



## PATIENT

Eli Ledwith

## SPECIES

Canine

## BREED

Whippet

## SEX

Neutered male

## AGE

11 years

## WEIGHT

34 lbs

## PRESENTING CLINICAL SIGNS

History: Patient has a Grade III left parasternal systolic murmur - wanted to work up  
Abnormal PE/Chem/CBC/UA Results: Grade III systolic murmur Blood pressure -140

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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. Doppler indicated measurable insufficiency. The **left ventricle** presented mild volume overload with hypocontractility for this type of pathology. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. 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. Periodic arrhythmia was noted in this patient.

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Dr. Kitz

## HOSPITAL NAME

Woodlands AH

## REFERRING VET

Dr. Kitz

## INVOICE

68628

## DATE

11/12/25

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO	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	5.62	2.63	1.5	1.86	26	51	1.0
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		NM	0.87	34 lbs	4.6	4.95	

## ULTRASONOGRAPHIC FINDINGS

- B2 valvular disease with potential myocardial insufficiency or emerging DCM



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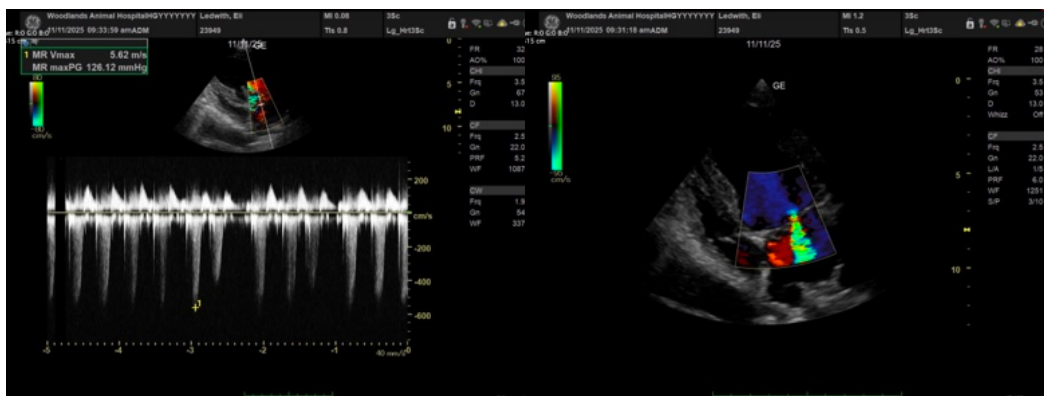
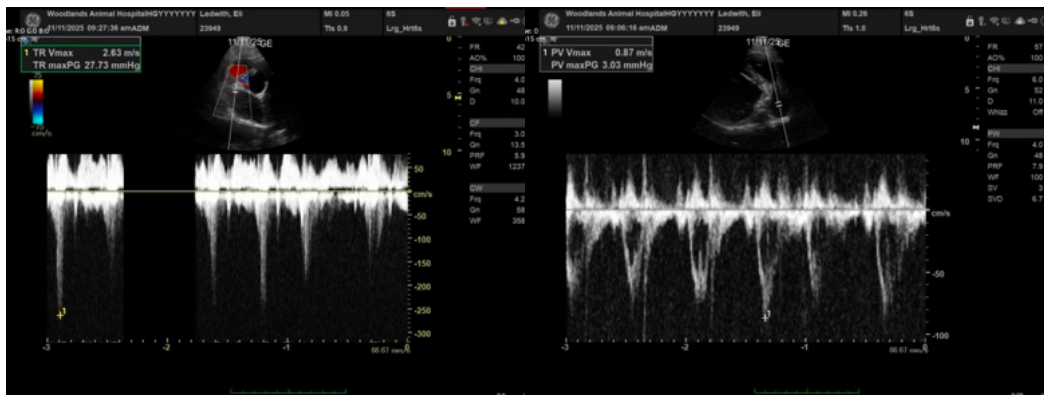
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

EKG or Holter monitor is indicated. Blood pressure measurements are warranted if not already performed. EPSS was excessive. This is suggestive for potential early DCM. Concurrent valvular disease was present. Thyroid assessment is indicated as well as taurine levels. Grain free diet should be investigated. I recommend initiating Pimobendan at 0.3 mg/kg b.i.d. with reassessment in a month regarding volume, contractility and update of the values as well as further diagnostics regarding thyroid and taurine. Potential underlying myocarditis should also be considered. Occult myocarditis or nutritional cardiomyopathy should be considered. Note that in typical valvular disease I would expect the contractility to be much higher and EPSS to be normal. Given that EPSS is mildly excessive and contractility is subnormal, other factors in addition to valvular disease may in play.





