



PATIENT

Loki Fitch

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

4 years

WEIGHT

13.4lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

PRESENTING CLINICAL SIGNS

History: Loki was recently seen on an emergent basis with a chief complaint of falling over and being ataxic. A POCUS revealed some pleural fluid. Radiographs revealed mild cardiomegaly. He was started on Lasix and Plavix. History of heart murmur, 2018. Loki was open mouthed breathing on the way here but was also very stressed in the car. He is presently eating well with no C/S/V/D but has been a bit PU/PD since starting Lasix. His activity is currently normal for him. On exam: NSR, grade III/VI parasternal murmur, PSS, lung fields clear, compressible thorax. BP: 130mmHg x 5. Current medications: 1) Plavix/clopidogrel 75mg 1/4 tab daily 2) Lasix/furosemide 12.5mg 1/2 tab daily *Sedated with propofol for study.

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 irregularity. There is a mildly hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly hypertrophied and hyperechoic. The endocardium appears mildly remodeled.

Left atrium: The left atrium is normal. No smoke or thrombi seen.

Mitral valve: The MV leaflets appears normal. Systolic anterior motion is seen on 2D and color flow imaging. Mild eccentric MR.

Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Mildly elevated aortic outflow velocity with a dynamic profile. 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 150bpm.

IMAGING

PERFORMED BY

Pamela Harrigan,
RDCS

HOSPITAL NAME

Mass Veterinary
Services

REFERRING VET

Dr. Masloski

INVOICE

27830

DATE

12/6/22

2-Dimensional Measurements

Ao diam (cm)	0.9
LA diam (cm)	1.1
LA:Ao (Swe)	1.2
IVS thickness (cm)	0.64
LVID diastole (cm)	1.4
PW thickness (cm)	0.61
LVID systole (cm)	0.4
FS (%)	71

Doppler Measurements

PV Vmax (m/s)	0.65
AoV Vmax (m/s)	2.2
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

The diagnosis and cause of the murmur is hypertrophic obstructive cardiomyopathy. This indicates some degree of LV thickening (mild in this case) with a dynamic LVOT obstruction (SAM). The degree of disease appears mild with mild focal LVH and no left atrial enlargement, indicating the risk for spontaneous CHF and/or a thrombotic event is currently low. No additional issues are identified.

While no medications have been shown to definitively alter long term outcome at this stage of disease, atenolol is often initiated to decrease the outflow obstruction. Given



PATIENT what is seen here, reasonable to initiate at this time, assuming the patient is easily medicated.
Loki Fitch

SPECIES These findings would suggest that the recent episode and possible pleural effusion are/were noncardiac in origin. Unless ataxia was brief and exertional in origin, alternative explanations should be explored. Additionally pleural effusion would also be noncardiogenic in origin prior to significant LA dilation. No indication for continued medications at this time. If the symptoms return, reassessment is strongly recommended.
Feline

BREED Prognosis is guarded given the highly variable nature of feline cardiomyopathy.
DSH

RECOMMENDATIONS

- No indication for Lasix or Plavix based upon mild findings.
- If elected, institute Atenolol 25mg tablets; Give ¼ tab once daily. Recheck heart rate in 1-2 weeks with target stressed rate of 140-160bpm 12-24 hours post-administration. Increase as needed until target reached.
- 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). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance. Additionally, steroids should be used with caution on older cats, as even a 'normal' geriatric heart can develop evidence of intolerance and fluid retention.
- 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 assess rate of progression, sooner if any issues arise in the interim.

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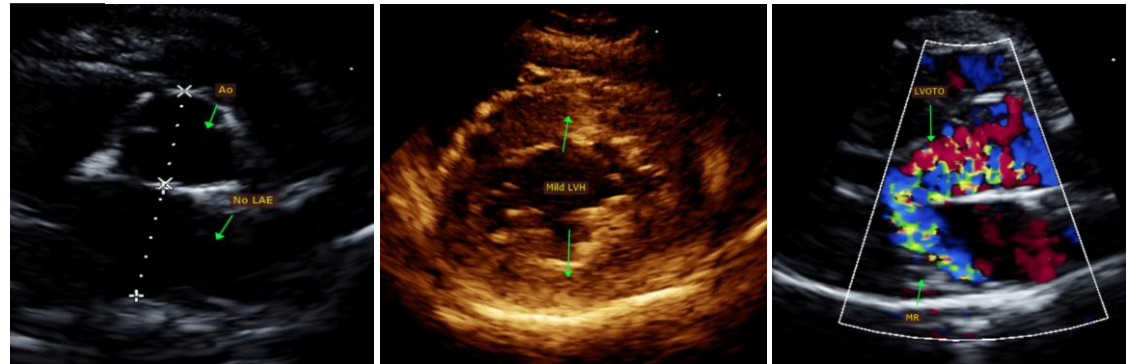
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES

Feline

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.

BREED

DSH

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SEX

Male Neutered

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

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