



**PATIENT PRESENTING CLINICAL SIGNS**

Daisy Tanner

History: History of low grade (grade II) left side murmur. Has been doing some coughing- more likely tracheal/lower resp in origin. Echo is to rule out heart disease as the cause for the cough.

**SPECIES**

Abnormal PE/Chem/CBC/UA Results: none reported

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Chihuahua Mix

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The **mitral** valve presented minor thickening primarily in the apical leaflet. Trivial mitral insufficiency was noted in this patient. This is not clinically significant and is essentially a flow murmur. 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. **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.

**SEX**

Spayed female

**AGE**

10 years

**WEIGHT**

22 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Swart

**HOSPITAL NAME**

Swart Veterinary  
Imaging

**REFERRING VET**

Dr. Swart

**INVOICE**

42400

**DATE**

12/28/22

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	<1.6	28-40	40-100	<0.6
<b>PATIENT</b>			1.1	1.44	47		0.2
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	BELOW	BELOW	BELOW	BELOW
<b>PATIENT</b>		2.0	1.17	22 lbs		2.84	



**PATIENT**

Daisy Tanner

**ULTRASONOGRAPHIC FINDINGS**

Essentially normal echocardiogram with trivial mitral insufficiency.

No evidence of volume overload.

**SPECIES**

Canine

Very early stage B1 valvular disease.

**BREED**

Chihuahua Mix

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cough is non-cardiogenic in this patient. Primary respiratory protocol is recommended based on radiographic and clinical signs. If a goose honk type cough is present then inspiratory and expiratory radiographs are warranted of the trachea.

**SEX**

Spayed female

The heart is stable without clinical disease. No overt contraindication for anesthesia of brief to moderate duration. I suggest Torbutrol premed, Propofol induction, Isoflor maintenance or similar protocol if anesthesia is desired. Blood pressure recommended if not already performed and target white coat negative systolic pressure of < 160 mmHg. If higher than this ACE-inhibitor is suggested to reach this level. Recheck echocardiogram is recommended in 6 months, earlier if murmur grade increases or clinical signs initiate.

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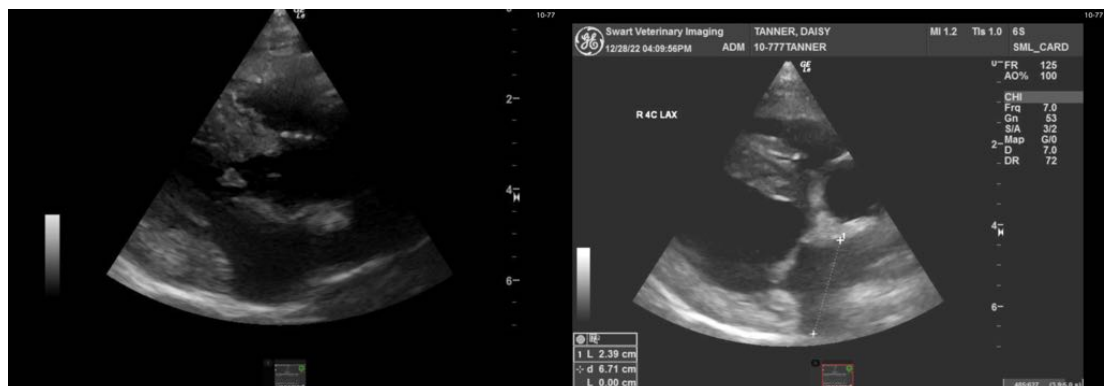


