

## PATIENT PRESENTING CLINICAL SIGNS

Myah Corrigan heart murmur heard, requires anesthetic

## SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

German Shepherd

SEX

Spayed Female

AGE

8 Years

WEIGHT

28 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	<1.6	28-40	40-100	<0.6
PATIENT			NM	1.23	45	79.8	0.2
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	1.6	1.45		4.0	4.0	

### Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. Mild MR was present on color doppler. 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. 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. No overt arrhythmia.

### ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function
- Mild MR

### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of structural or functional cardiomyopathy as well as no evidence of arrhythmogenic disease. Definitive cause of the murmur was not overtly evident. Mild MR is present, yet of questionable audibility. In the absence of dehydration or anemia, potential for benign physiologic flow murmur or additional small flow abnormality not visualized here are possible. Regardless, the normal cardiac

### INTERPRETED BY

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

### IMAGING PERFORMED BY

Kelly Reschny

### HOSPITAL NAME

Wellington AH

### REFERRING VET

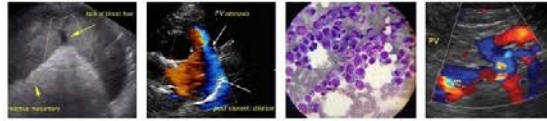
Dr. Dennis

### INVOICE

34373

### DATE

1/19/22



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Myah Corrigan

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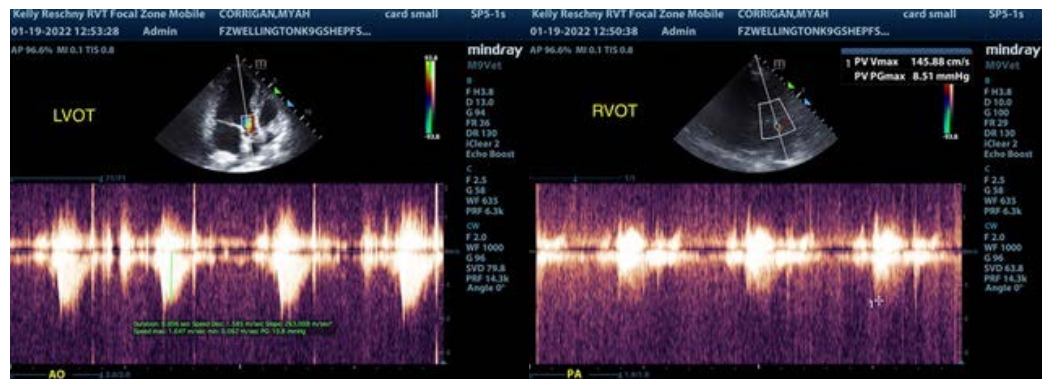
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presentation without evidence of left or right heart chamber enlargement or systolic dysfunction that potential risk is considered low.

Conservative monitoring of the murmur at this stage would be appropriate. No indication for cardiac medications. No overt anesthetic contraindications. 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. Pending ECG assessment, recheck echo suggested in 6-12 months, sooner if clinical signs suggestive of cardiac disease arise, or if murmur intensity progresses.

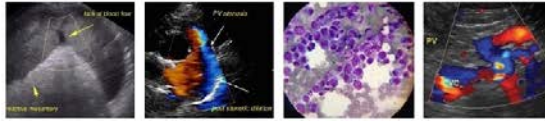


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**PATIENT**

Myah Corrigan

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.

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info@SonoPath.com

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