



**PATIENT**

Dan Fried

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Neutered male

**AGE**

10 years

**WEIGHT**

6.1 lbs

**PRESENTING CLINICAL SIGNS**

History: Grade 3/6 murmur.  
 Abnormal PE/Chem/CBC/UA Results: BP 163/148(150),152/128(134),153/140(142). Respiratory crackles end of inspiration

**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. Prolapse of the mitral valve leaflet was noted. Doppler indicated measurable insufficiency. The **left ventricle** presented normal 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). Trace **pericardial** effusion was noted in this patient. No masses are present in this patient.

**INTERPRETED BY**

Eric Lindquist, DMV  
 DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

JK

**HOSPITAL NAME**

Hamburg VC

**REFERRING VET**

Dr. Martens

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	5.0	2.8	1.85	1.9	58	90	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			0.5	6.1 lbs	1.87	2.66	

**INVOICE**

42919

**DATE**

2/22/23

**ULTRASONOGRAPHIC FINDINGS**

Stage B2 valvular disease.  
 Trace pericardial effusion. Potential for small left atrial tear.



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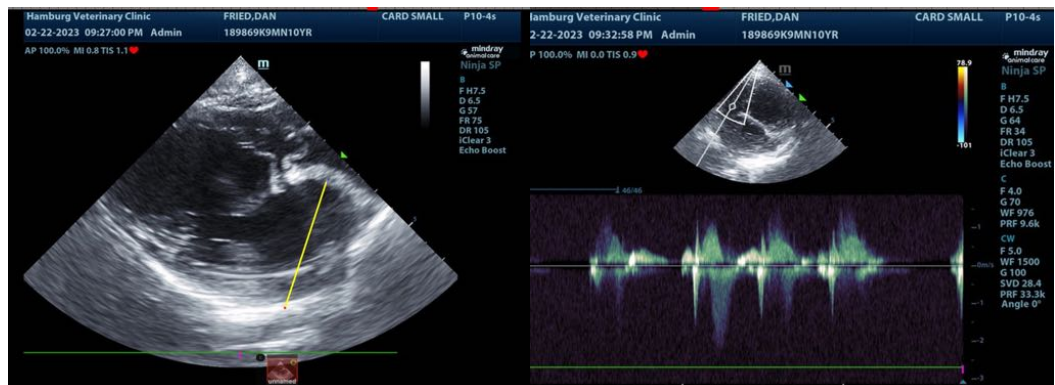
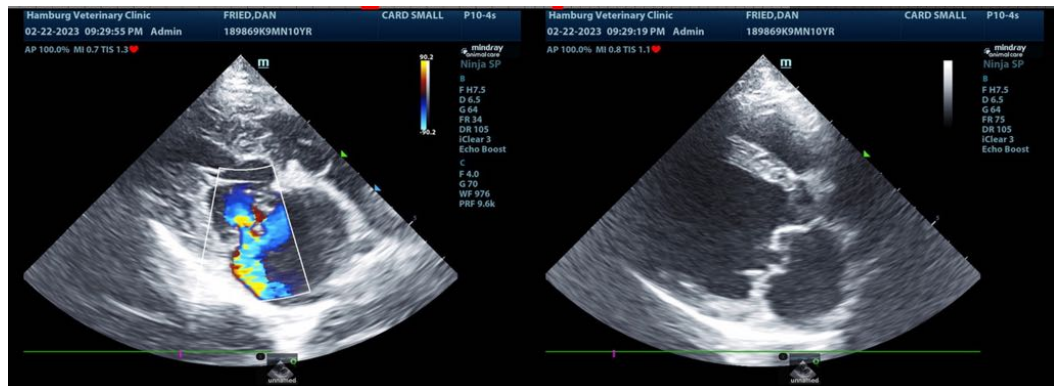
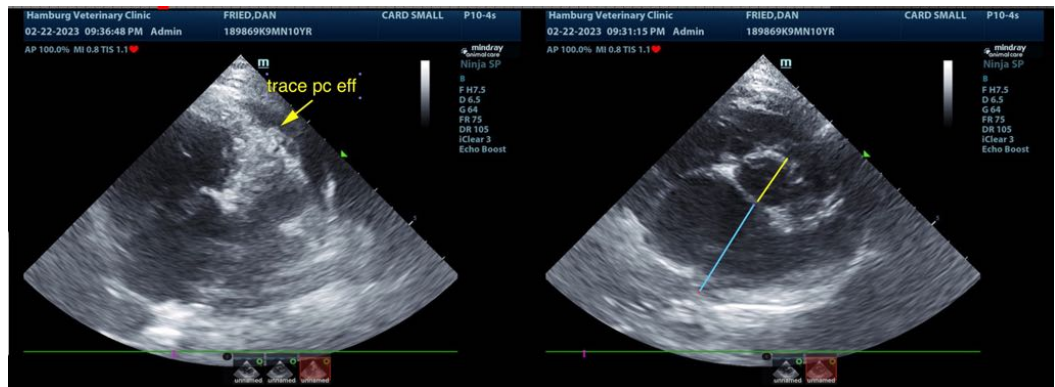
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Blood pressure measurements. Given the borderline systolic hypertension ace inhibitor can be considered +/- Spironolactone at 1-2 mg/kg b.i.d. I recommend Pimobendan at 0.3 mg/kg b.i.d. I cannot rule out an early left atrial tear. The pericardial effusion is likely owing to the appearance of cardiomegaly on radiographs. Recheck echocardiogram is recommended in a month or earlier if clinical signs develop. An abdominal sonogram is recommended to ensure primary hemangiosarcoma or other comorbidity is not contributing to the pericardial effusion.





