



**PATIENT**

Zoey Hiemstra

**PRESENTING CLINICAL SIGNS**

Recheck cardiac ultrasound from last year to see progression.

**SPECIES**

Canine

**BREED**

Cockapoo

**SEX**

FS

**AGE**

10

**WEIGHT**

23

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

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	5.4	--	--	1.38	52	85	0.2
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	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	--	1.3	1.0	--	3.0	3.0	--

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal left atrial size based on 2 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal mitral valve leaflets presented vegetative thickening consistent with endocardiosis. No evidence of prolapse. Doppler indicated measurable 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. 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, laminar flow, and diameter (approx.1:1 pa/ao ratio). 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**

**Primary**

- Compensated chronic mitral valve disease (B1)

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Becky Meier-Gast

**HOSPITAL NAME**

Meier Veterinary Clinic PC

**REFERRING VET**

Dr. Kathy Ross

**INVOICE**  
22848

**DATE**  
11/03/2025



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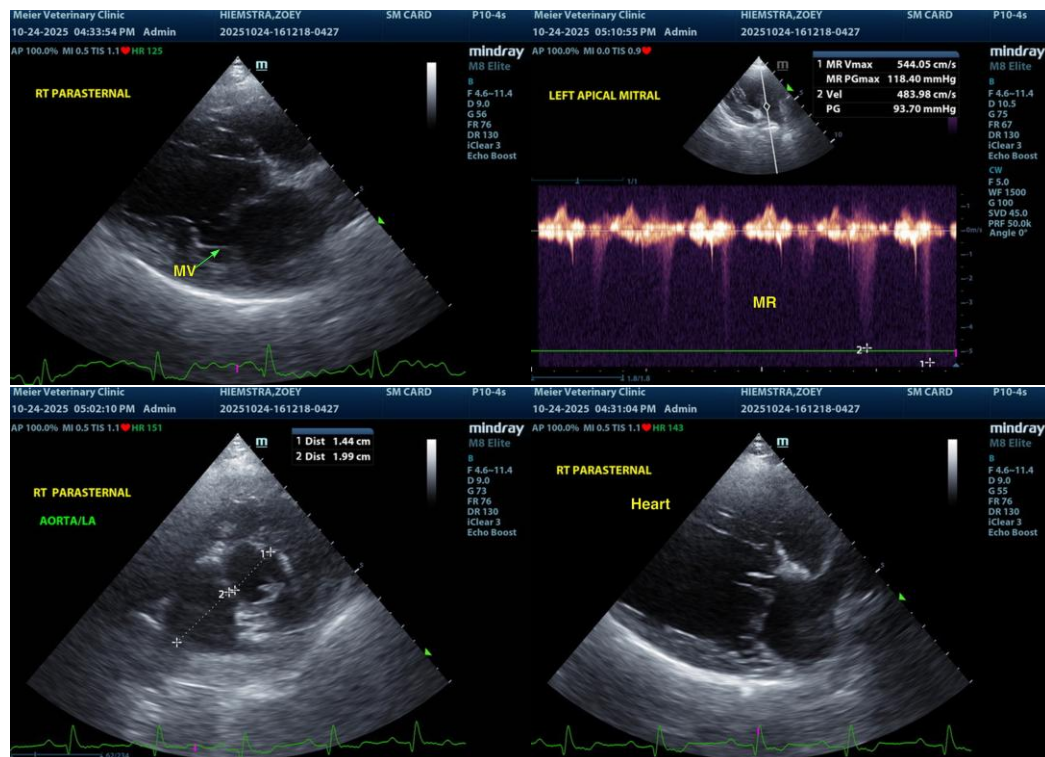
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The lack of LA enlargement indicates the current and future risk of complication is low. In an assumed non-clinical patient without chamber enlargement, no indication for cardiac medications. Continued monitoring with a recheck echo suggested in 6 - 12 months, sooner if clinical signs arise is recommended.

No 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.



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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