



**PATIENT PRESENTING CLINICAL SIGNS**

Uncle Leo Lopez

History: History Grade 3/6 heart murmur, last echo in 2021 showed no LA enlargement. Clinically patient is coughing more. On hydrocodone for treatment of coughing secondary to collapsing trachea.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Yorkie

The echocardiogram in this patient demonstrated mild **left atrial** enlargement. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable 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 or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** 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. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. There is a large amount of respiratory interference noted in the peripheral lung fields.

**SEX**

Neutered male

**AGE**

14 years

**WEIGHT**

7 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

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			1.5	2.0	55		0.1
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				7 lbs	2.83 max	2.2	

**IMAGING PERFORMED BY**

Dr. Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Petrone

**ULTRASONOGRAPHIC FINDINGS**

Mitral insufficiency with prolapse of the mitral valve leaflet.

**INVOICE**

32769

Mild left atrial enlargement.

**DATE**

9/7/22



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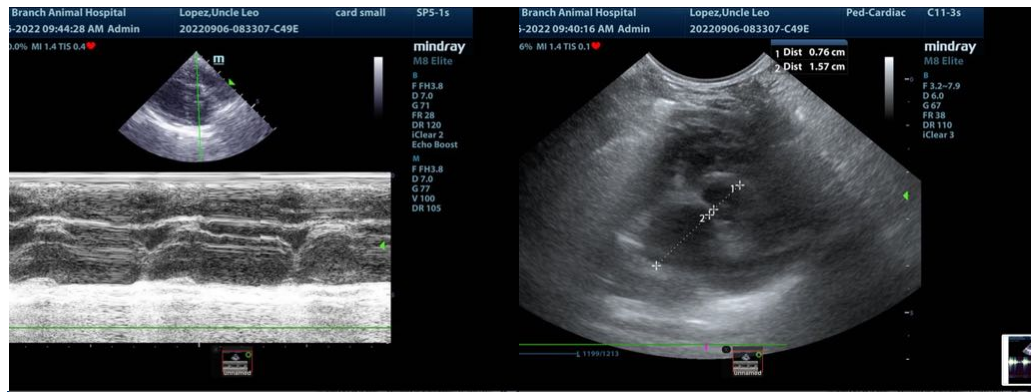
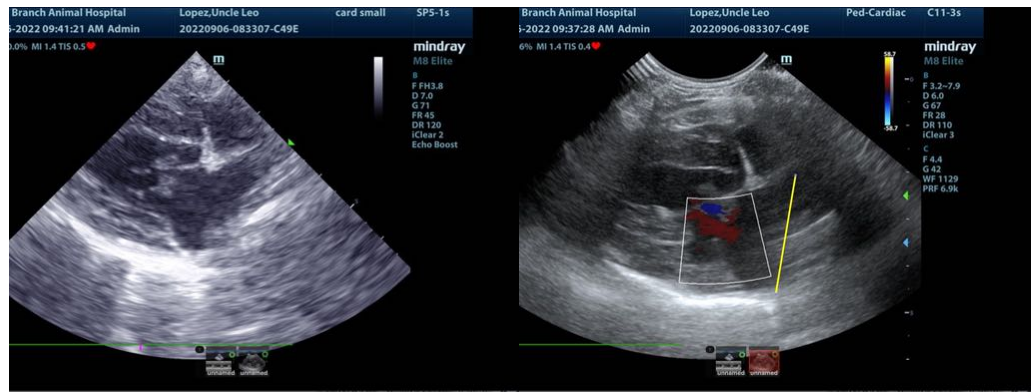
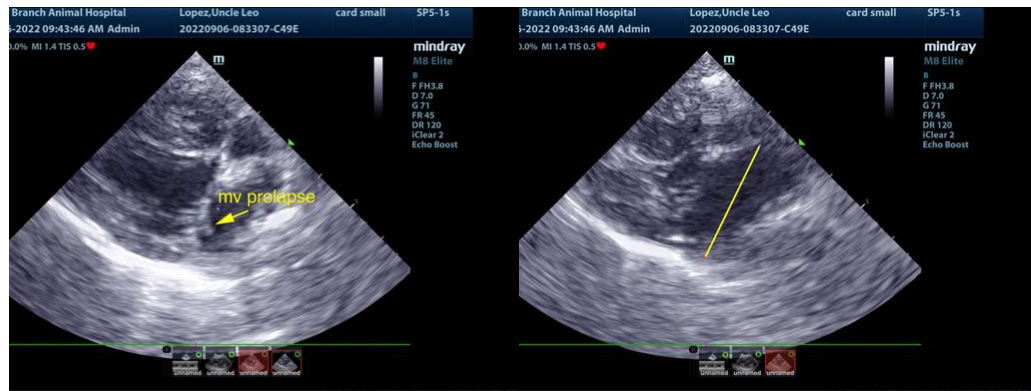
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**DATE**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

I do not feel that the cardiac presentation is the primary issue in this patient. However, there is mild left atrial enlargement. I recommend initiating Pimobendan if vertebral heart score is excessive in this patient to 0.3 mg/kg b.i.d. However, primary respiratory protocol is recommended. Respiratory and cardiac components are likely playing a role.





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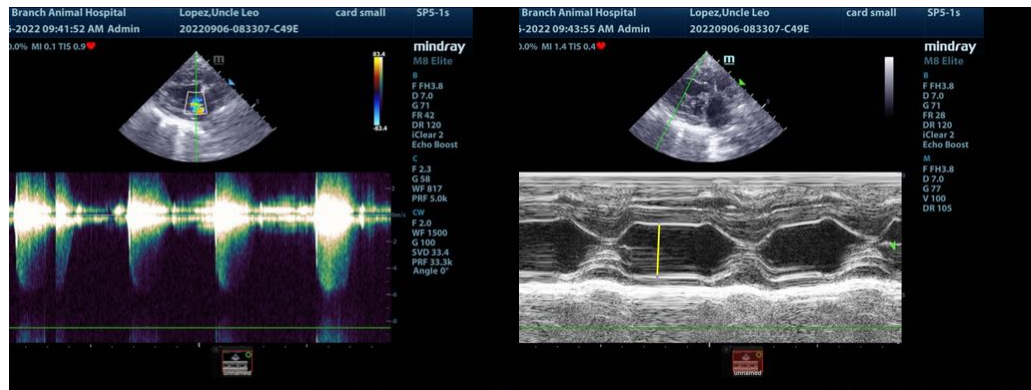
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**INVOICE**

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**DATE**

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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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
info@SonoPath.com