



**PATIENT**

Charlie Homlish

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

MN

**AGE**

9 years

**WEIGHT**

7.8 lbs.

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

Whippany VH

**REFERRING VET**

Dr. Smith

**INVOICE**

15963

**DATE**

1/26/23

**PRESENTING CLINICAL SIGNS**

6 mo Cardiac exam, murmur 3/6. Current meds: Clavamox for recent AG abscess

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

| CANINE<br>CARDIAC<br>PARAMETERS | MR<br>VMAX<br>(m/s) | TR<br>VMAX<br>(m/s) | LA/AO<br>(Boon<br>method) | LA/AO<br>(Heart Base;<br>Swe) | FS<br>(%)                                | EF<br>(%)  | EPSS<br>(cm)                                       |
|---------------------------------|---------------------|---------------------|---------------------------|-------------------------------|--|--|--|
| NORMAL<br>PARAMETER             | 4.5-5.5             | <2.7                | 1.3                       | <1.3                          | 28-40                                    | 40-100   | <0.6   |
| PATIENT                         | 6.2                 | <2.0                | NM                        | 1.9                           | 52                                       | 85.5   | 0.15   |
| CANINE<br>CARDIAC<br>PARAMETERS | HR<br>(BPM)         | AV<br>VMAX<br>(m/s) | PV<br>MAX<br>(m/s)        | BODY<br>WEIGHT<br>(kg)        | LA<br>2D short axis<br>Base view<br>(cm) | LVIDd<br>Avg; 2D and m-<br>mode short axis<br>(cm) | LVIDs<br>Avg; 2D and m-<br>mode short axis<br>(cm) |
| NORMAL<br>PARAMETER             | 50-100              | 0.7-1.7             | 0.7-1.6                   |                               |  |  |  |
| PATIENT                         | 129                 | 1.9                 | 1.2                       |                               | 2.9                                      | 2.4  |  |

**Cardiac Presentation**

The echocardiogram in this patient demonstrated moderately enlarged **left atrial** size based on 2 different LA measurement methods. Minor deviation of the interatrial septum towards the right atrium, suggestive of increased left atrial pressure, was present. The cranial and caudal **mitral** valve leaflets presented mild to moderate thickening consistent with endocardiosis. Doppler indicated measurable moderate eccentric insufficiency. Borderline elevated MR velocity was 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 systolic flow. Previously noted aortic insufficiency measuring 4.6 m/s MAX was present. Borderline increased measured LVOT velocity was noted. 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. Minor TR was present on Doppler with no evidence of clinical pulmonary hypertension. 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.



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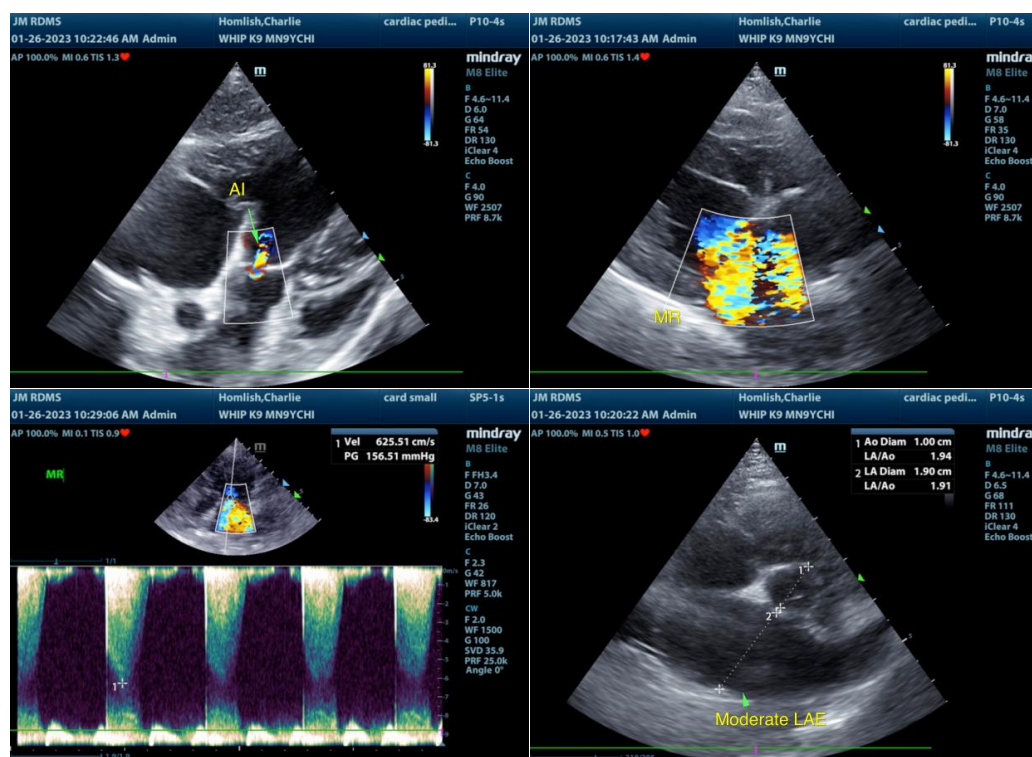
1/26/23

## ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B2)
- Previously noted aortic insufficiency

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Cardiac presentation appeared to be essentially static compared to the previous study without evidence of significant progressive LA/LF enlargement or left heart volume overload. If not currently instituted, Pimobendan 0.3 mg/kg PO BID is recommended with monitoring of resting respiration rate going forward advised. Screening BP to assess for evidence of hypertension, given the aortic insufficiency, is suggested. Prognosis remains highly variable and serial sonographic monitoring is recommended. Recheck echocardiogram is suggested in 6 months, sooner if clinical signs arise.



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)  
info@SonoPath.com