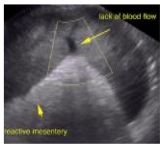
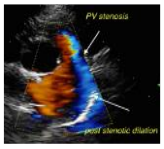
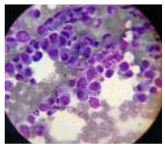
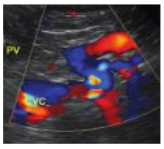
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Lucie Roney

SPECIES

Canine

BREED

Corgi Mix

SEX

FS

AGE

15 yo

WEIGHT

34.4 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Meredith Swart

HOSPITAL NAME

Swart Veterinary Imaging

REFERRING VET

Dr. Meredith Swart

INVOICE

15102

DATE

10/5/22

PRESENTING CLINICAL SIGNS

History of grade III murmur last couple years. Patient has been more lethargic recently, started coughing, exercise intolerance- which he initially attributed to old age. Also recent history of weight loss and possible vomiting. Increase resp rate noted during AUS to evaluate for vomiting. AUS revealed pancreatitis otherwise WNL. No crackles or arrthymia auscultated today. Murmur still grade III.

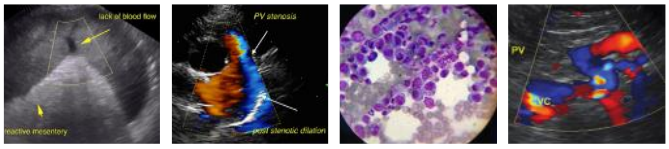
Abnormal PE/Chem/CBC/UA Results: Labwork pending today. Labwork from 3 months ago showed creat 1.6, BUN 38, usg 1.037 with trace prot otherwise WNL

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT		3.4	2.16	2.0	40.5		0.33
CANINE CARDIAC PARAMETERS	**HR** (BPM)	**AV VMAX** (m/s)	**PV MAX** (m/s)	**BODY WEIGHT** (kg)	**LA** 2D short axis Base view (cm)	**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	0.7		5.7	5.5	

Cardiac Presentation

The echocardiogram in this patient demonstrated moderately enlarged **left atrial** size based on 3 different LA measurement methods. Deviation of the interatrial septum towards the right atrium, consistent with increased left atrial pressure, was present. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis with lack of normal leaflet coaptation yet without evidence of valvular prolapse or chordae tendinea rupture. Doppler indicated moderate eccentric insufficiency. The **left ventricle** presented thicknesses with maintained linear contour with concurrent Increased left ventricle volume. 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 concurrent 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,



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Lucie Roney

SPECIES

Canine

BREED

Corgi Mix

SEX

FS

AGE

15 yo

WEIGHT

34.4 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Meredith Swart

HOSPITAL NAME

Swart Veterinary Imaging

REFERRING VET

Dr. Meredith Swart

INVOICE

15102

DATE

10/5/22

laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

ULTRASONOGRAPHIC FINDINGS

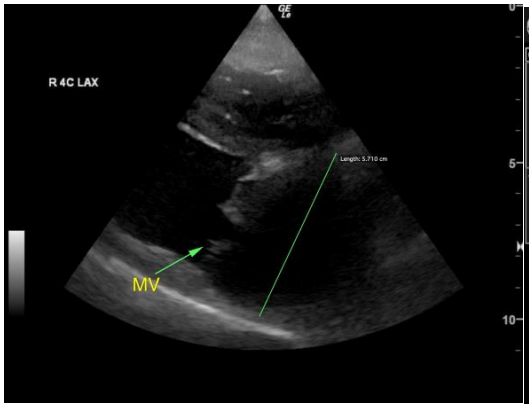
- Chronic mitral valve disease with lack of mitral valve leaflet coaptation (ACVIM B2-C)
- TR - estimated pulmonary pressure gradient ~40 mmHg, consistent with mild pulmonary hypertension

