



PATIENT PRESENTING CLINICAL SIGNS

PATIENT Raven Schmitt
SPECIES Canine
BREED Labrador Retriever X
SEX Spayed Female
AGE 15 Years
WEIGHT 59 Pounds

Patient with history of progressive grade 3-4/6 heart murmur, presents for labored breathing and chronic cough following Mycoplasma positive PCR 3.5 weeks ago. Patient had been treated with Azithromycin and had improved, but never fully resolved cough. Repeat PCR is pending, patient's tongue turns a dusky/purple out of O2 support but did well for echo today on O2 flowby. BP: 142/98, 105/69. Current meds: Azithromycin, Lasix, and O2 support cage.

Abnormal PE/Chem/CBC/UA Results: CBC/Chem: Mild neutrophilia 13.14, rest WNL.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	Up to 1.6	28-40	40-100	<0.6
PATIENT	5.4	2.0	NM	2.4	30	57	NM
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	111	1.0	0.51			5.6	

INTERPRETED BY

Eric Lindquist, DMV
 DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional VH

REFERRING VET

Dr. Giammanco

INVOICE

43957

DATE

7/13/23

Cardiac Presentation

The echocardiogram for this patient presented excessive **left atrial size** (7.0 cm) expressed both in the LA/AO and LA max measurements. Complete filling of the left atrium noted on color flow assessment. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. The **left ventricle** presented 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** was mildly subnormal for this type of pathology and non-compensatory. 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. Mild **tricuspid** insufficiency noted. 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 noted. Hepatic veins were not dilated.

ULTRASONOGRAPHIC FINDINGS

- Mitral insufficiency and severe left atrial enlargement
- Mild tricuspid insufficiency



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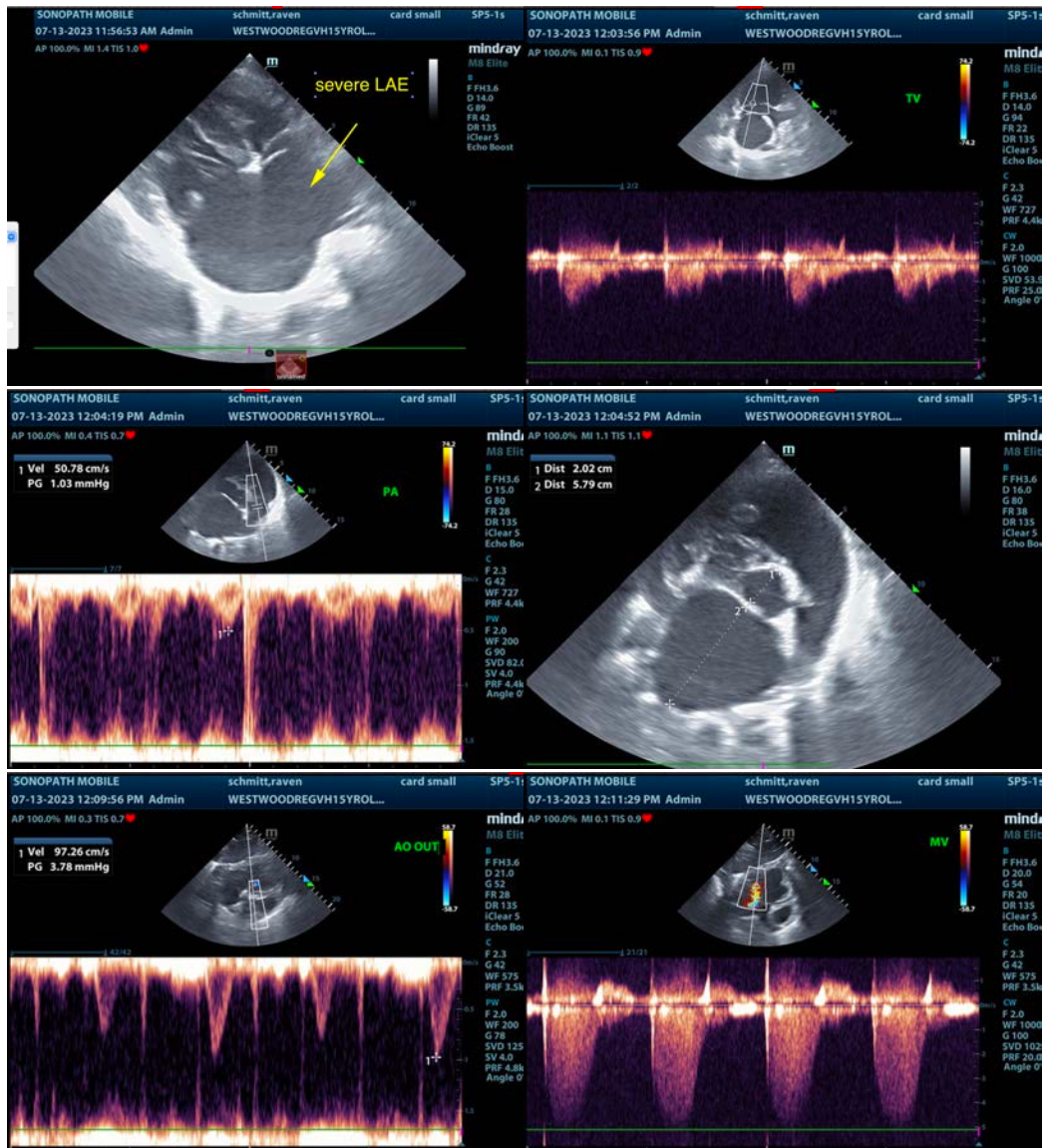
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommend quadrotherapy in this patient. Pimobendan 0.3 mg/kg BID, Lasix 2-4 mg/kg BID, ACE inhibitor 0.5 mg/kg SID progressing to BID, and Spironolactone at 1-2 mg/kg BID. Thyroid assessment warranted. Taurine levels could be considered. Cardiac nutraceuticals indicated. Recheck echo in 10-14 dyas for further refinement of therapy. Prognosis is guarded. The patient is at risk for sudden death.