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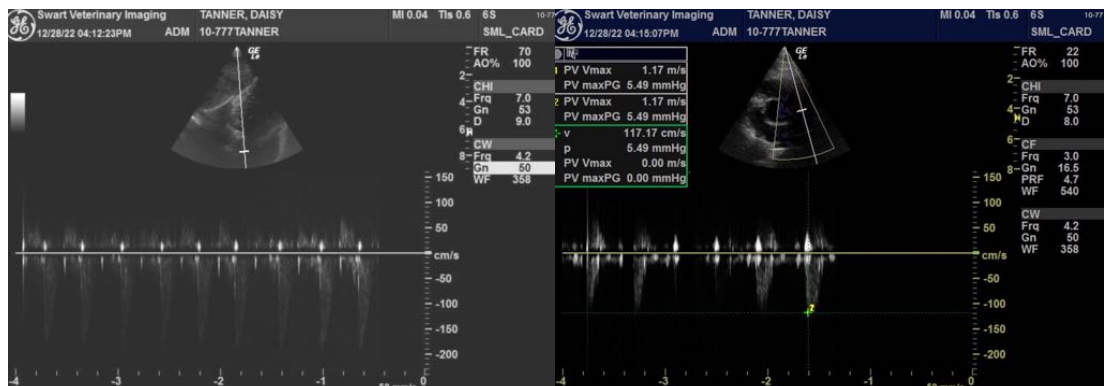
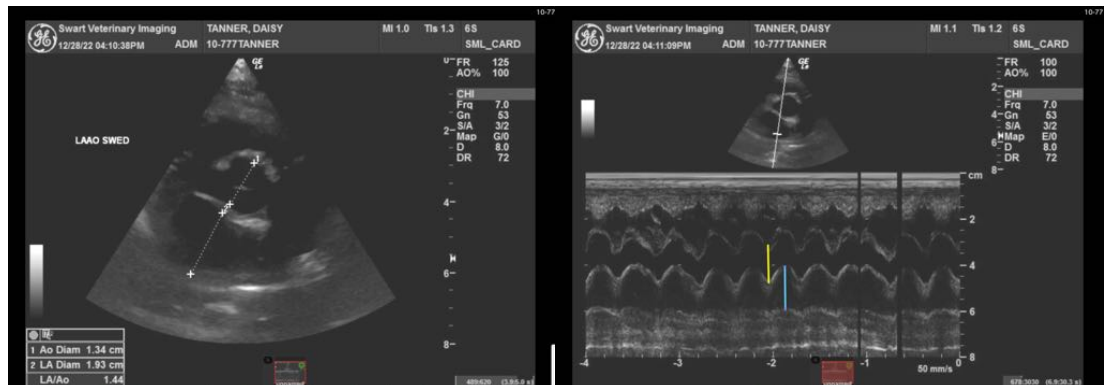
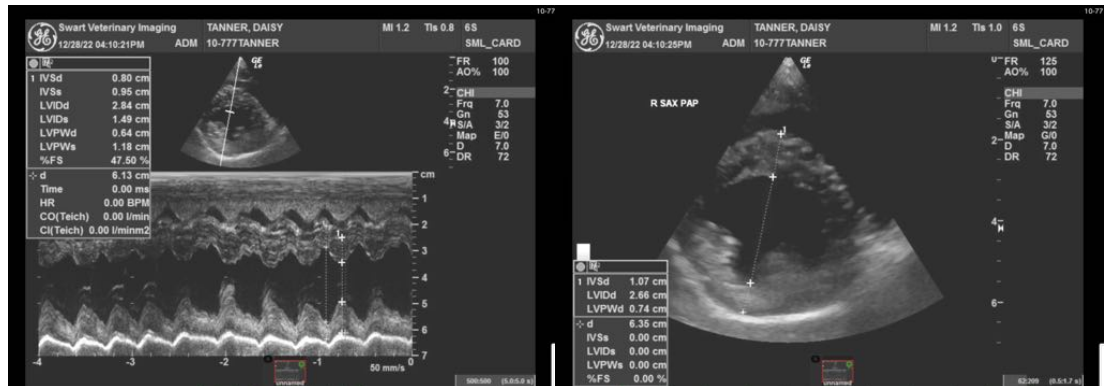
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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