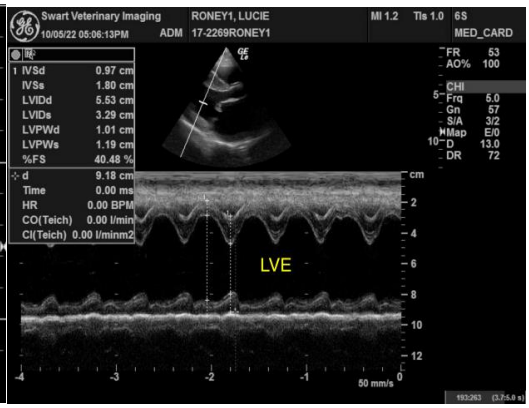
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is secondary to chronic degenerative valvular changes with eccentric mitral valve insufficiency. The degree of LA/LV enlargement is consistent with left-heart volume overload and suggestive of cardiogenic pulmonary congestion and correlates with a clinical history of coughing and exercise intolerance. A contributing factor to the coughing in this patient may be mainstem bronchi irritation or compression secondary to LA enlargement with potentially some contribution owing to mild pulmonary hypertension.

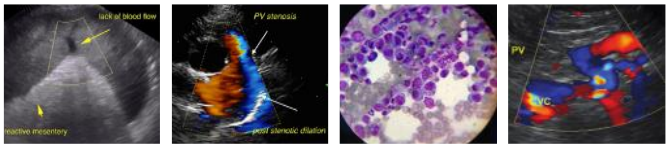
Pimobendan 0.3 mg/kg PO BID, Lasix 1.0-2.0 mg/kg PO BID, with close monitoring of renal parameters going forward, given concurrent mild azotemia as well as assessment of systemic BP is recommended. If systemic BP >130, ACE Inhibitor medication would be recommended, (not advised if BP <130).

Prognosis is guarded at this stage, as this patient is at a significantly elevated risk for episodes of congestive heart failure and the development of malignant arrhythmias. Serial sonographic monitoring is required for further prognosis. Pending response to medical therapy, a recheck echocardiogram is suggested in 3-4 months, sooner if persistent clinical signs or concern for CHF are noted.





SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Lucie Roney

SPECIES

Canine

BREED

Corgi Mix

SEX

FS

AGE

15 yo

WEIGHT

34.4 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Meredith Swart

HOSPITAL NAME

Swart Veterinary Imaging

REFERRING VET

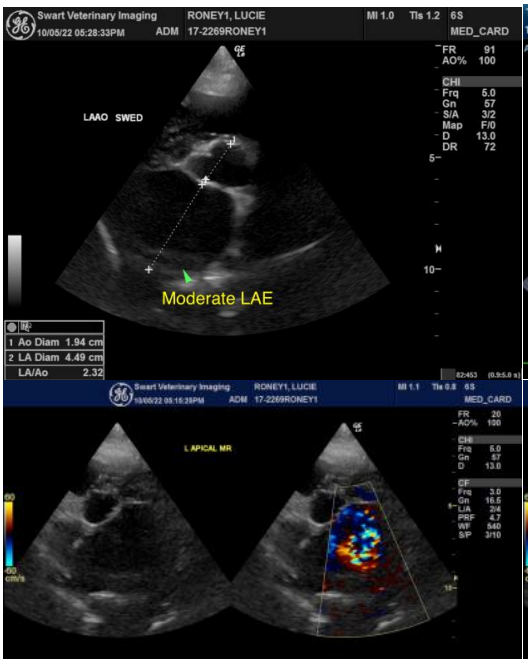
Dr. Meredith Swart

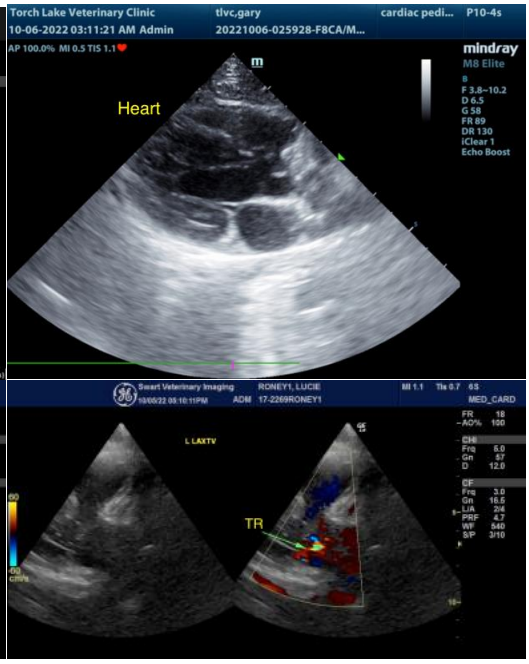
INVOICE

15102

DATE

10/5/22





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