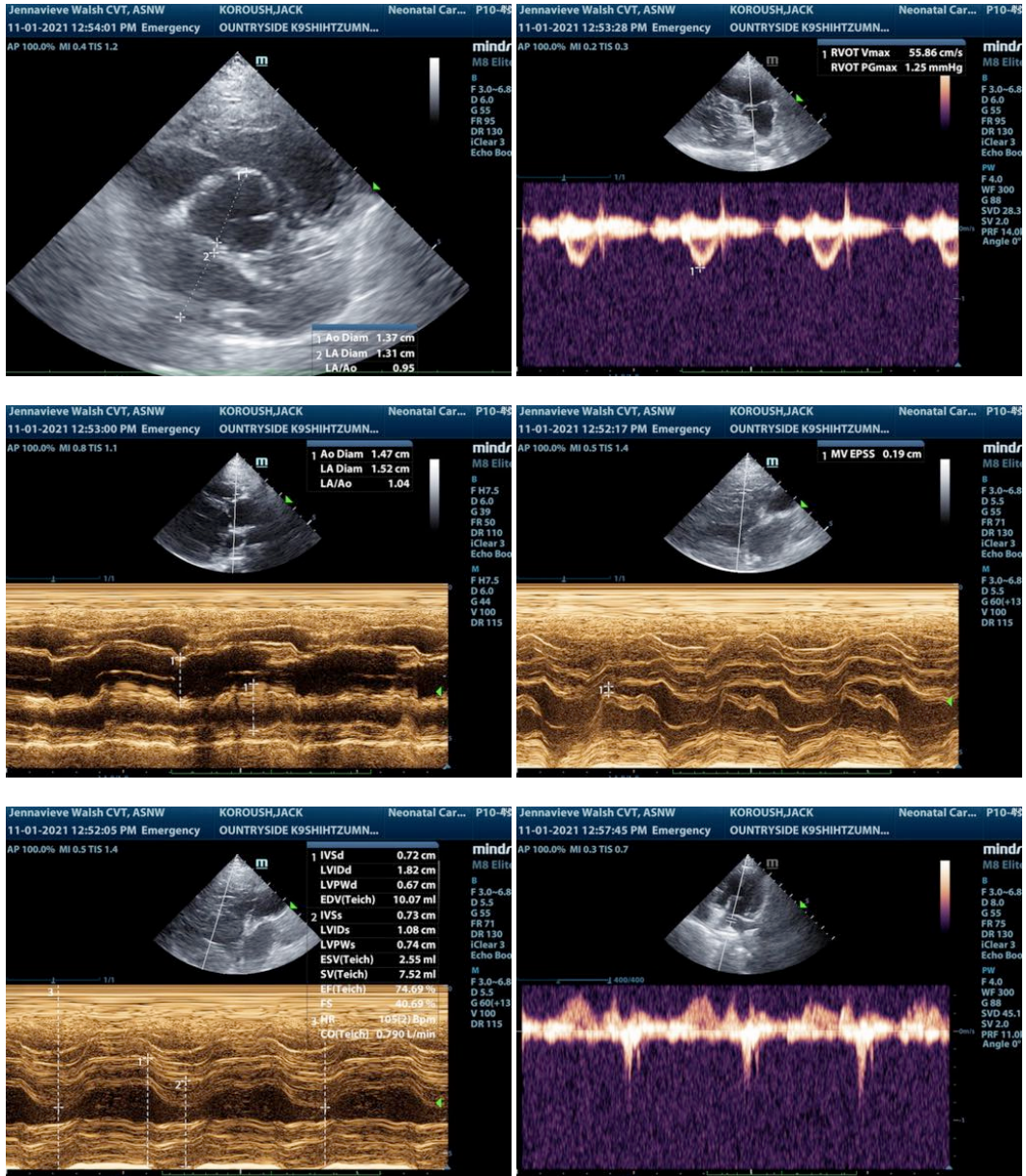
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Hydration status should be evaluated in this patient. There was no evidence of primary cardiac disease. Blood pressure measurements are warranted to rule out systemic hypotension.





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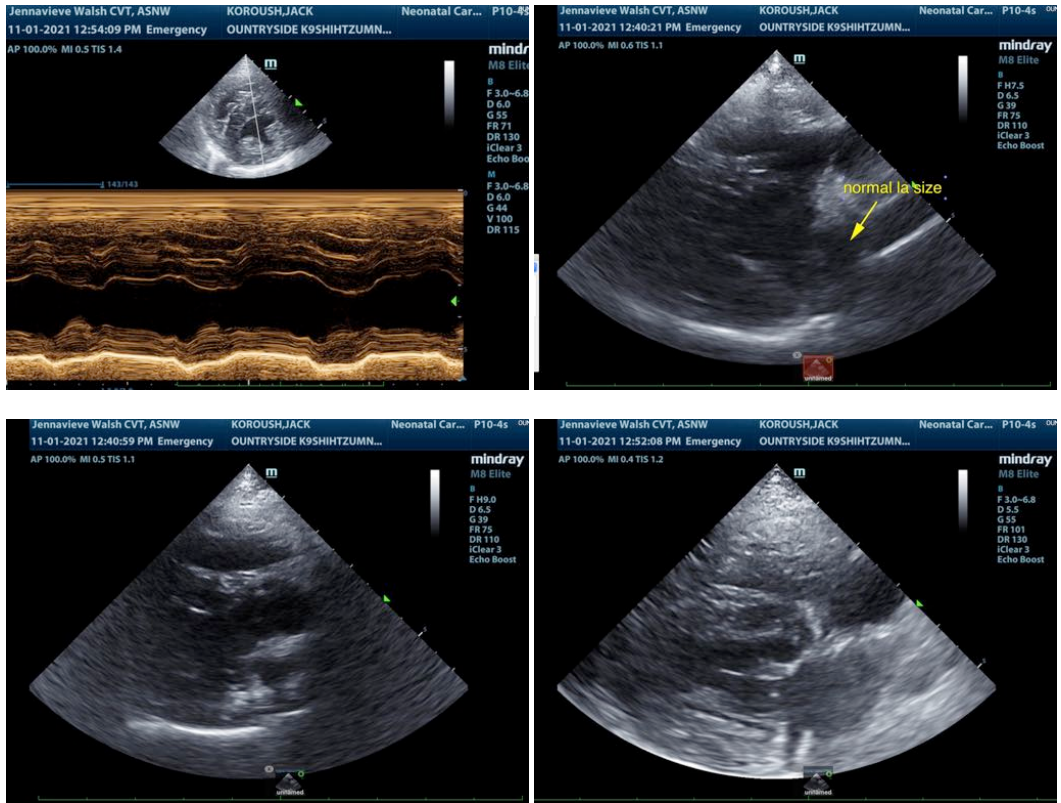
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Eric Lindquist, DMV, DABVP, Cert. IVUSS**

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