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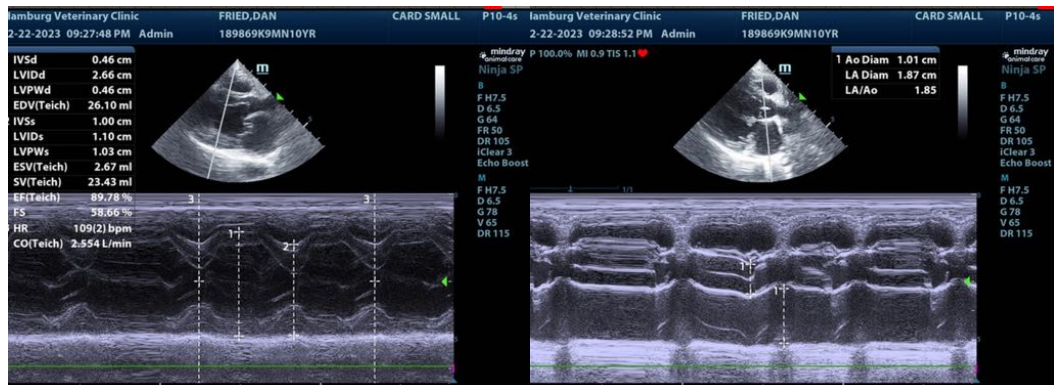
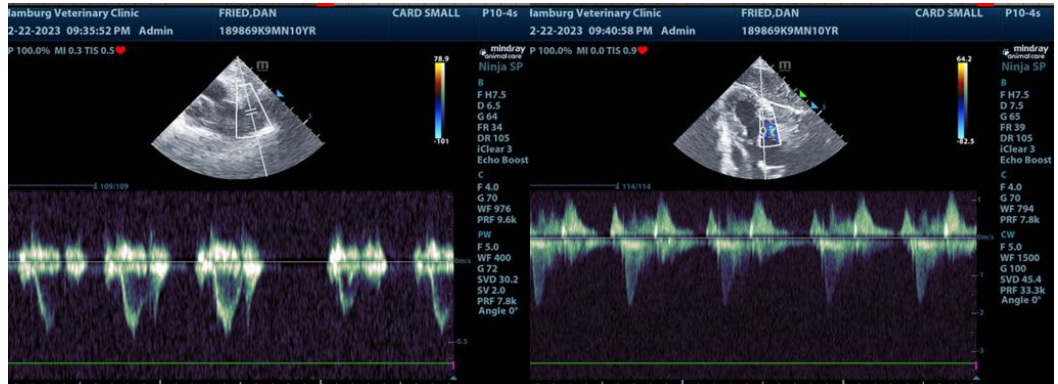
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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, Cert. IVUSS, CEO of SonoPath.com**  
info@SonoPath.com