

## PATIENT PRESENTING CLINICAL SIGNS

Pumpkin Distler

History: Presented for ongoing labored breathing, restless at night and pacing. Partial anorexia, Grade 6/6 heart murmur (shivers and pants) PE WNLs aside from heart murmur. Has been on Theophylline. Difficult to assess for BP, HR etc with her frantic shaking, panting and vocalizing.  
Abnormal PE/Chem/CBC/UA Results: No labs done.

## SPECIES

Canine

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

## BREED

Poodle

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 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). 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. Comet tail lung pattern was noted.

## SEX

Spayed femlae

## AGE

13 years

## WEIGHT

2.3 kg

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Crystal Hill, RVT

## HOSPITAL NAME

Mohawk AC

## REFERRING VET

Dr. Rice

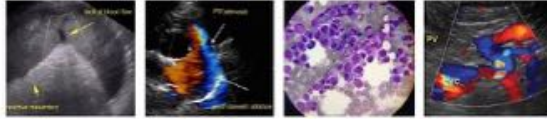
## INVOICE

42683

## DATE

11/24/22

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	>5.0		NM	2.25	40	72	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	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	193	1.41	0.9	2.3 kg	3.6	2.82	



**PATIENT                      ULTRASONOGRAPHIC FINDINGS**

Pumpkin Distler

Mitral insufficiency. Stage C1 valvular disease with moderate left atrial enlargement and pulmonary edema.

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**BREED**

Poodle

Quadro therapy is indicated. Pimobendan at 0.3 mg/kg b.i.d. is recommended as well as ace inhibitor at 0.5 mg/kg s.i.d. and Spironolactone at 1-2 mg/kg b.i.d. and Lasix at 2-3 mg/kg b.i.d. Lasix can be diminished as the patient stabilizes. Target sleeping respiratory rate is less than 25/minute.

**SEX**

Spayed femlae

The heart has some volume overload and is working to compensate for the valvular insufficiency. Target respiratory rate is < 20 resp/minute after therapy. After initiating therapy, I recommend recheck on the clinical exam, BUN, Creatinine, USG, Chest radiographs & Blood pressure in 5-7 days. Recheck echo in 3-6 month. Earlier if clinical decompensation is occurring. I do not recommend anesthesia at this time until stabilization has occurred on the recommended medications. Repeat preanesthetic echo is ideal if anesthesia is eventually necessary.

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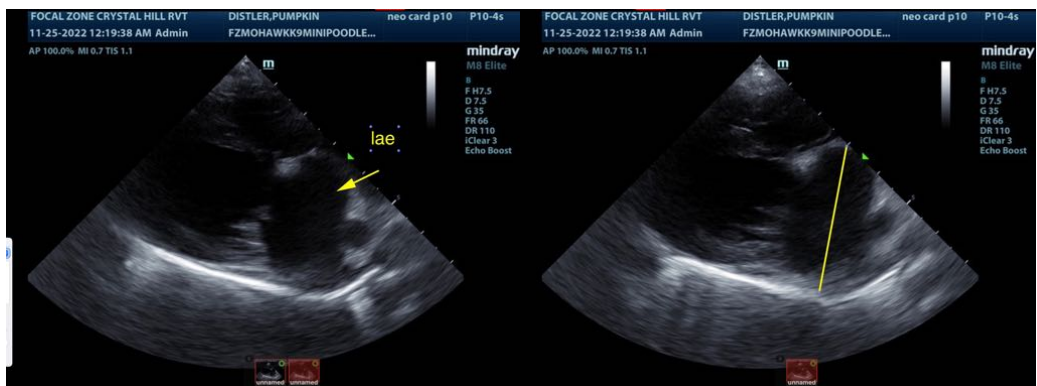
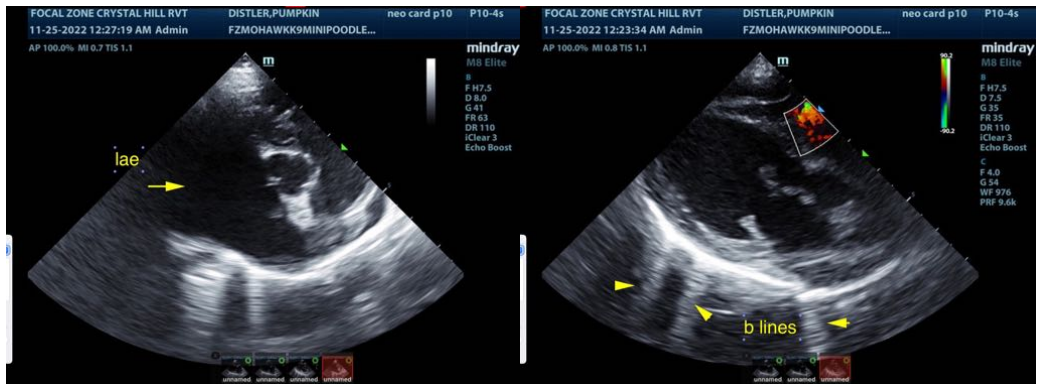
Dr. Rice

