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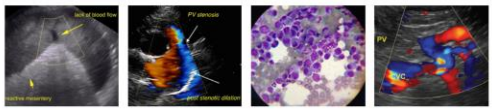

SonoPath
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PATIENT
Oliver Shurtleff

SPECIES
Feline

BREED
DSH

SEX
Male Neutered

AGE
2 years

WEIGHT
10.7lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
New England Animal Medical Center

REFERRING VET
Dr. Fernandez

INVOICE
22282

DATE
12/6/21

PRESENTING CLINICAL SIGNS

History: Recheck echo. History CHF, original diagnosis made in Dec 2020. At that time, echo showed mild LVE, reduced systolic function with marked thinning of inferior septum/inferior wall c/w infarct.; moderately dilated LA. Current presentation: Doing well at home; good appetite, playful.
-Current medications: Atenolol 25 mg, 1/4 SID, Pimobendan 1.25 BID; Clopidogrel 75 mg, 1/4 SID; Lasix 12.5 mg, 1/2 AM, 1/4 PM.
-Pertinent previous echo findings (3/15/21 Mark Stamoulis, DVM, DACVIM): LA 1.7 cm; LA:Ao 1.68; IVS 0.29 cm; PW 0.41 cm; moderate LAE, normal IVS and PW thicknesses, thinned, hypokinetic free wall c/w infarct; mild RAE, moderate MR.

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 25mm/s, 20mm/mV. The underlying rhythm is sinus in origin with an average heart rate of 200bpm (range 188-214bpm). P for every QRS complex and vice versa. P and QRS morphologies are positive. Frequent APC's throughout with periods of bigeminy. Occasional VPCs. No obvious couplets, triplets, or sustained tachyarrhythmias are appreciated.
ECG diagnosis: Sinus rhythm with frequent APCs and VPCs.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: The LV is dilated with decreased systolic function overall. The LV appears spherical. The morphology of the LV is asymmetric with a significantly thinned/infarcted free wall and relatively normal remaining wall thickness. Papillary muscles appear asymmetric as well with diffuse remodeling.
Left atrium: The left atrial is mildly dilated with no spontaneous contrast seen. No obvious organized thrombus in the body or auricular appendage.
Mitral valve: The mitral valve is normal in form and function, with no obvious prolapse. Mild central mitral regurgitation.
Aortic valve/aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity. No aortic insufficiency.
Right ventricle: Normal right ventricular diameter and morphology.
Right atrium: Mild right atrial enlargement with no spontaneous contrast.
Tricuspid valve: The tricuspid valve appears normal with mild tricuspid regurgitation.
Pulmonic valve/pulmonary artery: The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal pulmonic outflow velocity.
Pericardium/other: No pericardial effusion. No pleural effusion. No obvious cardiac masses.

2-Dimensional Measurements

Ao diam (cm)	1.1
LA diam (cm)	1.54
LA:Ao (Swe)	1.4
IVS thickness (cm)	0.46
LVID diastole (cm)	2.08
PW thickness (cm)	0.46
LVID systole (cm)	1.6
FS (%)	24

Doppler Measurements

PV Vmax (m/s)	1.2
AoV Vmax (m/s)	0.9
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

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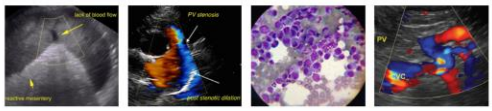

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INTERPRETATION OF THE FINDINGS

End-stage cardiomyopathy persists with a markedly abnormal left ventricle. While the LV is dilated with asymmetric dysfunction and likely an infarcted region, this is similar to what is described in the 2020 study. Additionally, the LA is only mildly dilated which would indicate relative stability overall. Compared to the prior study, these findings are quite similar which is remarkable given both the timeframe and severity of the findings.

The ECG is highly irregular with frequent premature beats from the atria and the ventricles. While significant, there are no sustained runs of tachycardia appreciated, such as AF or VT. This patient is at exceedingly high risk for atrial fibrillation, VT and/or sudden death and this should be expressed to the owner. That being said, in a playful stable cat who is doing well at home, I would not necessarily change the antiarrhythmic therapy at this time.

