



**PATIENT**

Buck Keggan

**SPECIES**

Canine

**PRESENTING CLINICAL SIGNS**

- 5/6 murmur,
- recent coughing
- start of heart meds
- furosemide 40mls PO SID
- enalapril 10mg PO SID

Abnormal PE/Chem/CBC/UA Results: None

**BREED**

Beagle

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**SEX**

MN

**AGE**

6yr

**WEIGHT**

35.4lb

| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO M-mode | 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                   | 5.5           | 2.2           | --           | 2.0                     | 35                   | 65                                       | 0.2                                      |
| CANINE CARDIAC PARAMETERS | HR (BPM)      | AV VMAX (m/s) | PV MAX (m/s) | BODY WEIGHT             | LAD LA MAX 4 Chamber | 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                   | 179           | 1.3           | 0.82         | 35.4lb                  | 5.2                  | 5.2                                      | --                                       |

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Shari Reffi CVT

**HOSPITAL NAME**

Animal Mansion VH

**REFERRING VET**

Dr Rodier

**INVOICE**  
23722

**DATE**  
01/30/2026

**Cardiac Presentation**

The echocardiogram in this patient demonstrated severe increased left atrial size based on 2 different LA measurement methods with mild interatrial septal deviation. The cranial and caudal mitral valve leaflets presented thickening consistent with endocardiosis. Minor valve prolapse was present. Doppler indicated measurable insufficiency. The left ventricle presented thicknesses with linear contour and moderate increased LV dimension. 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. Mild aortic valve insufficiency on Doppler. The right atrium and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated mild thickening with mild TR on Doppler. 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



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pericardial or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible. No evidence of arrhythmia.

**ULTRASONOGRAPHIC FINDINGS**

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**Primary**

- Chronic mitral valve disease with emerging to current left heart volume overload and mild valve prolapse (ACVIM B2-C)
- Mild TV insufficiency - no evidence of clinical pulmonary hypertension
- Mild aortic valve insufficiency

**BREED**

Beagle

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**SEX**

MN

The cause of the murmur is chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency. The left atrial enlargement implies that the risk of complication secondary to mitral valve insufficiency is significantly elevated with possible clinical signs secondary to volume overload. Initiate **Furosemide** / **Spirolactone** 1-2 mg/kg BID, **Pimobendan** 0.3 mg/kg BID. **ACEI** is suggested if systemic BP >130 (not indicated if <130). Antitussive medication if coughing is suggested. Prognosis is considered variable and sonographic monitoring is recommended. Recheck echo cardiogram is suggested in 6 months, sooner if progressive clinical signs. Monitoring of systemic BP for hypertension given mild aortic valve insufficiency is recommended.

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Anesthetic risk is significantly elevated. Elective anesthesia is not advised unless absolutely necessary. If required the following protocol is recommended with limited anesthetic time and judicious IV fluid administration.

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DVM, DABVP  
(Canine and Feline)

Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.

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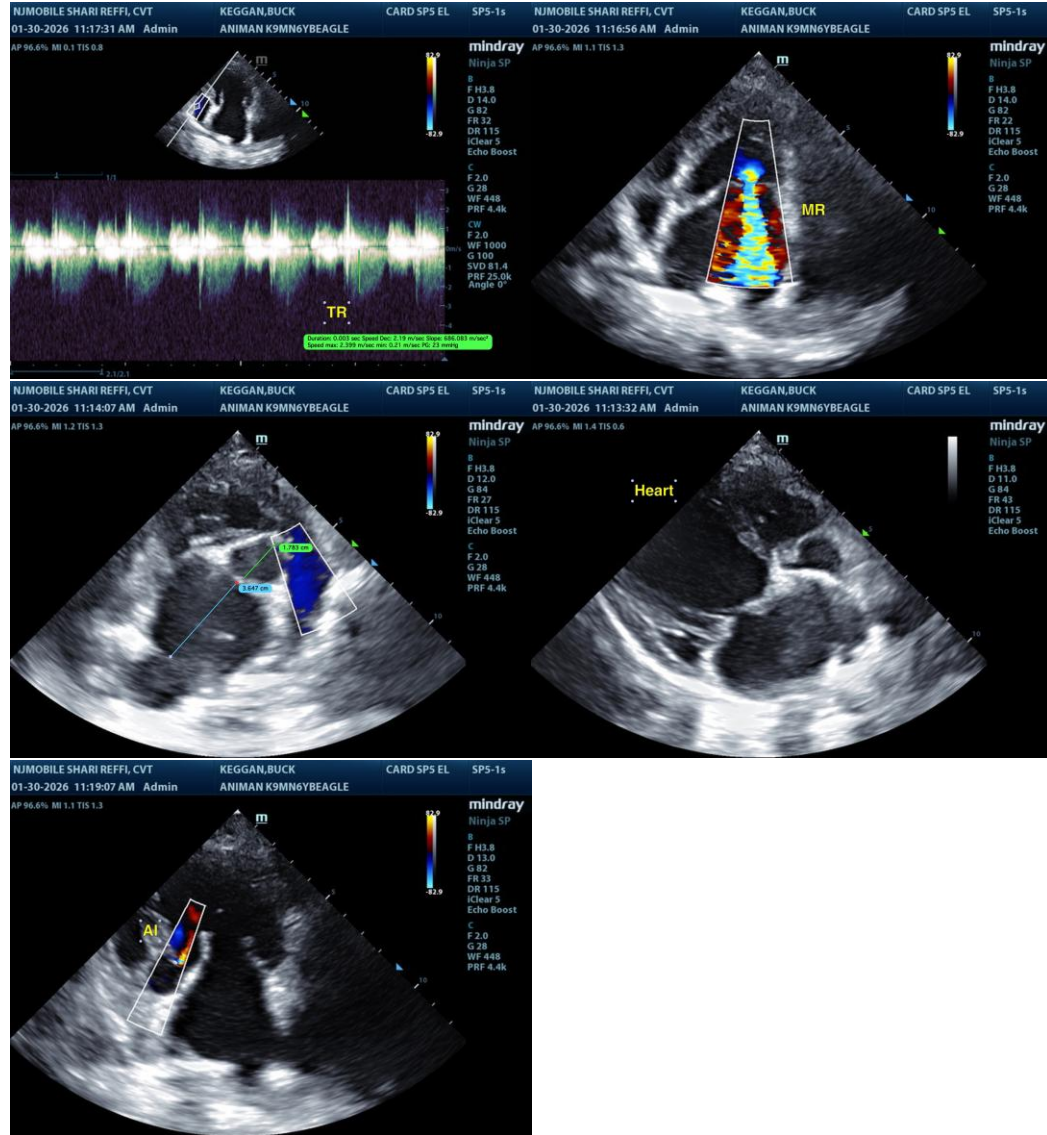
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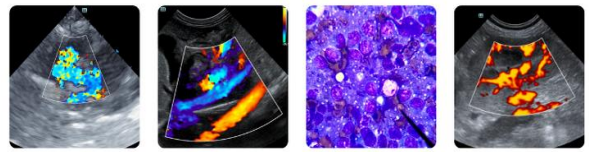
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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[info@sonopath.com](mailto:info@sonopath.com)



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