



**PATIENT**

Samson Hendrickson

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Male

**AGE**

10 months

**WEIGHT**

67 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Tracy Nyberg

**HOSPITAL NAME**

Stuga North VC

**PRESENTING CLINICAL SIGNS**

History: From what we can tell normal puppyhood/exams with no heart murmur noted at other veterinarian (records not received). Presented last week for castration and grade 5-6 cardiac murmur ausculted, seems to be primarily left sided systolic. Asymptomatic at home. Did not perform castration but scheduled cardiac ultrasound

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

The **aortic valve** was mildly thickened with what appeared to be **left ventricular** septal limbus. Turbulence was noted at the left ventricular outflow tract. Doppler evaluation is necessary to assess for subaortic stenosis. The **mitral valve** also appeared thickened. There was no evidence of volume overload or significant concentric hypertrophy. The **left atrial** size was normal. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** 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. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

| 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                   |               |               | 1.15                |                         | 35                                |  | 0.1  |
| CANINE CARDIAC PARAMETERS | HR (BPM)      | AV VMAX (m/s) | PV MAX (m/s)        | BODY WEIGHT             | 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                   | 90            |               |                     | 67 lbs                  | 2.8 max                           | 3.0  |  |

**REFERRING VET**

Dr. Nyberg

**INVOICE**

91155

**DATE**

8/11/21

**ULTRASONOGRAPHIC FINDINGS**

Slightly thickened aortic valve and mitral valve.

Further Doppler evaluation is necessary.

I suspect a congenital lesion, possible subaortic stenosis. However, CW Doppler of the mitral valve and left ventricular outflow tract is necessary for further definition.



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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Even though normal volume and function is present I do not recommend anesthesia in this patient until complete Doppler evaluation of the LVOT and mitral valve have been performed.

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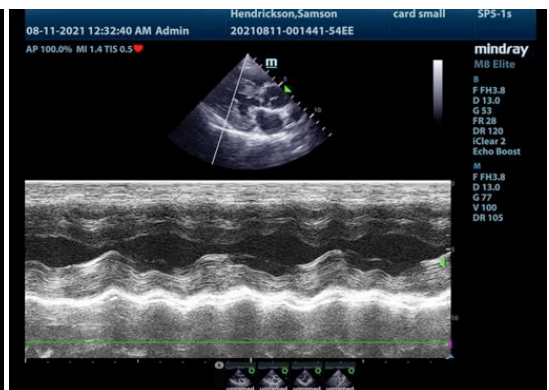
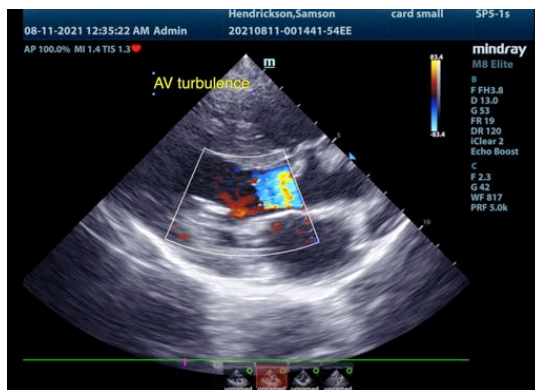
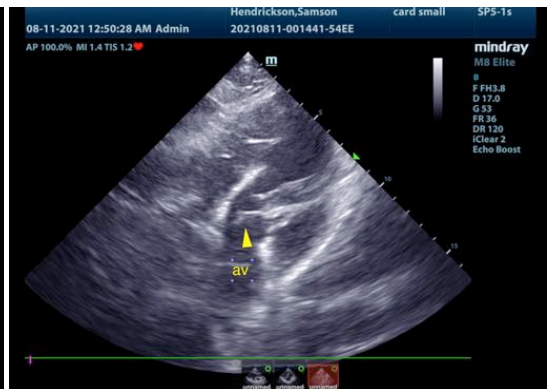
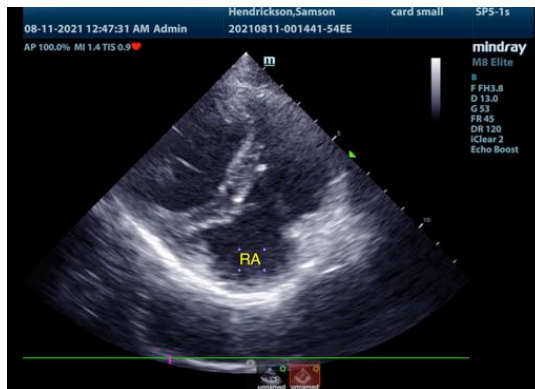
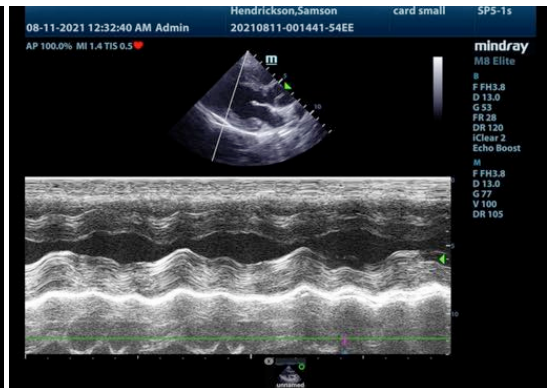
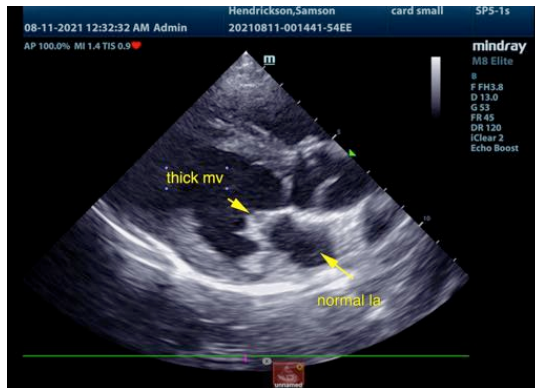
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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info@SonoPath.com

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