



PATIENT PRESENTING CLINICAL SIGNS

Savannah Diulio

mm pale pink, crt<2, quiet panting harsh labored breathing mild tense abdomen by palpation could not hear the heart sounds due to the harsh breathing, owner said the Regular vet said she has some heart murmur. Started Furosemide yesterday. Cannot appreciate the heart murmur.

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: rads-there is concern for potential generalized and left sided cardiomegaly. There is severe alveolar infiltrates of the ventral lungs, most pronounced at the caudal ventral lungs. most likely severe alveolar bronchopneumonia

BREED

Shar Pei

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

SEX

Intact female

Severe **left atrial** enlargement was noted in this patient with severe **mitral** insufficiency on color flow Doppler. **Left ventricular** internal diameter was excessive with **hypocontractility**. This is non-compensatory for this type of pathology. Turbulence was noted in the **left ventricular outflow** tract. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** insufficiency was noted and suggestive for pulmonary hypertension at 4.0 m/sec. However, left sided velocity interference may be an issue. 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 in the peripheral lung fields. This is consistent with pulmonary edema.

AGE

6 years

WEIGHT

19.2 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

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		4.0	2.3	2.76	30		0.5
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				
PATIENT				19.2 kg	5.56	5.0	

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95426

DATE

1/20/22

ULTRASONOGRAPHIC FINDINGS

Left-sided heart failure owing to valvular disease, severe volume overload and hypocontractility/myocardial insufficiency.

Tricuspid insufficiency. Suggestive for pulmonary hypertension.



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IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Beatties PH Stoney
Creek

REFERRING VET

Dr. Baskin/Salib

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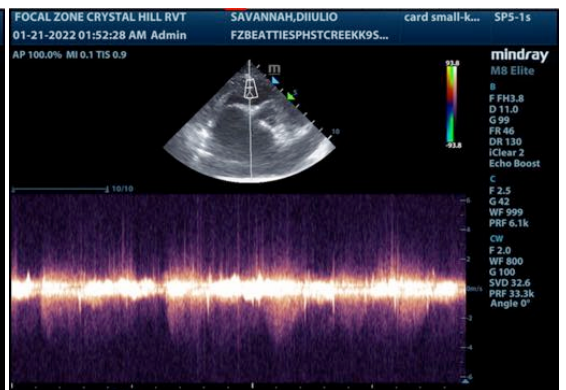
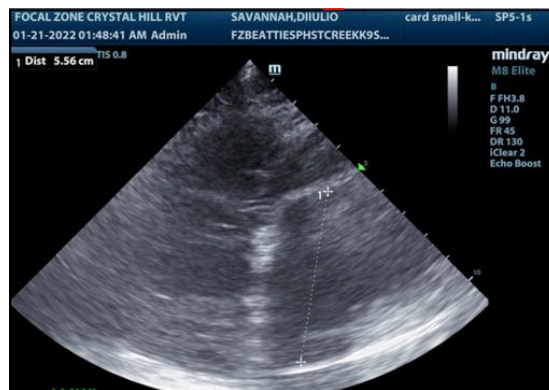
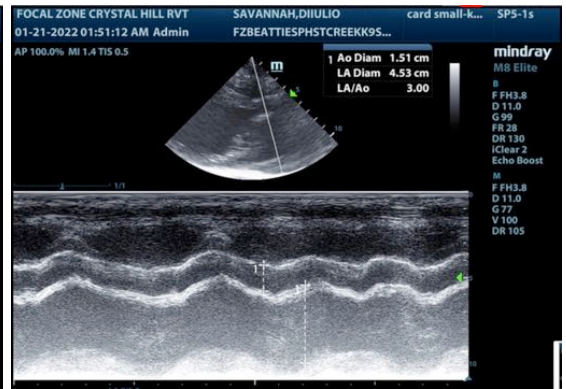
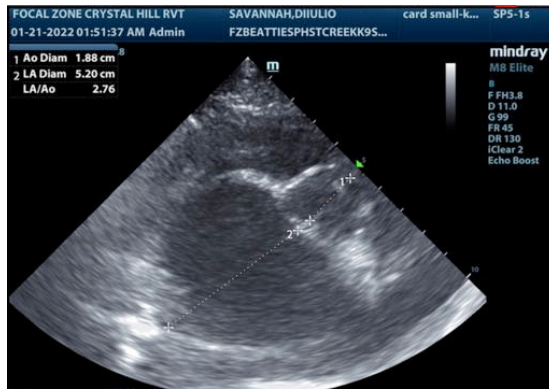
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The respiratory distress in this patient did not enable complete Doppler evaluation of the left LVOT. Further defects such as subaortic stenosis and pulmonic stenosis cannot be ruled out owing to respiratory interference. Sedation would likely be necessary for further evaluation. I do recommend triple therapy at this time with Pimobendan at 0.3 mg/kg b.i.d., ace inhibitor at 0.5 mg/kg s.i.d. progressing to b.i.d. and Lasix at 2-4 mg/kg b.i.d.

B2/C1: The heart is in a somewhat precarious state with volume overload and a heart that 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 1 month. Earlier if clinical decompensation is occurring. I do not recommend anesthesia at this time until stabilization has occurred on the recommended medications. Repeat pre-anesthetic echo is ideal if anesthesia is eventually necessary.





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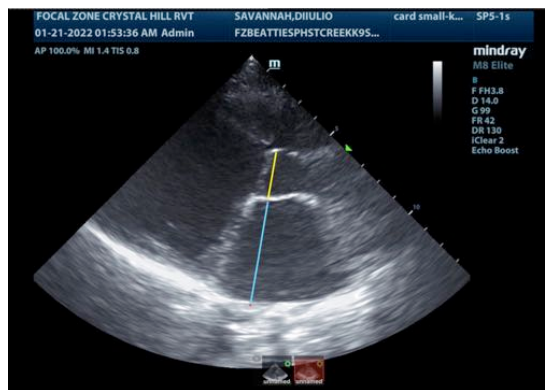
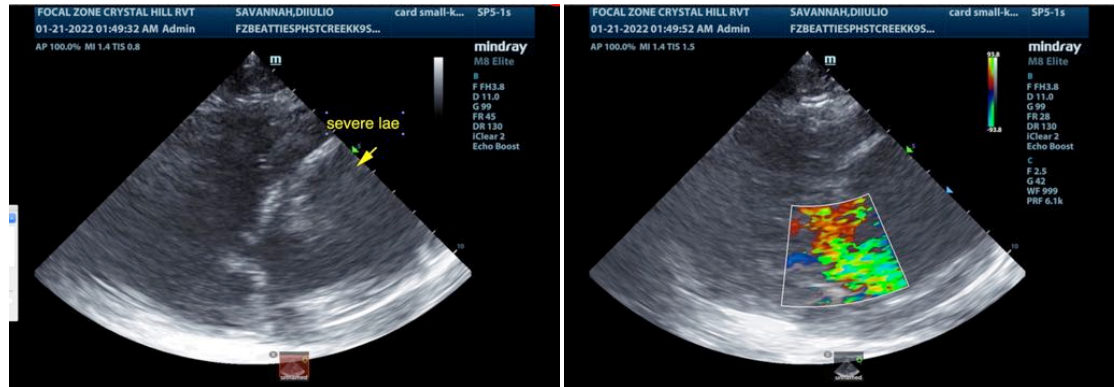
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
Eric.Lindquist@SonoPath.com