

PATIENT

Lucy Murray

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

Spayed Female

AGE

14 Years

WEIGHT

8.5 Pounds

INTERPRETED BY

Sara Brethel DVM,
DACVIM (Cardiology)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Albany AH

REFERRING VET

Dr. Hunt

INVOICE

35393

DATE

1/13/26

PRESENTING CLINICAL SIGNS

History: Clinical Exam Findings: Grade 4 left apical systolic heart murmur. Hx of chronic hacking gagging cough after waking up from sleep, normal breathing rate, normal lung sounds, no tracheal sensitivity on palpation. Concern for mitral valve disease, radiographs performed and showed mild cardiomegaly and dorsal tracheal deviation. BP check with doppler -- avg 120mmHg Hx of grade 3 bilateral MPL, treated for arthritis with galliprant ABNORMAL Labwork Values N/A For ECHO Only: Blood Pressure 120, 110, 100 HR/RR/BP: 120/35 BP 120, 110, 100 Is there a Heart Murmur? If so, please grade. Grade 4 Apical Systolic Current Medications Galliprant Radiographic Findings Mild/moderate cardiomegaly, mild trachea elevation.

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	7.25	2.83	1.7	2.0	44.44	--	NM
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	1.16	0.82	3.86	2.7	1.8	1.0

Cardiac Presentation

The mitral valve leaflets are moderately thickened with moderate mitral regurgitation posteriorly directed. There is moderate prolapse of the mitral valve leaflets. The left atrial size is severely increased. Left ventricular dimensions are normal and systolic function is preserved in the face of mitral regurgitation. There is normal right atrial size with mild tricuspid regurgitation. There is no prolapse of the tricuspid valve leaflets and no evidence of pulmonary hypertension based upon tricuspid regurgitant velocities. The right ventricle subjectively appears normal in structure and function. The aortic and pulmonic valves have normal morphology and the corresponding outflow velocities are within normal limits. There is no evidence of pulmonic or aortic insufficiency. The aorta appears normal. The pulmonary artery and associated branches appear normal. There is no evidence of pleural effusion, pericardial effusion, or intracardiac masses.

ULTRASONOGRAPHIC FINDINGS



PATIENT

Lucy Murray

- Degenerative valve disease, ACVIM stage B-2 (mitral)
- Mild degeneration of the tricuspid valve without evidence of significant pulmonary hypertension

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

Spayed Female

AGE

14 Years

WEIGHT

8.5 Pounds

INTERPRETED BY

Sara Brethel DVM,
 DACVIM (Cardiology)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Albany AH

REFERRING VET

Dr. Hunt

INVOICE

35393

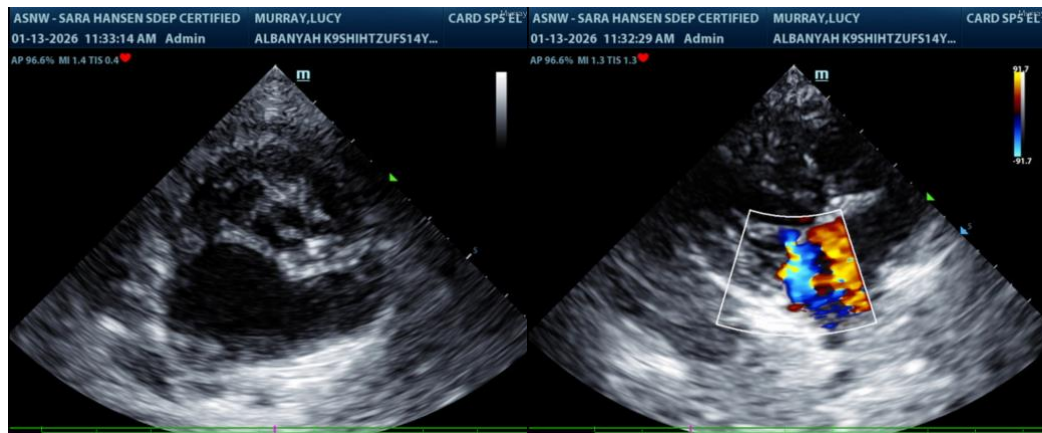
DATE

1/13/26

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient has degenerative valve disease ACVIM stage B2 and pimobendan therapy at 0.27-0.32mg/kg PO q12 is recommended. This will be a lifelong therapy. A recheck echocardiogram is recommended in 4-6 months to monitor the condition since starting pimobendan. A sooner recheck is recommended if the patient develops cardiovascular clinical signs or the heart murmur is worsening in intensity. The client should start monitoring respiratory rate and effort at home if not already doing so. The resting respiratory rate should be < 35-40 breathes/minute when the patient is resting or sleeping. If the breathing rates are increasing, then chest radiographs are recommended.

The reported blood pressures are within normal limits. If anesthesia is needed, the patient is at an increased risk due to the increased left atrial size, with the biggest risk being the potential for congestive heart failure. If anesthesia needs to be performed, ideally, the patient would be receiving pimobendan for at least 1-3 weeks prior to elective procedures. Recommend obtaining a blood pressure on the patient to ensure it is <160mmHg. If the blood pressure is elevated recommend following ACVIM guidelines for systemic hypertension and treating if indicated.



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.

Sara Brethel DVM, DACVIM (Cardiology)

info@SonoPath.com