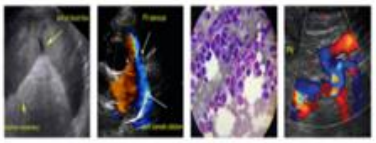
Mass Veterinary Services



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

PATIENT
Lukie Thorton

SPECIES
Feline

BREED
Ocicat

SEX
Male Neutered

AGE
2.6 years

WEIGHT
11.38lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
23765

DATE
4/19/22

PRESENTING CLINICAL SIGNS

History: Recheck echo. History HOCM +/- mitral valve dysplasia, severe LAE. CHF (pulmonary edema) - first episode 2/8/22, recurrence 3/25/22. History elevated blood pressure - r/o secondary to nervousness/anxiety vs systemic disease vs idiopathic. Lukie was first noted to have a heart murmur in October. He had a CBC, chem profile and thyroid level done at that time, which was all within normal limits, but a ProBNP was elevated at 1500. After diagnostic testing, Lukie was started on benazepril, clopidogrel and spironolactone initially as individual medications but now combined in a compounded form (benazepril 2.5mg/clopidogrel 18.75mg/spironolactone 6.25mg/ml) with Lasix (discontinued and changed to torsemide [dose unknown]). Lukie has been eating well with normal activity. He does sneeze occasionally with some mild PD noted. On exam today: NSR, grade IV/VI parasternal murmur, PSS, lung fields clear, compressible thorax. BP: 140mmHg x 5.
-Pertinent previous echo findings (2/8/22 (Ashley Lange, DVM, DACVIM): LA (2D Rishniw) 1.8 cm; LA:Ao 1.8; PW 0.91 cm; LVOT Vmax 1.47 m/s *Sedated with alfaxalone for study (ECG done prior to sedation).

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: The LV diameter is normal with adequate myocardial function. The LV wall thicknesses are highly asymmetric, with a mildly increased IVS dimension and markedly increased PW. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly hypertrophied and hyperechoic. The endocardium appears remodeled.
Left atrium: The left atrium is moderate to severely increased in dimension. Subtle smoke suspected; no obvious thrombi.
Mitral valve: The anterior leaflet of the mitral valve is thickened and elongated, consistent with dysplasia. The tip of the mitral valve is visible in the LVOT during systole. Moderate eccentric mitral regurgitation is noted.
Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Aortic outflow velocities are severely elevated on Doppler. No aortic insufficiency.
Right ventricle: Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.
Right atrium: The right atrium is normal in dimension.
Tricuspid valve: The tricuspid valve appears normal with no tricuspid regurgitation.
Pulmonary 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 180bpm.

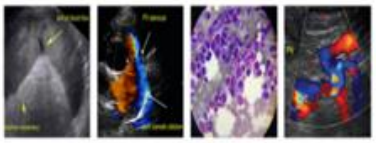
2-Dimensional Measurements

Ao diam (cm)	0.9
LA diam (cm)	1.7
LA:Ao (Swe)	1.9
IVS thickness (cm)	0.51
LVID diastole (cm)	1.2
PW thickness (cm)	1.1
LVID systole (cm)	0.7
FS (%)	42

Doppler Measurements

PV Vmax (m/s)	0.86
AoV Vmax (m/s)	5.6
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

Mass Veterinary Services



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

PATIENT
Lukie Thorton

SPECIES
Feline

BREED
Ocicat

SEX
Male Neutered

AGE
2.6 years

WEIGHT
11.38lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
23765

DATE
4/19/22

INTERPRETATION OF THE FINDINGS

Mitral valve dysplasia persists with marked asymmetric LV hypertrophy and moderate LA enlargement. Compared to what is noted on the prior study, these findings are actually similar without significant progression. Regardless, LA enlargement indicates the patient is at high risk for decompensation and/or a thrombotic event at this time.

Given a history of CHF, full cardiac support should be continued going forward. It is noted that the patient can be difficult to medicate and if we have to prioritize medications, diuretic and Plavix would be the most important. Plavix is often the culprit with difficulty medicating and other options such as removing it from the compounded liquid, a transdermal form, etc. can be considered. The use of torsemide versus Lasix should be based upon the history (refractory CHF on Lasix, dosing, etc). Additionally, I would consider Atenolol in this case; however, again we must prioritize what we are able to administer. Discussion with the owner is advised.

Prognosis is poor going forward with high risk for decompensation and/or sudden death in the future.

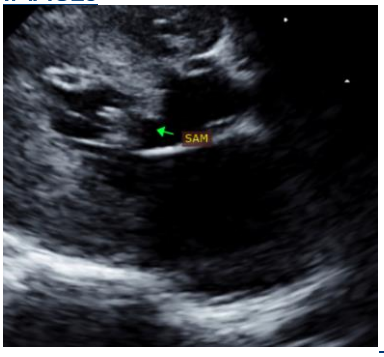
RECOMMENDATIONS

- Prioritize medications with diuretic/Plavix being most important.
- If Torsemide is being used because Lasix was ineffective, this can also be considered. More information is necessary.
- If able, institute Atenolol: 25mg tablets; Give ¼ tab once daily and up-titrate to effect. Target HR in hospital is 140-160bpm.
- Elective anesthesia is not advised.
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).

PLAN

- Recommend recheck echocardiogram in 6 months to screen for progression, sooner if clinical signs arise in the interim.

IMAGES



Mass Veterinary Services

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

PATIENT
Lukie Thorton

SPECIES
Feline

BREED
Ocicat

SEX
Male Neutered

AGE
2.6 years

WEIGHT
11.38lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

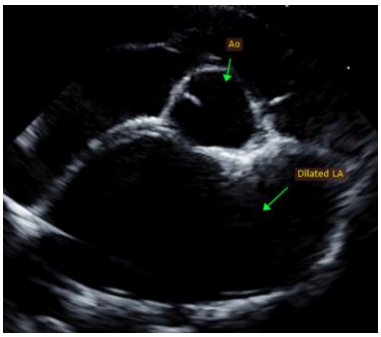
IMAGING PERFORMED BY
Pamela Harrigan, RDCS

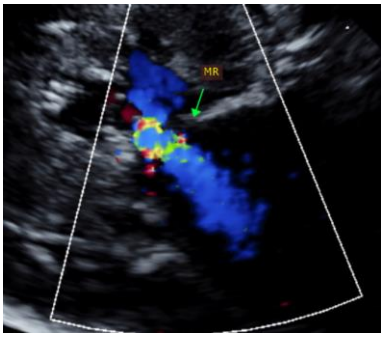
HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
23765

DATE
4/19/22





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)
info@sonopath.com

Echocardiogram performed by: Pamela Harrigan, RDCS
Pet Animal Ultrasound Service (4paus.com)