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. 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. There is severe anesthetic risk for this patient. Light dose opioids may be used to calm but I do not recommend anesthesia.





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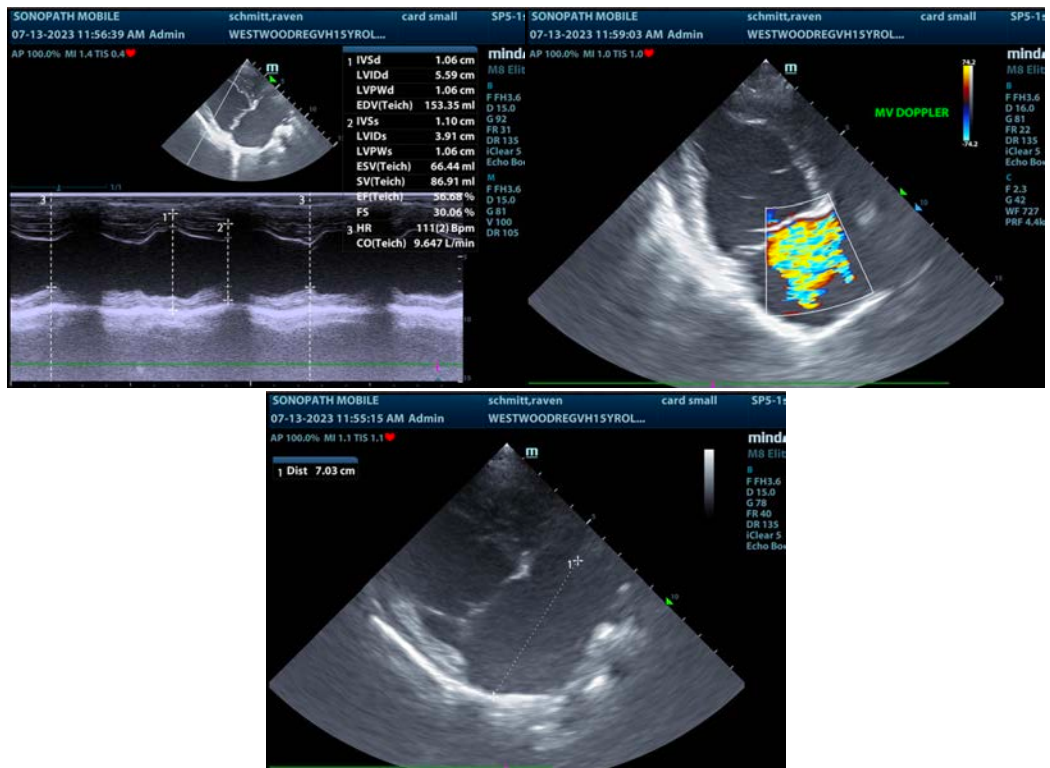
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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