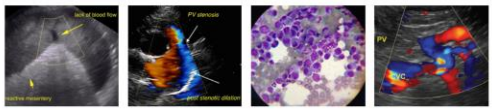
PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Lucy Kapourelakos

SPECIES
Canine

BREED
Maltese

SEX
Female Spayed

AGE
14 years

WEIGHT
6.2lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Norfolk County Veterinary Service

REFERRING VET
Dr. Poor

INVOICE
23543

DATE
4/8/22

PRESENTING CLINICAL SIGNS

History: Grade II-III/VI systolic murmur; no clinical signs. BP: 140mmHg. *Sedated with torb/alfaxan.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: The LV diameter is normal with adequate myocardial function. LV wall thicknesses are normal.
Left atrium: The left atrium is normal.
Mitral valve: The mitral valve is mildly thickened with no prolapse into the left atrial lumen. Mild anterior-directed double jet of mitral regurgitation with a normal velocity.
Aortic valve/aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.
Right ventricle: Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.
Right atrium: Normal RA dimension.
Tricuspid valve: The tricuspid valve appears mildly thickened with septal prolapse and moderate tricuspid regurgitation. Velocity consistent with early pulmonary hypertension.
Pulmonic valve/pulmonary artery: The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.
Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.
Heart rhythm: ECG reveals a sinus rhythm with an average HR of 130bpm.

2-Dimensional Measurements

Ao diam (cm)	1.3
LA diam (cm)	1.4
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.5
LVID diastole (cm)	1.84
PW thickness (cm)	0.5
LVID systole (cm)	0.9
FS (%)	50

Doppler Measurements

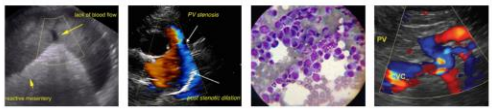
PV Vmax (m/s)	0.63
AoV Vmax (m/s)	0.9
MR Vmax (m/s)	4.5
TR Vmax (m/s)	3.1
TR PG (mmHg)	38

INTERPRETATION OF THE FINDINGS

The cause of the murmur is chronic degenerative valve disease causing mild mitral and moderate tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. Early pulmonary hypertension is noted, which should be monitored going forward. This likely explains why the TR is quantitatively greater than MR and is of unknown significance in an asymptomatic dog. No additional issues are noted in this study. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1).

RECOMMENDATIONS

- Given these findings, no cardiac medications are clearly indicated.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane



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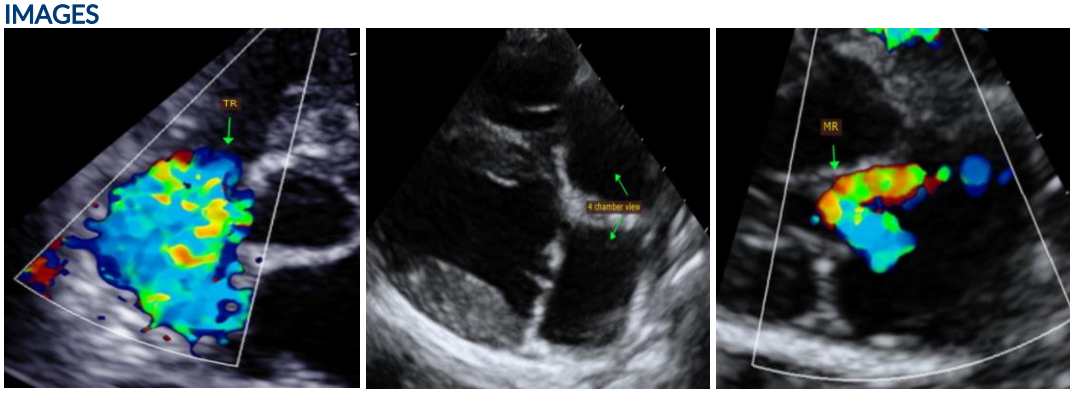
gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

PLAN

- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

IMAGES



The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
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