



PATIENT

Chapo Tiffany Alulems

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

11

WEIGHT

17.6

PRESENTING CLINICAL SIGNS

Coughing History of heart disease

Abnormal PE/Chem/CBC/UA Results: Coughing Heart murmur grade 5/6 Collapsed trachea

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	--	<2.0	--	2.3	45	77	0.33
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	--	--	0.95	--	5.3	4.1	--

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr Sharkawy

HOSPITAL NAME

Kew Gardens Animal Hospital

REFERRING VET

Dr Sharkaway

INVOICE 23339

DATE
12/24/2025

Cardiac Presentation

The echocardiogram in this patient demonstrated severe increased left atrial size with mild horizontal LA enlargement component and deviated intra-atrial septum based on 2 different LA measurement methods. The cranial and caudal mitral valve leaflets presented moderate to significant thickening with mild valve prolapse consistent with endocardiosis. Doppler indicated severe eccentric insufficiency. The left ventricle presented thicknesses with moderate to significant increased LV internal dimension and increased LV sphericity. 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 with 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. No evidence of arrhythmia. Brief hepatic assessment revealed no evidence of hepatic congestion or cranial abdomen ascites.

ULTRASONOGRAPHIC FINDINGS

Primary



PATIENT

Chapo Tiffany Alulems

- Chronic mitral valve disease with mitral valve prolapse (ACVIM B2 +/- C)
- TV insufficiency -estimated pulmonary pressure gradient not overtly consistent with current clinical pulmonary hypertension.

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

11

WEIGHT

17.6

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr Sharkawy

HOSPITAL NAME

Kew Gardens Animal
Hospital

REFERRING VET

Dr Sharkaway

INVOICE

23339

DATE

12/24/2025

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The severely increased LA with concurrent increased LV dimension and sphericity consistent with left heart volume overload criteria indicates the current and future risk of complications secondary to MR is significantly elevated with potential clinical signs secondary to left sided congestion. Multicentric component to the coughing including mainstem bronchi irritation or compression owing to LA enlargement as well as concurrent chronic lower airway disease is possible.

Pimobendan 0.3 mg/kg per BID, Lasix at lowest effective dose 1-2 mg/kg PO BID, ACE inhibitor 0.5 mg/kg SID/titrate to BID indicated. Concurrent respiratory support which may include antitussive medication hydrocodone is recommended.

Prognosis going forward is considered extremely guarded with sonographic monitoring indicated. Recheck echo suggested in 6 months, sooner if clinically indicated. Elective anesthesia is not advised.



PATIENT

Chapo Tiffany Alulems

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

11

WEIGHT

17.6

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr Sharkawy

HOSPITAL NAME

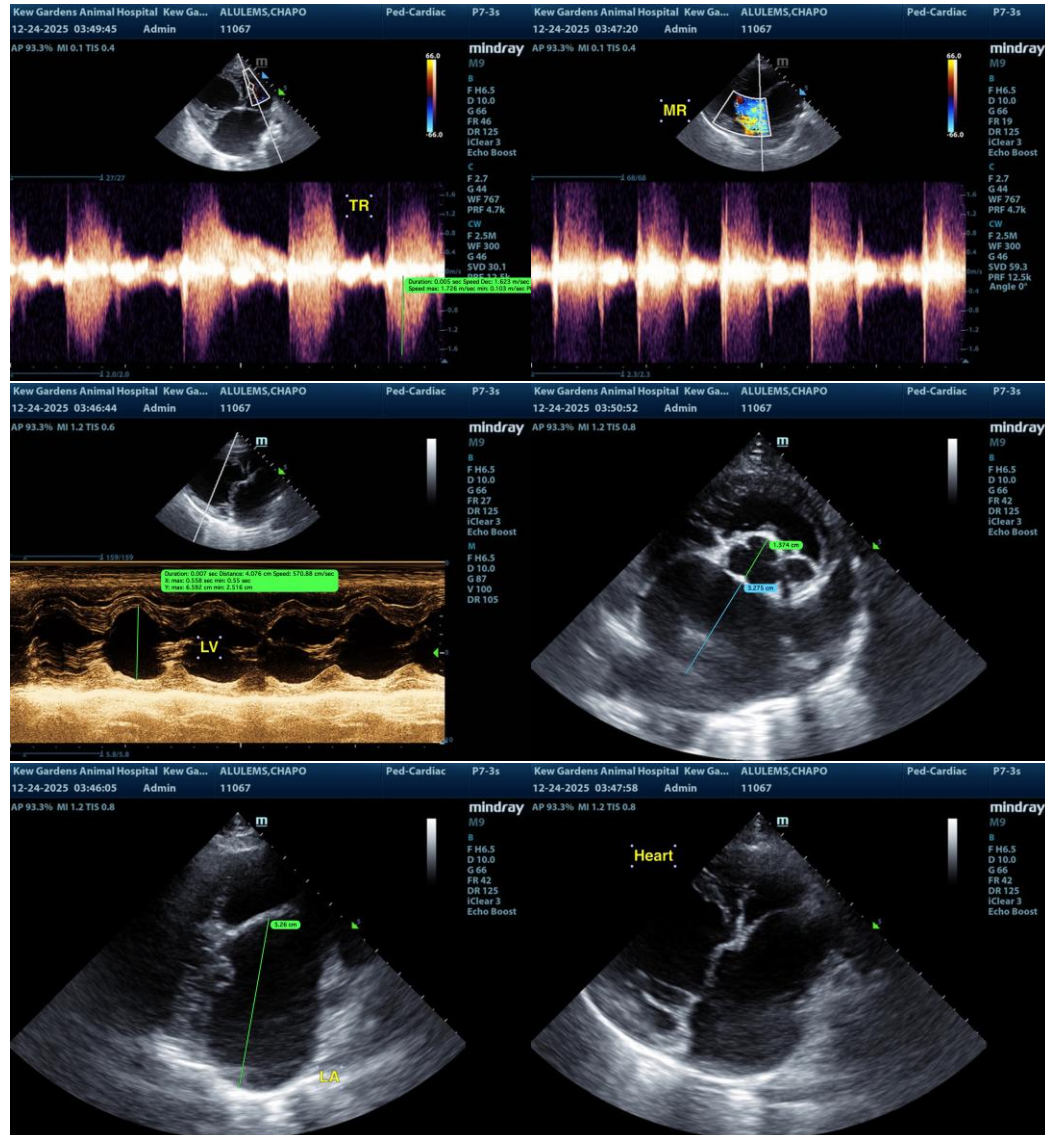
Kew Gardens Animal
Hospital

REFERRING VET

Dr Sharkaway

INVOICE
23339

DATE
12/24/2025



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