



PATIENT PRESENTING CLINICAL SIGNS

Leo Veliz

History: History of enlarged heart since 2021, increase in symptoms recently, increased cough.
Current meds: Enalapril 5 mgs 1 BID, Furosemide 12.5 mgs 1 SID, Pimobendan 5 mgs 1/2 BID.

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

Neutered male

AGE

13 years

WEIGHT

20 lbs

INTERPRETED BY

Eric Lindquist, DMV,
DABVP, Cert. IVUSS,
CEO of SonoPath.com

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

North Haledon VC

REFERRING VET

Dr. Mansfield

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 anterior mitral valve leaflet was noted. 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** 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. Minor **tricuspid** insufficiency was noted at 1.5 m/sec. 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.

| CANINE | MR | TR | LA/AO | LA/AO | FS | EF | EPSS |
|---------------------------|----------------------|----------------------|---------------------|-------------------|------------------------------------|---------------------------------------|---------------------------------------|
| CARDIAC PARAMETERS | VMAX (m/s) | VMAX (m/s) | (Boon method) | (Heart Base; Swe) | (%) | (%) | (cm) |
| NORMAL PARAMETER | 4.5-5.5 | <2.7 | 1.3 | <1.6 | 28-40 | 40-100 | <0.6 |
| PATIENT | 6.0 | 1.5 | 1.6 | 1.8 | 39 | 70 | NM |
| CANINE | HR | AV | PV | BODY WEIGHT | LA | LVIDd | LVIDs |
| CARDIAC PARAMETERS | (BPM) | VMAX (m/s) | MAX (m/s) | | 2D short axis Base view (cm) | Avg; 2D and m-mode short axis (cm) | Avg; 2D and m-mode short axis (cm) |
| NORMAL PARAMETER | 50-100 | 0.7-1.7 | 0.7-1.6 | | | | |
| PATIENT | 90 | 1.35 | 1.34 | 20 lbs | 4.1 | | |

INVOICE

98007

DATE

4/4/22



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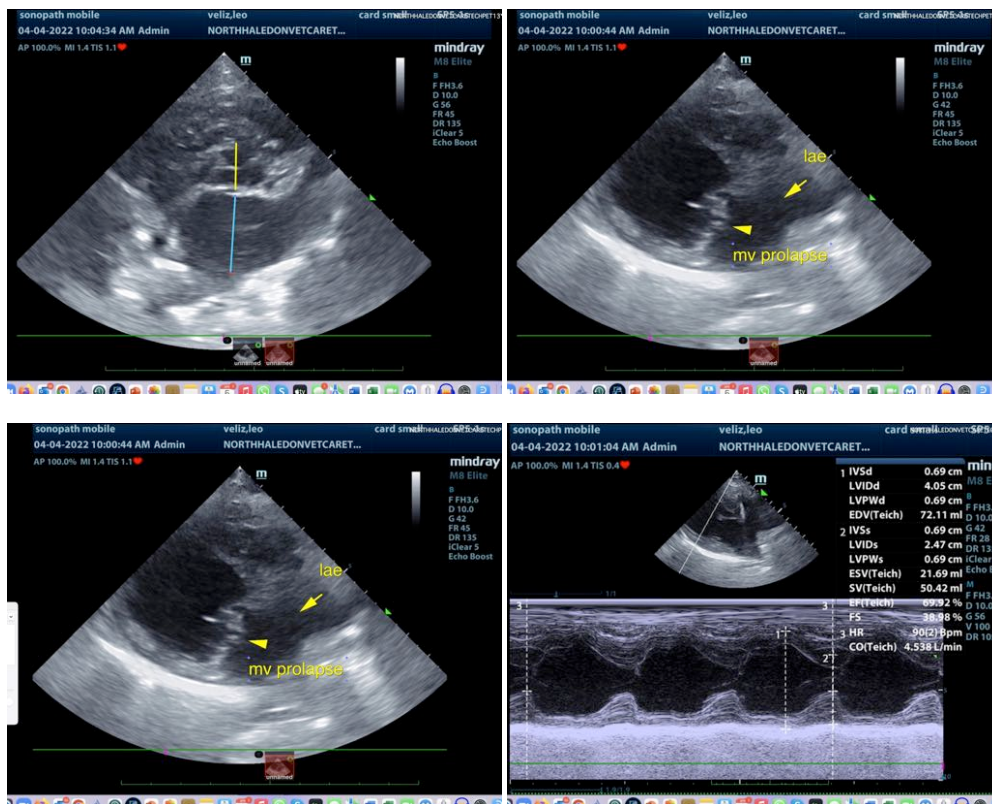
ULTRASONOGRAPHIC FINDINGS

Partially stabilized C1 valvular disease.
Mitral and tricuspid insufficiency with mitral valve prolapse.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I recommend refining therapy by adding Spironolactone at 1-2 mg/kg b.i.d. and increasing Furosemide to b.i.d. dosing. Hycodan or similar can be utilized for cough. The volume overload of the left atrium is likely playing a role in the recent cough.

