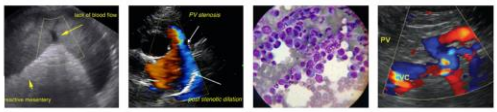
Mass Veterinary Specialty Services
1-413-734-1292



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

PATIENT
Nala Simmons

SPECIES
Feline

BREED
DMH

SEX
Female Intact

AGE
7 years

WEIGHT
7.38lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Specialty Services

REFERRING VET
Dr. Masloski

INVOICE
21735

DATE
10/27/21

PRESENTING CLINICAL SIGNS

History: Nala was noted to have both a mammary mass and heart murmur in August. She was also noted to have a mild, regenerative anemic. Thyroid level in August was within normal limits. She is having coughing fits at home daily. No labored breathing noted. Her appetite has been decreased a bit and she does seem to be sleeping more the past few weeks. CV/RESP: NSR, no murmurs noted though purring loudly, PSS. BP: 130mmHg x 5.

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 mildly increased with regions of asymmetry and irregularity. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled and hyperechoic.
Left atrium: The left atrium is normal. No obvious spontaneous contrast or thrombi seen.
Mitral valve: The mitral valve is normal in structure and mobility. No obvious systolic anterior motion is seen; however, an intermittent LVOTO is possible. Mild MR.
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: The right atrium is normal in dimension.
Tricuspid valve: The tricuspid valve appears normal with no tricuspid regurgitation.
Pulmonic valve/Pulmonary artery: The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.
Pericardium/other: Scant pericardial and small pockets of pleural effusion noted. Irregular consolidated pulmonary tissue. No obvious cardiac masses.
Heart rhythm: ECG reveals a sinus rhythm with an average HR of 188bpm.

2-Dimensional Measurements

Ao diam (cm)	1.0
LA diam (cm)	1.2
LA:Ao (Swe)	1.2
IVS thickness (cm)	0.65
LVID diastole (cm)	1.2
PW thickness (cm)	0.61
LVID systole (cm)	0.5
FS (%)	58

Doppler Measurements

PV Vmax (m/s)	0.55
AoV Vmax (m/s)	1.4
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

HCM is a rule out diagnosis, once hypertension and hyperthyroid disease are ruled out. In this normotensive euthyroid cat, primary changes are suspected. That being said, anemia as well as active effusion are both identified, and some degree of volume depletion may be contributing to the appearance of the LV. Regardless, the degree of abnormality is mild, with mild LVH and no LA dilation. The only potential cause of a murmur seen here is mild mitral regurgitation with a possible intermittent LVOT obstruction. This appears mild and does not warrant therapy.

These findings would certainly suggest the respiratory signs and bicavitary effusion is non-cardiac in origin. Primary pulmonary abnormalities are suspected based upon the

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appearance of surrounding pulmonary tissue which should be further investigated. Recommend sampling, focused thoracic imaging (US or CT), respiratory evaluation, etc.

Prognosis is guarded, due to the highly variable rates of progression with subclinical feline cardiomyopathy.

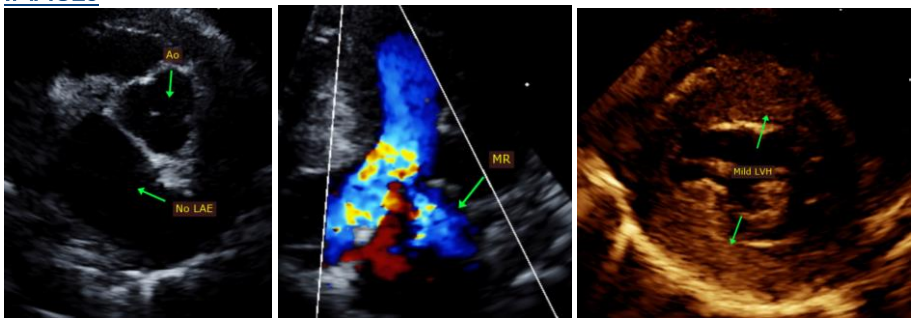
RECOMMENDATIONS

- Given these findings, no medications are indicated.
- Consider fluid sampling, advanced thoracic imaging, respiratory treatment as discussed.
- Monitor BP and T4 every 6 months.
- Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance.
- Risk for complication with steroid use typically follows LA dilation, which in this case is low. That being said, any cat can experience unexpected signs of intolerance and monitoring of RR/RE is advised particularly in the initiation phase.
- 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 any clinical signs arise in the interim.

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
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info@sonopath.com

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