

## PATIENT PRESENTING CLINICAL SIGNS

Honey Heggstrom

Chronic cough, possible seizures, but can't r/ syncope Heart murmur with palpable thrill  
Abnormal PE/Chem/CBC/UA Results: Current Medications Chlorpheniramine, Benazepril,  
hydrocodone cough syrup, furosemide Radiographic Findings Tracheal narrowing seems to be biggest  
issue, but this dog responded favorably to furosemide trial, so we have kept her on furosemide until  
echo could be done

## SPECIES

Canine

## BREED

Chihuahua X

## SEX

Spayed Female

## AGE

8 Years

## WEIGHT

16.8 Pounds

## INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

## 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                 | <1.6                    | 28-40                           | 40-100                                   | <0.6                                     |
| PATIENT                   |               |               | 1.5                 | 1.9                     | 30                              | 59                                       | 0.2                                      |
| 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                   | 161           | 2.0           | 1.0                 |                         | 3.27                            | 2.8                                      |  |

## IMAGING PERFORMED BY

Sara Hansen

## HOSPITAL NAME

Countryside VS

## REFERRING VET

Dr. Eichmann

## INVOICE

35947

## DATE

3/4/22

### Cardiac Presentation

The echocardiogram for this patient presented excessive **left atrial size** expressed both in the LA/AO and LA max measurements Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. Prolapse of the anterior mitral valve leaflet noted. 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. **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.

### ULTRASONOGRAPHIC FINDINGS

- Advanced Stage B2/Early C1 Valve disease



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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The patient likely ruptured chordae tendineae. Recommend adding Pimobendan at 0.3 mg/kg BID, continuing with Lasix at 2-4 mg/kg BID. 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 preanesthetic echo is ideal if anesthesia is eventually necessary.

