

**PATIENT**

Lilah Memmelaar

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Female Spayed

**AGE**

11 yrs

**WEIGHT**

39.8 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse, LVT,  
 CVT

**HOSPITAL NAME**

Wyckoff VH

**REFERRING VET**

Dr. Eisenberg

**INVOICE**

12982

**DATE**

12/26/25

**PRESENTING CLINICAL SIGNS**

History: Pre sx echo, hx of HM, echo 4/2025 indicates B1 MVD

**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	--	--	--	1.2	43	75	0.25
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	NM	1.6	1.5	--	3.5	3.7	--

**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 mild thickening consistent with mild degenerative change exhibiting normal coaptation. 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 noted. 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). Normal measured RVOT velocity noted. No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible.

**ULTRASONOGRAPHIC FINDINGS**

- Normal cardiac structure/function
- Mild thickened mitral valve leaflets and probable compensated MR



**PATIENT**

Lilah Memmelaar

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Female Spayed

**AGE**

11 yrs

**WEIGHT**

39.8 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse, LVT,  
 CVT

**HOSPITAL NAME**

Wyckoff VH

**REFERRING VET**

Dr. Eisenberg

**INVOICE**

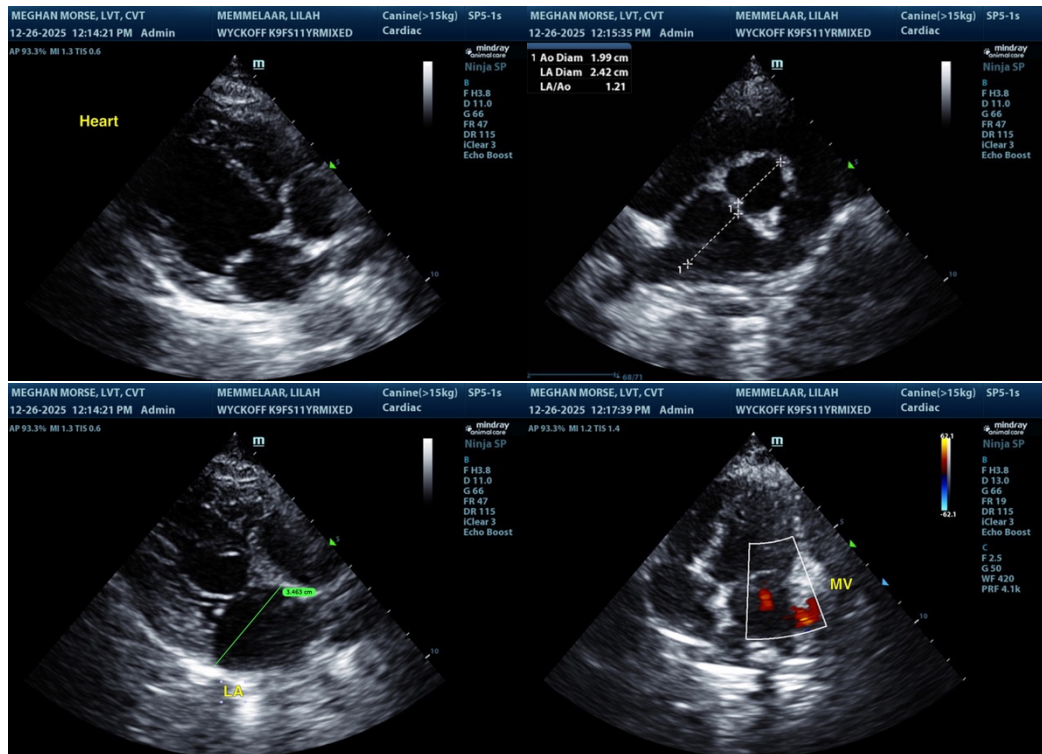
12982

**DATE**

12/26/25

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Significant mitral valve insufficiency was not definitively evident. No evidence of clinical issues such as left or right heart chamber enlargement, LV systolic dysfunction or pulmonary hypertension/ Given patient history, the cause of the murmur is most likely consistent with persistent compensated MR. Regardless of classification, the hemodynamic effects of the murmur are low. No indication for cardiac medication and no anesthetic contraindications. Conservative monitoring of the murmur, if present, is advised. Recheck echo recommended in 6-12 months, sooner if clinically indicated. The following anesthetic protocol is suggested. 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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

[info@sonopath.com](mailto:info@sonopath.com)



**PATIENT**

Lilah Memmelaar

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

Female Spayed

**AGE**

11 yrs

**WEIGHT**

39.8 lbs

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Meghan Morse, LVT,  
CVT

**HOSPITAL NAME**

Wyckoff VH

**REFERRING VET**

Dr. Eisenberg

**INVOICE**

12982

**DATE**

12/26/25