



PATIENT

Mikey Rubin

SPECIES

Canine

BREED

Maltese

SEX

Male

AGE

11

WEIGHT

9.7

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Dr. Sharkaway

HOSPITAL NAME

Kew Gardens Animal
Hospital

REFERRING VET

Dr. Basim

INVOICE

13127

DATE

01/12/26

PRESENTING CLINICAL SIGNS

COUGHING

Abnormal PE/Chem/CBC/UA Results: HEART MURMUR GRADE 4/6

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	--	--	NM	2.3	44	74	0.44
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	1.4	1.3	9.7	3.2	3.1	--

Cardiac Presentation

The echocardiogram in this patient demonstrated moderate to severe increased **left atrial** dimension based on 2 different LA measurement methods with mild associated intra-atrial septal deviation. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis with mild valvular prolapse. Doppler indicated significant eccentric insufficiency. The **left ventricle** presented moderate increased 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 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 cardiac / pericardial tumors was visible. No evidence of arrhythmia.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B2+ - possible emerging C).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



PATIENT

Mikey Rubin

SPECIES

Canine

BREED

Maltese

SEX

Male

AGE

11

WEIGHT

9.7

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Dr. Sharkaway

HOSPITAL NAME

Kew Gardens Animal
Hospital

REFERRING VET

Dr. Basim

INVOICE

13127

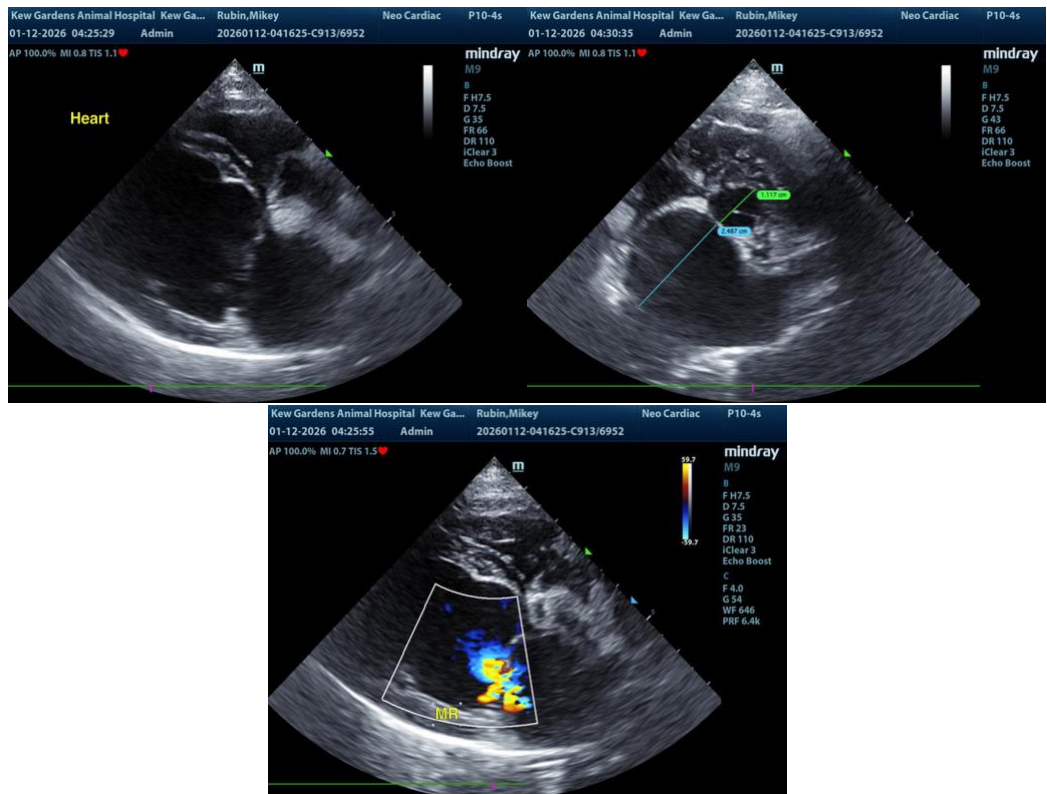
DATE

01/12/26

The moderate to severe increased LA/LV dimension consistent with emerging or possible current volume overload in conjunction with patient's coughing indicates the current or future risk of complication is significantly elevated. Pimobendan 0.3 mg/kg BID, LASIX 1 to 2 mg/kg BID at lowest effective dose, and ACE inhibitor 0.5 mg/kg SID is recommended.

The coughing in this patient may be multifactorial in origin owing to emerging left side of congestion, main stem bronchi irritation, secondary to LA enlargement or concurrent lower airway disease. Correlation with three view chest radiographs and monitoring of resting respiration rate going forward is indicated. Monitoring of renal parameters, systemic BP +/- ECG if evidence of tachycardia is recommended. Prognosis is highly variable to guarded going forward with sonographic monitoring indicated.

Recheck echo is suggested in six months or sooner if progressive clinical signs. Current anesthetic risk is significantly elevated. Strong caution for elective anesthesia. If anesthesia is required, the following protocol is suggested with limited anesthetic time and judicious IV fluid use with close clinical monitoring. 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



PATIENT

can be of any further assistance, please contact me.

Mikey Rubin

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

SPECIES

info@SonoPath.com

Canine

BREED

Maltese

SEX

Male

AGE

11

WEIGHT

9.7

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

**IMAGING
PERFORMED BY**

Dr. Sharkaway

HOSPITAL NAME

Kew Gardens Animal
Hospital

REFERRING VET

Dr. Basim

INVOICE

13127

DATE

01/12/26