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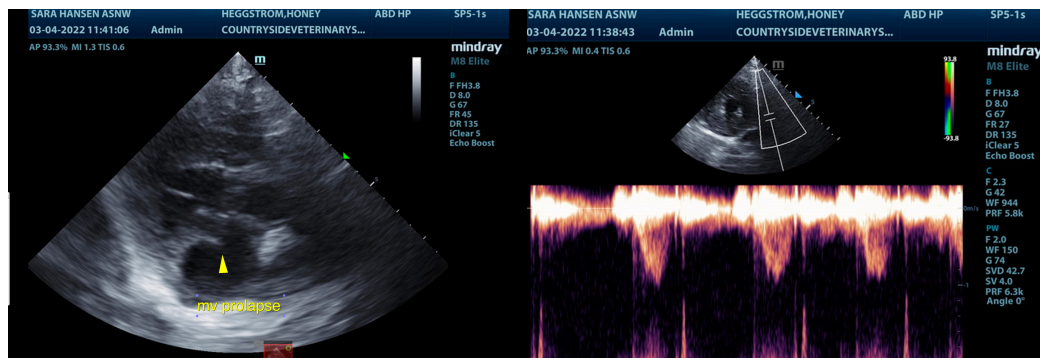
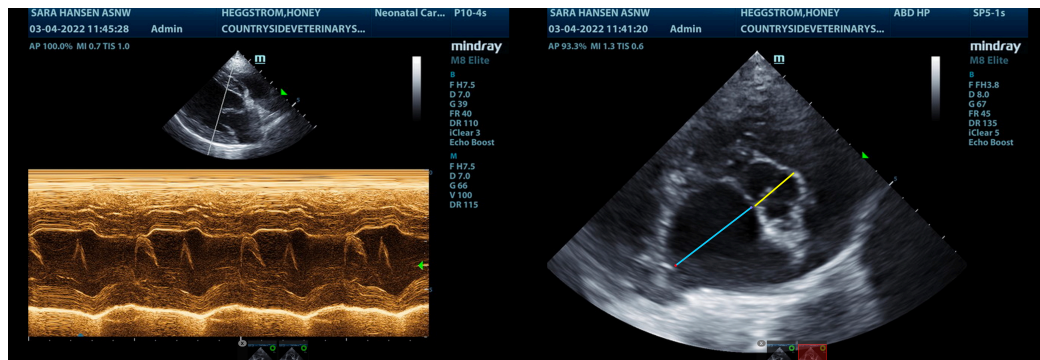
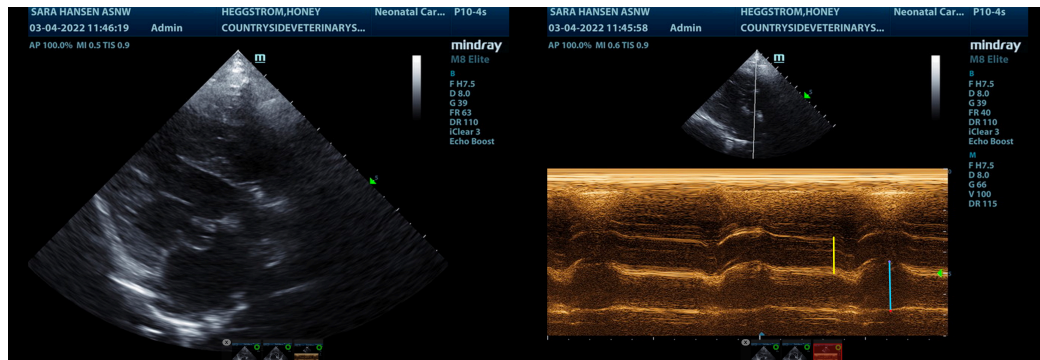
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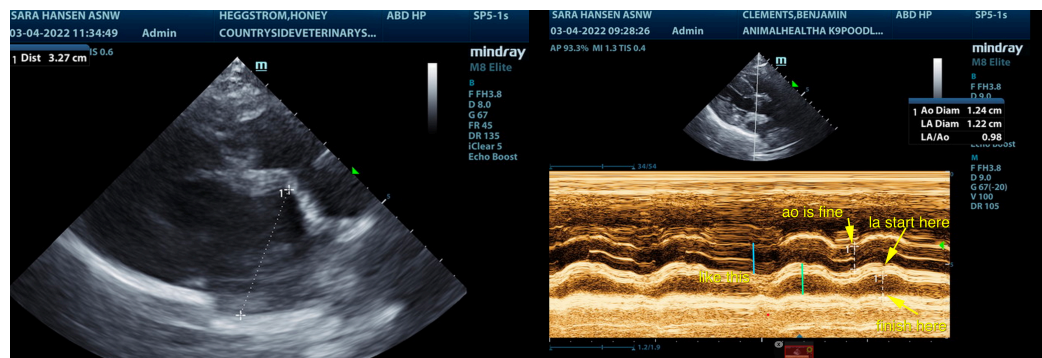
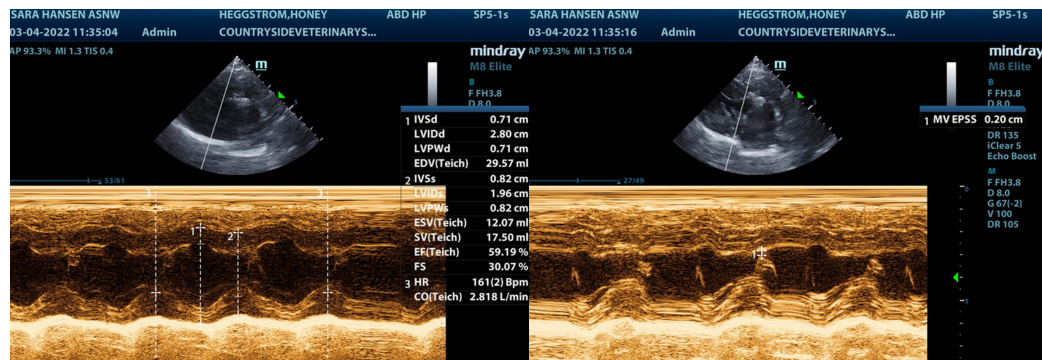
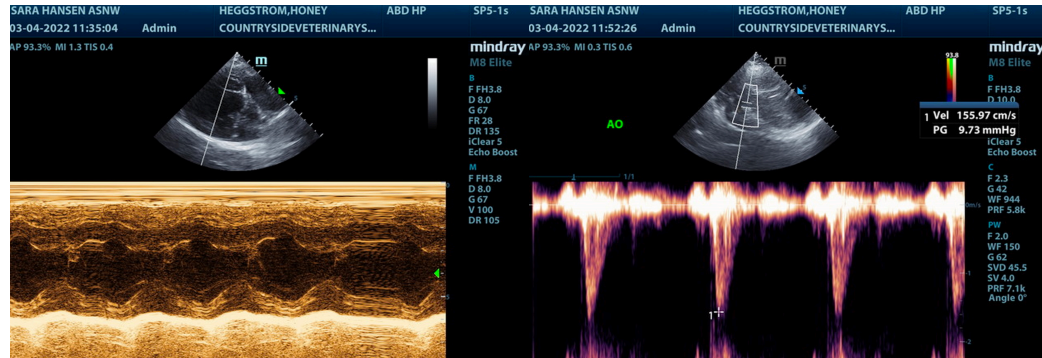
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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