



**PATIENT PRESENTING CLINICAL SIGNS**

Camden Sherman Increased coughing- r/o progression of cardiac enlargement vs lung pathology vs other Previous echo read by sonopath in May 2022 On Pimobendan 2.5mg PO Q12, hydrocodone and cerenia for coughing. Owner is concerned that coughing is worsening. CXR images available. Mild ALP elevation

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Mix

**SEX**

Neutered male

**AGE**

8 years

**WEIGHT**

18.6 lbs

The echocardiogram in this patient demonstrated enlarged **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Color flow and spectral Doppler indicated measurable insufficiency. Prolapse of the anterior mitral valve leaflet was noted. Complete filling of the left atrium was present on color flow assessment of the mitral valve. 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.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Petrone

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
<b>PATIENT</b>			NM				NM
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
<b>CARDIAC PARAMETERS</b>	(BPM)	<b>VMAX</b> (m/s)	<b>MAX</b> (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6				
<b>PATIENT</b>			1.0		3.8	3.15	

**INVOICE**

31369

**DATE**

6/30/22

**ULTRASONOGRAPHIC FINDINGS**

Mitral insufficiency.  
Mild left atrial enlargement.  
Stage B2 valvular disease.



**PATIENT**

Camden Sherman

**SPECIES**

Canine

**BREED**

Mix

**SEX**

Neutered male

**AGE**

8 years

**WEIGHT**

18.6 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Petrone

**INVOICE**

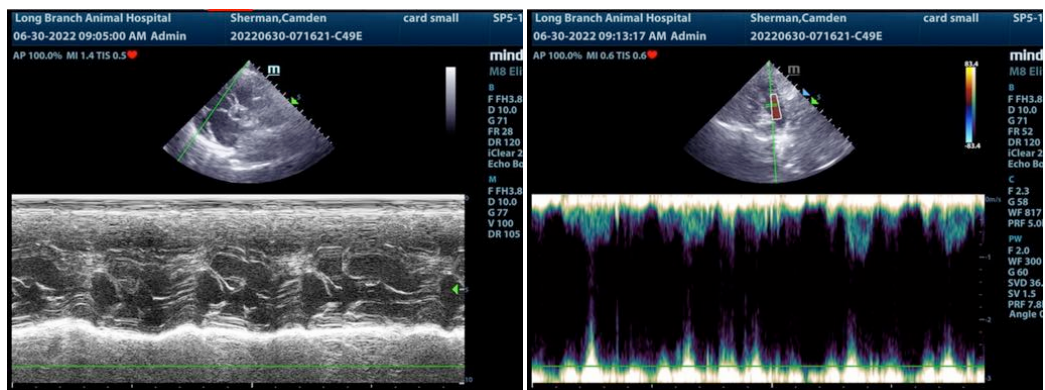
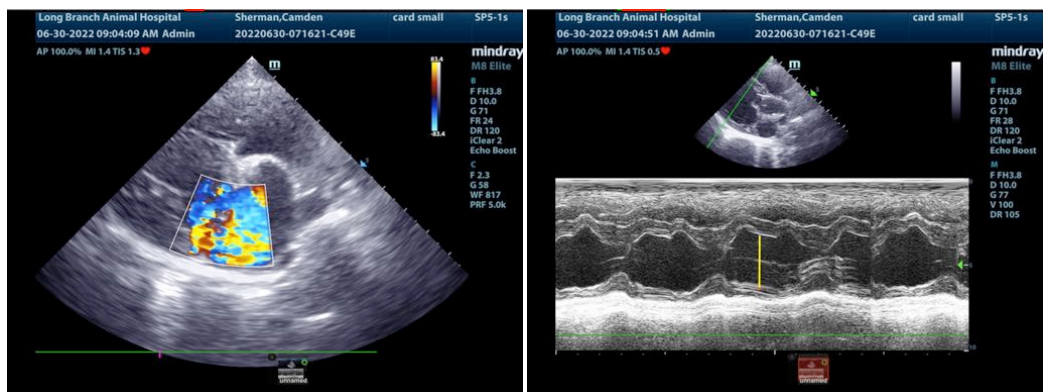
31369

**DATE**

6/30/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given the history of a cough depending on radiographic findings mainstem bronchus impingement is a concern. Spironolactone at 1-2 mg/kg b.i.d. and ace inhibitor at 0.5 mg/kg s.i.d. Minor Lasix trial is recommended at 1-2 mg/kg b.i.d. could be considered as well followed by reassessment of the cough. Primary bronchial disease may be playing a role in this patient. Lasix trial may work on primary bronchial as well as reducing left atrial volume overload.



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