



## PATIENT PRESENTING CLINICAL SIGNS

Stewart Zemietra  
History: murmur 3/6; assess for anesthesia for dental procedure  
Abnormal PE/Chem/CBC/UA Results: wnl in March 2022

## SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Whippet

SEX

Neutered Male

AGE

8 Years

WEIGHT

35 Pounds

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	6.1	--	NM	1.4	36.3	66.1	0.37
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	153	2.1	1.6	--	4.1	4.6	--

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Diane McFadden

## HOSPITAL NAME

Advanced Veterinary  
Care

## REFERRING VET

Dr. Gad

## INVOICE

16110

## DATE

6/16/22

### 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 vegetative thickening consistent with mild endocardiosis. No evidence of valvular prolapse or chordae tendineae rupture. Doppler indicated measurable moderate insufficiency. Borderline elevated MR velocity noted. The **left ventricle** presented thicknesses with linear contour with borderline subjective increased LV volume. 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. Borderline elevated 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. 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, systolic laminar flow, and overall diameter (approx. 1:1 pa/ao ratio). Minor PI was present on doppler, measuring 1.2 m/s in diastolic 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.

### ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B-1)



**PATIENT**

- Minor pulmonic insufficiency

Stewart Zemietra

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**SPECIES**

Canine

The cause of the murmur is consistent with mild chronic degenerative changes with secondary eccentric mitral valve insufficiency. The lack of left atrium enlargement indicates that the risk of current and future complication is relatively low. However, prognosis at this stage is highly variable and serial sonographic monitoring is required for further prognosis. In a nonclinical patient without evidence of significant chamber enlargement, cardiac medications are not overtly indicated.

**BREED**

Whippet

Conservative monitoring, at this stage, would be appropriate. Screening blood pressure recommended to assess for evidence of systemic hypertension given the borderline elevated MR velocity. ECG assessment suggested prior to potential anesthesia. However, no overt anesthetic contraindications. Recheck echocardiogram suggested in 6 months or sooner if clinical signs arise.

**SEX**

Neutered Male

The following anesthetic protocol may be considered:

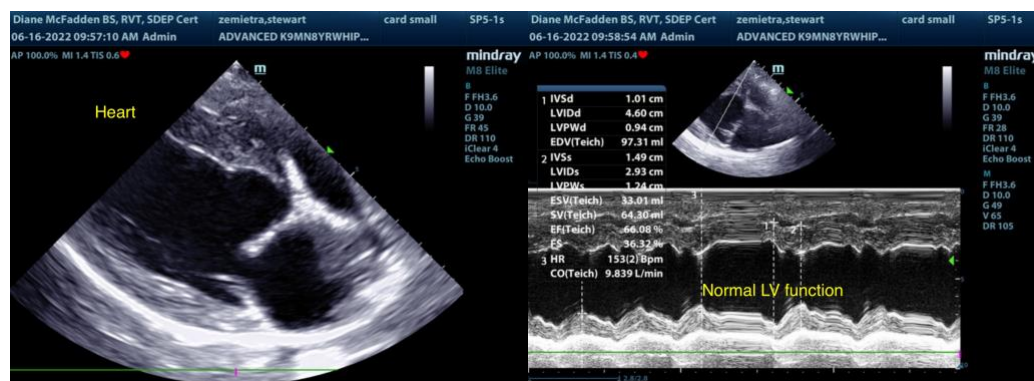
**AGE**

8 Years

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.

**WEIGHT**

35 Pounds



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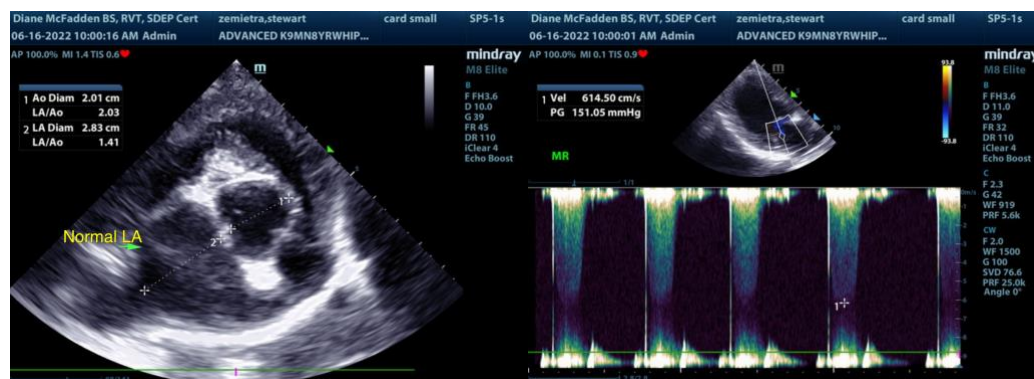
Diane McFadden

**HOSPITAL NAME**

Advanced Veterinary Care

**REFERRING VET**

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**PATIENT**

Stewart Zemietra

**SPECIES**

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**BREED**

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**SEX**

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**AGE**

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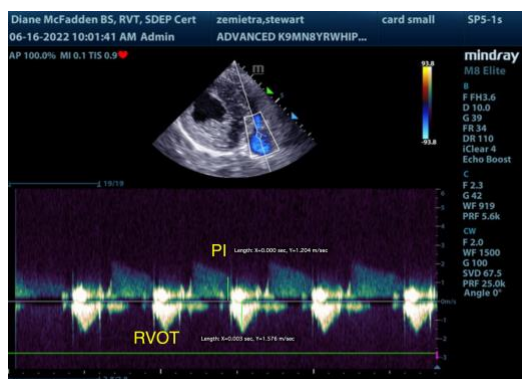
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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