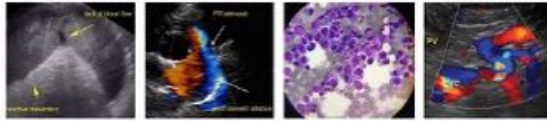
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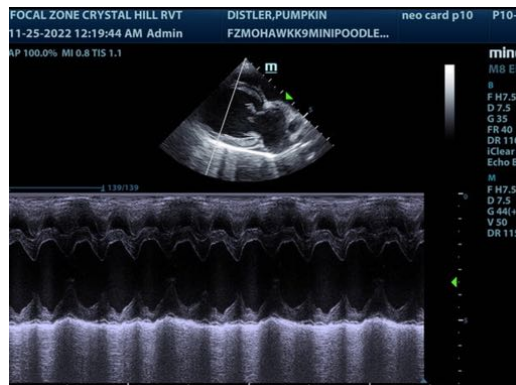
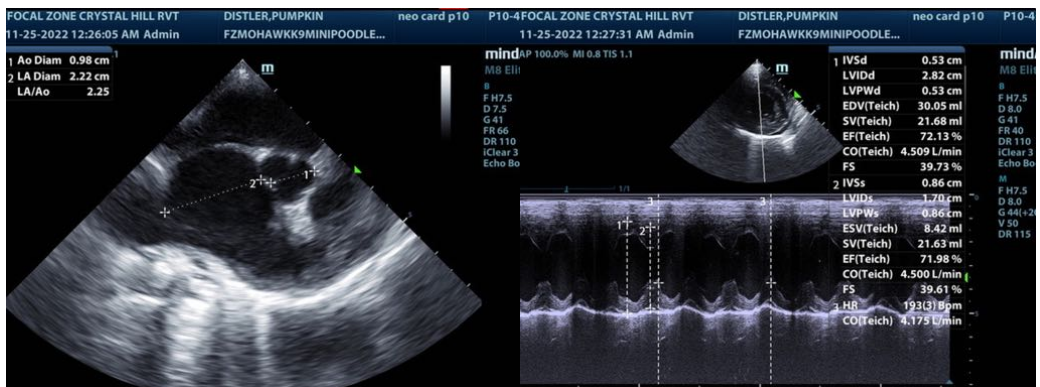
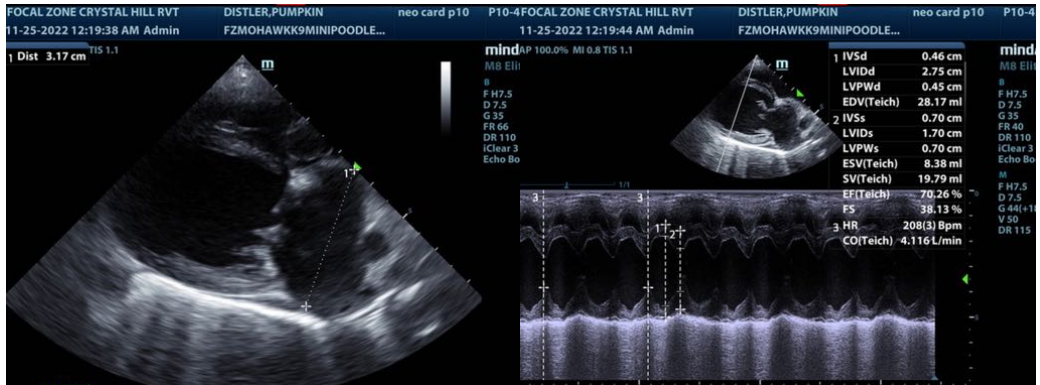
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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