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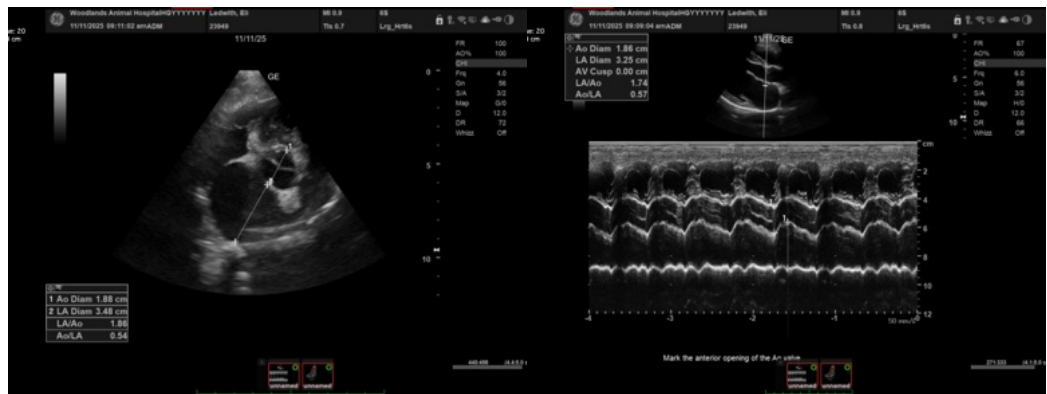
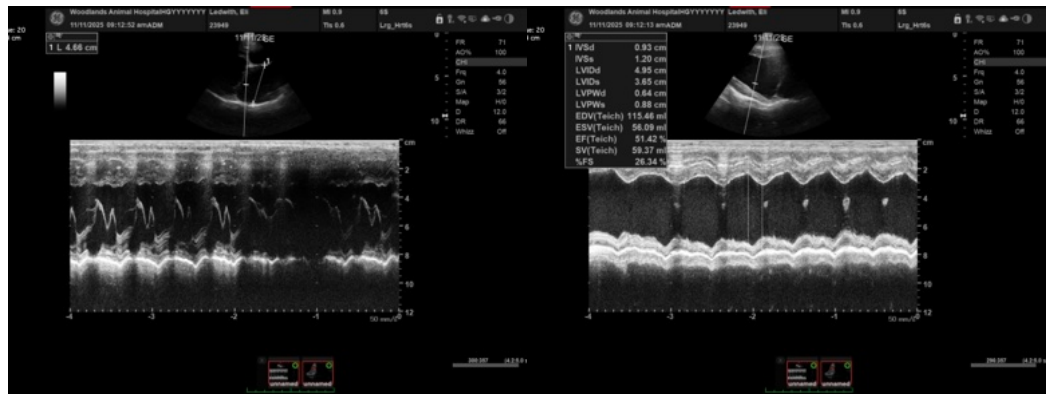
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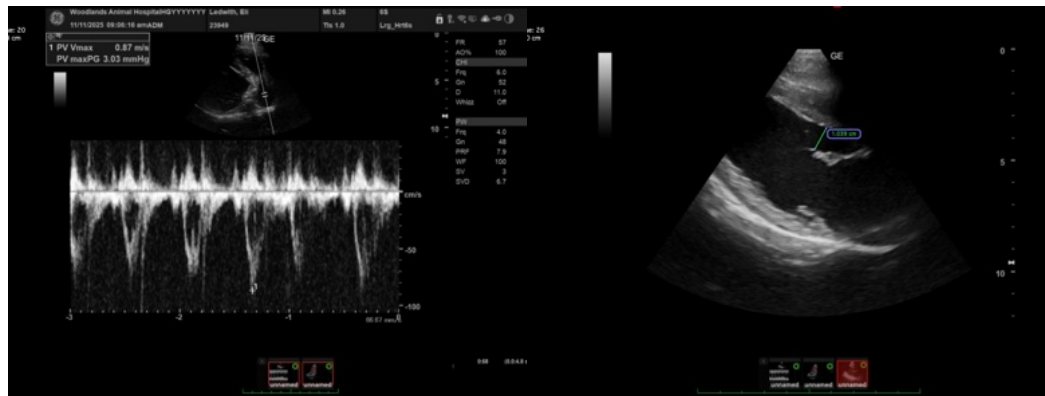
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP (CFM), Cert. IVUSS, CEO of SonoPath.com

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