



## PATIENT PRESENTING CLINICAL SIGNS

Stella Warrington

History: Heart murmur noted grd III/VI PMI left apex with some apparent radiation to the right. This is a pre-surgical workup given age (basal cell derived mass on a leg)

## SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: Heart murmur Mild nonretentive anemia Mild hypokalemia Mild elevation in alkaline phosphatase Normal total T4 Bacterial UTI Relative microcardia on thoracic rads (hypovolemia?)

## BREED

Beagle

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

## SEX

Spayed Female

## AGE

15

## WEIGHT

19.4 kg

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	5.0	2.5	NM	1.1	45	80	0.18
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	1.3	0.6	--	3.7	3.0	--

## 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

21337

## 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 endocardiosis. No evidence of valvular prolapse noted. Doppler indicated measurable mild to moderate eccentric insufficiency. The **left ventricle** presented borderline increased thicknesses with maintained linear contour and was not dilated nor restricted. Potential for mild LV pseudohypertrophy. 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 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. Minor pulmonic insufficiency present on doppler. No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative



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disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. No arrhythmia was noted.

**SPECIES**

Canine

- Compensated chronic mitral valve disease (ACVIM B-1)
- Mild TR- estimated pulmonary pressure gradient not consistent with clinical pulmonary hypertension

**BREED**

Beagle

- Minor pulmonic insufficiency- not clinically significant

**SEX**

Spayed Female

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The cause of the murmur is most consistent with mild degenerative valvular changes with secondary primary MR and mild TR. The lack of left atrium enlargement indicates that the risk of current and future complication at this stage is low. In a nonclinical patient without evidence of chamber enlargement, no indication for cardiac medications. Assessment of hydration status, as well as systemic BP for evidence of hypertension, which may preclude to mild LV pseudohypertrophy is recommended. However, LV functionality was normal. No anesthetic contraindications, however, prognosis is variable and sonographic monitoring is recommended with recheck echocardiogram suggested in 6-8 months or sooner if clinical signs arise.

**AGE**

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**WEIGHT**

19.4 kg

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>

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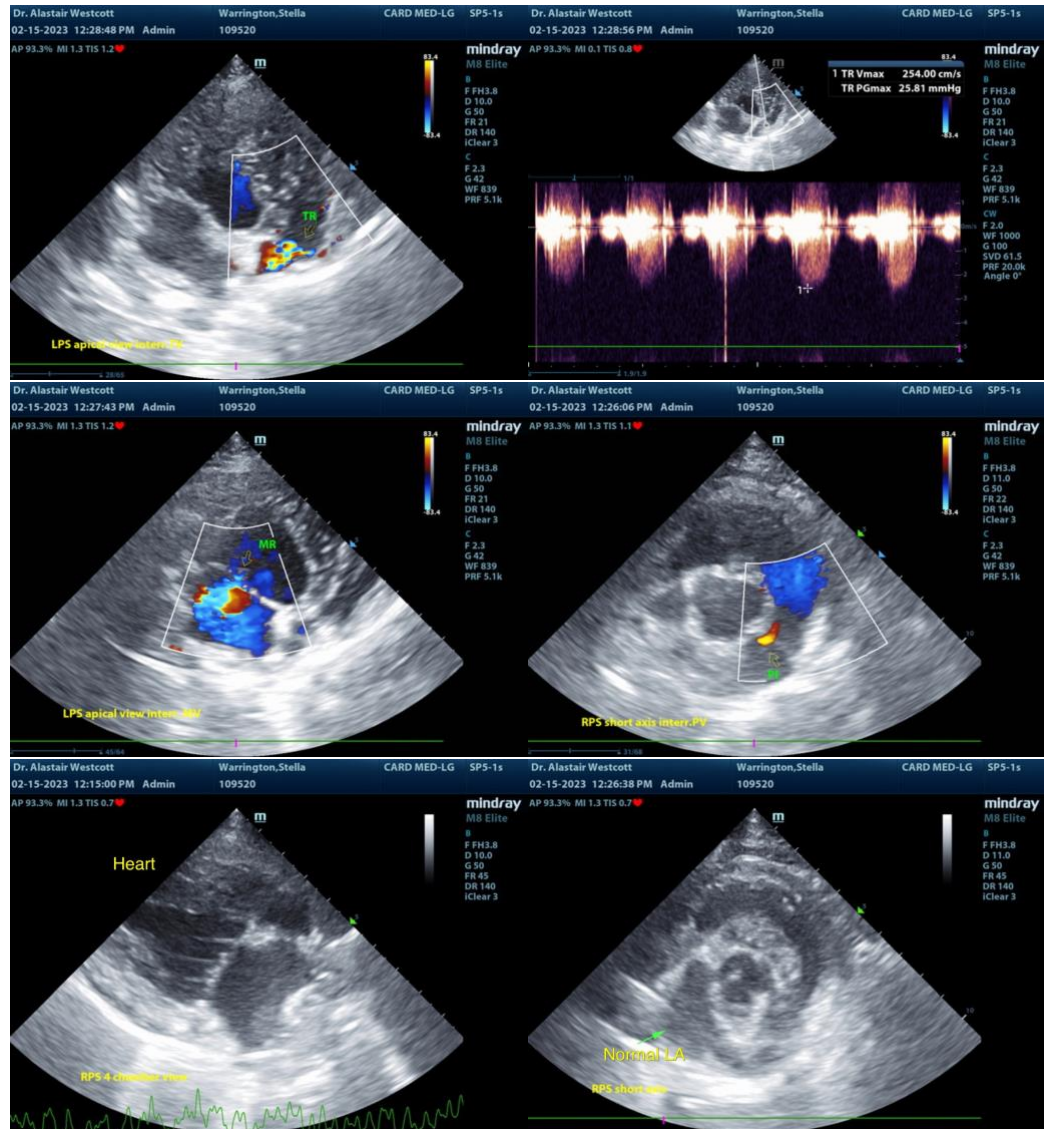
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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