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.





PATIENT

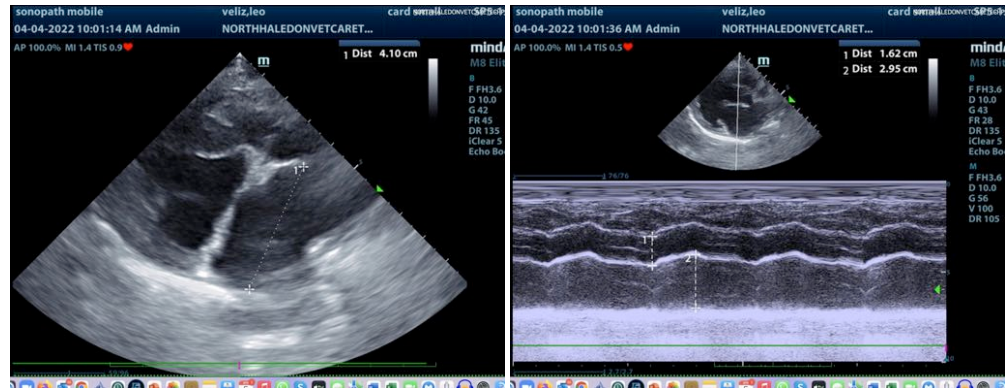
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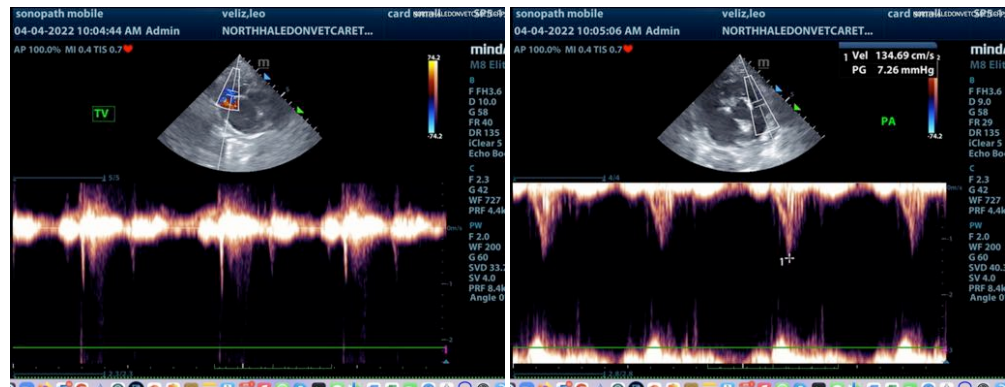
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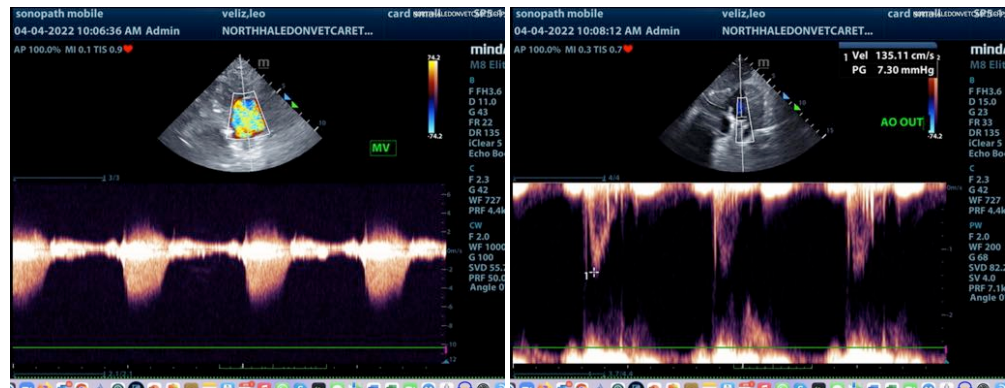
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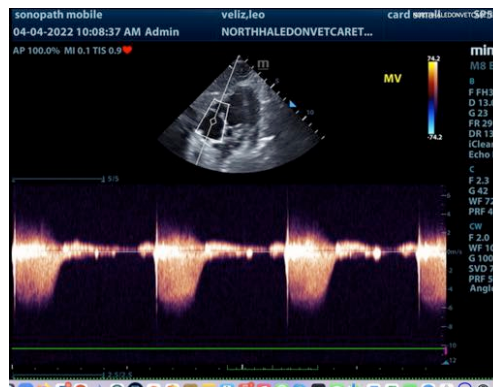
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PATIENT

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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.

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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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Info@SonoPath.com

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