



## PATIENT

Flynn Coburn

## SPECIES

Canine

## BREED

Sheltie X

## SEX

Neutered Male

## AGE

10

## WEIGHT

25.3 kg

## PRESENTING CLINICAL SIGNS

History: Presented for cardiac evaluation prior to surgical removal of the mass. Heart murmur noted on presurgical examination. Not demonstrating any clinical signs of clinical cardiac disease.

Abnormal PE/Chem/CBC/UA Results: Heart murmur grd III/VI systolic PMI left apex Bacterial UTI Mild elevation in ALT

## 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                 | <1.3                    | 28-40                           | 40-100                                   | <0.6                                     |
| PATIENT                   | --            | 2.1           | NM                  | 1.3                     | 31                              | 60                                       | 0.3                                      |
| 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             |                         |                                 |  |  |
| PATIENT                   | NM            | 1.1           | 1.1                 | --                      | 3.3                             | 2.9                                      | --                                       |

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dr. Alastair Westcott

## HOSPITAL NAME

Dr. Alastair Westcott

## REFERRING VET

Dr. Alastair Westcott

## INVOICE

21345

## DATE

2/28/23

## Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented mild thickening consistent with mild endocardiosis. No evidence of valvular prolapse. Doppler indicated mild to moderate eccentric 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. Normal measured LVOT velocity. 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. Mild TR was present 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). Normal. measured RVOT velocity. 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. No arrhythmia was noted.

## ULTRASONOGRAPHIC FINDINGS



**PATIENT**

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- Compensated MR, normal LA (ACVIM B-1)
- Mild TR- no evidence of clinical pulmonary hypertension

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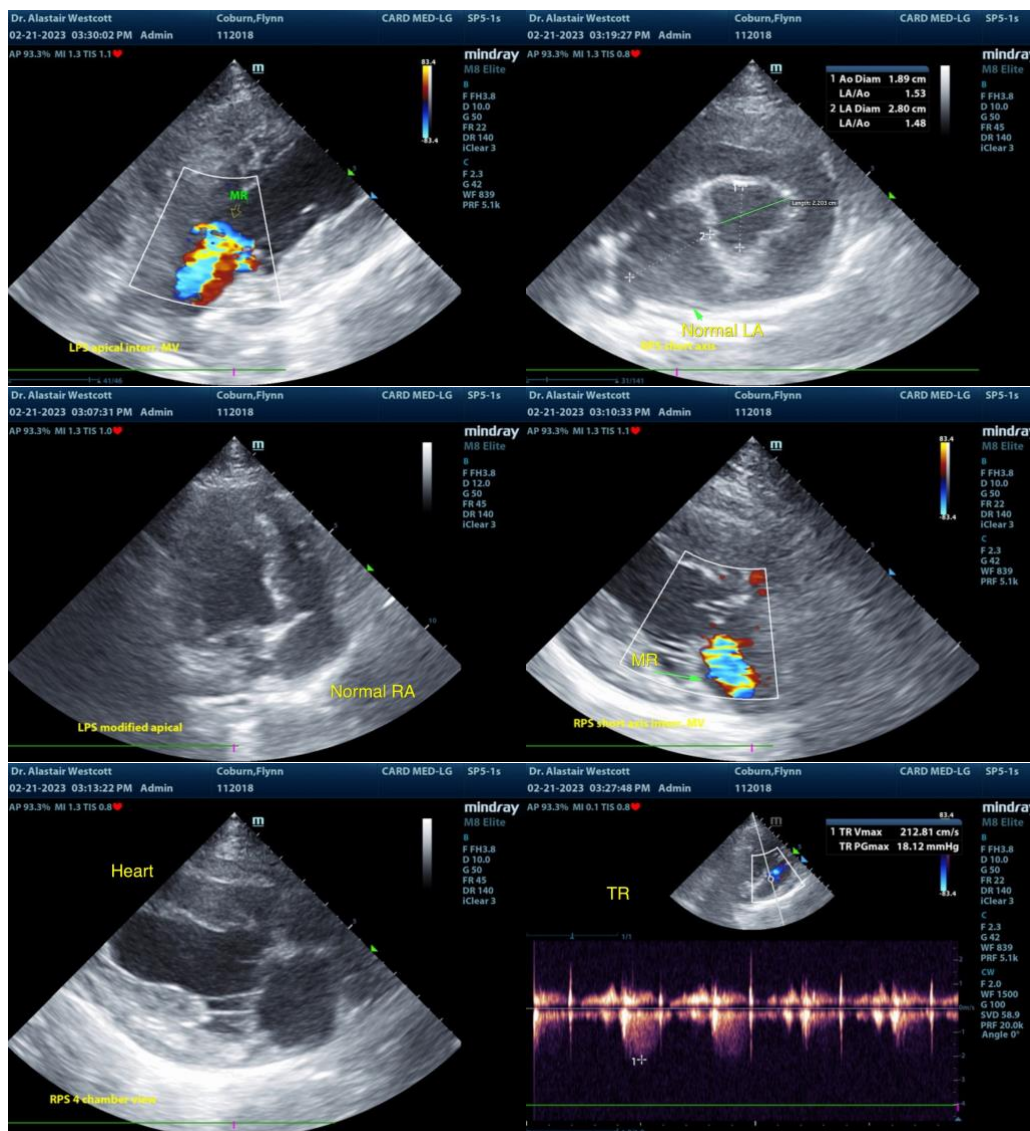
2/28/23

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cause of the murmur was consistent with mild degenerative valvular changes with secondary, primary eccentric MR. LV function was adequate without evidence of additional clinical issues, such as pulmonary hypertension. In a nonclinical patient without evidence of significant chamber enlargement, no indication for cardiac medications. Serial sonographic monitoring is recommended for further prognosis. No overt anesthetic contraindications. The following anesthetic protocol is recommended. Recheck echocardiogram is recommended in 8-12 months or sooner if clinical signs arise.

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.

<https://www.antechdiagnostics.com/cadet-braf>





**PATIENT**

Flynn Coburn

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.

**SPECIES**

Canine

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.

**BREED**

Sheltie X

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

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