



PATIENT

Lilly Mustacchio

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

FS

AGE

11

WEIGHT

8

PRESENTING CLINICAL SIGNS

Grade 5/6 L systolic murmur palpable thrill progressed from quiet 4/7 in 7/25 Current meds
Levetiracetam Metro Proviabile

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 | 6.1 | ~ 3.0 | -- | 1.7 | 48 | 81 | 0.2 |
| CANINE CARDIAC PARAMETERS | HR (BPM) | AV VMAX (m/s) | PV MAX (m/s) | BODY WEIGHT | 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 | -- | 1.0 | 8 | 2.7 | 2.6 | -- |

Cardiac Presentation

The echocardiogram in this patient demonstrated moderate increased left atrial size based on 2 different LA measurement methods. Mild deviated interatrial septum, The cranial and caudal mitral valve leaflets presented thickening consistent with endocardiosis and valvular prolapse. Doppler indicated measurable severe eccentric insufficiency. The left ventricle presented thicknesses with linear contour and mild increased LV dimension. 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 mild thickening and 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). No visible pericardial or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible.

ULTRASONOGRAPHIC FINDINGS

Primary

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway Animal Hospital

REFERRING VET

Dr Harrs

INVOICE

24205

DATE

03/16/2026



PATIENT

Lilly Mustacchio

- Chronic mitral valve disease with mitral valve prolapse and mild increased measured MR velocity (ACVIM B2)
- TV insufficiency- estimated pulmonary pressure gradient consistent with mild increased pulmonary pressure without overt clinical pulmonary hypertension

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Hospital

REFERRING VET

Dr Harris

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24205

DATE

03/16/2026

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The degree of LA / LV enlargement indicates the current and future risk of complication secondary to MR is at least moderately elevated. Pimobendan 0.3 mg/kg BID is recommended. Monitoring of resting RR and thoracic radiographs going forward is advised. If evidence of increasing resting RR without overt radiographic pulmonary edema, weak diuretic spironolactone 1 to 2 mg/kg BID is suggested. Assessment of systemic BP for evidence of hypertension given mild increased measured MR velocity is recommended.

The prognosis is highly variable and sonographic monitoring is advised. Recheck echo is recommended in 6 months, sooner if clinically indicated.

Current anesthetic risk is considered moderate. If required, the following protocol is recommended with limited anesthetic time and judicious IVF administration. 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.



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Jenn

HOSPITAL NAME

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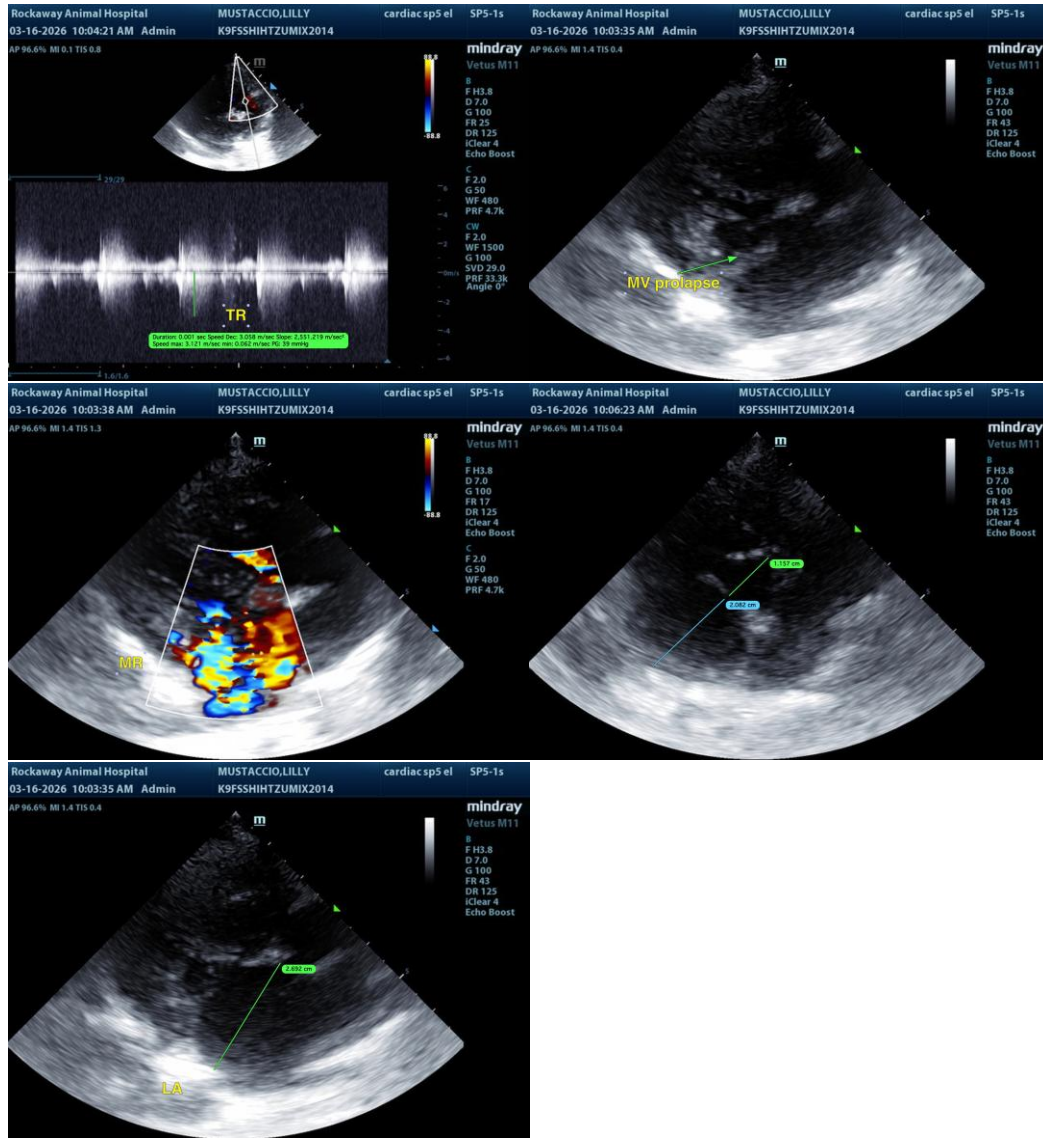
Dr Harrs

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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