The medication regimen is appropriate given what is seen here, and given that the patient is doing well at home, no changes are indicated at this time. This patient is still considered end-stage despite overall lack of progression and CHF, malignant arrhythmias and/or sudden death are possible at any time. Given the overall prognosis once CHF is diagnosed, this cat has already outlived expectation and hopefully will continue to do so.

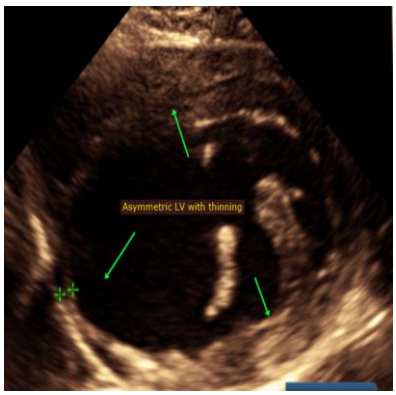
RECOMMENDATIONS

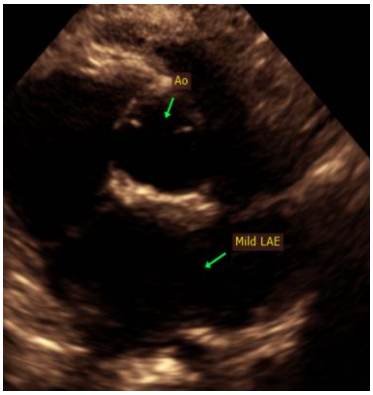
- Continue Plavix, Lasix, Atenolol and Pimobendan as prescribed.
- Monitor renal values every 3-4 months going forward.
- If respiratory signs developed, consider addition of Spironolactone 6.25mg PO q12h.
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.
- Elective anesthesia, steroids and/or fluid therapy is not advised.

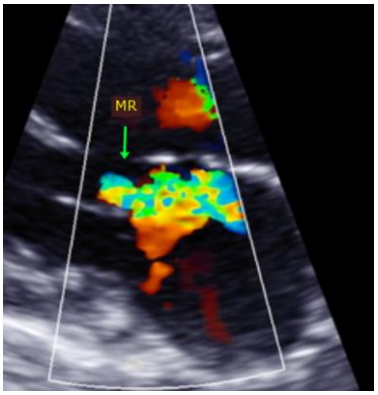
PLAN

- Recheck echocardiogram in 6 months to assess for progressive issues.

IMAGES







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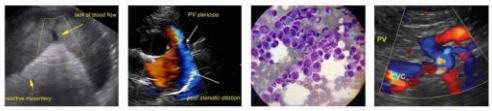

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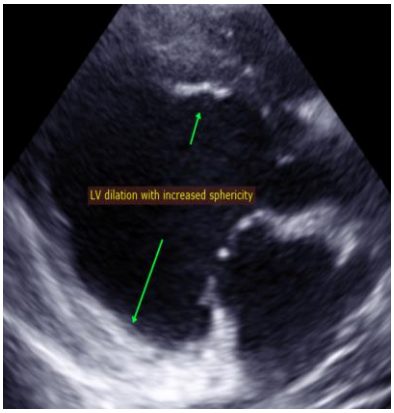

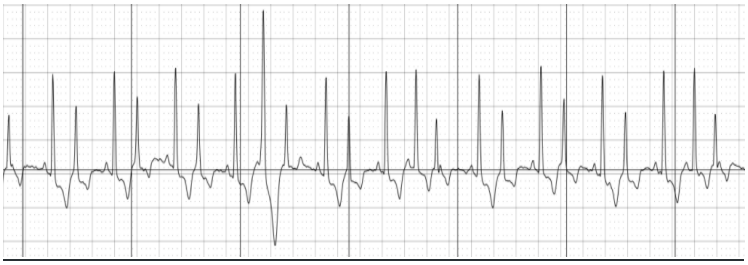

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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