



PATIENT PRESENTING CLINICAL SIGNS

Baby Cleo Stary

History: Grade II/VI heart murmur; no clinical signs. Echocardiogram prior to anesthesia for dental procedure. BP: 148,149,150mmHg.

SPECIES

Feline

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 from an Alivector phone monitor (50s duration 25mm/s and 10mm/mV). The underlying heart rate is reasonable; however there are no 2 consecutive sinus beats. Frequent VPC's are identified throughout in a bigeminal rhythm. VPC's appear monomorphic. No couplets, triplets or runs of VT are appreciated. ECG diagnosis: Ventricular bigeminy.

BREED

DLH

SEX

Female Spayed

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.

Left ventricle: The LV diameter is borderline with borderline function. The LV wall thicknesses are irregular with regions of borderline thickening and regions of thinning. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are remodeled and hyperechoic. The endocardium appears remodeled.

Left atrium: The left atrium is moderately dilated. No obvious smoke or thrombi seen.

Mitral valve: The mitral valve appears mildly thickened with moderate central MR. No obvious systolic anterior motion is seen.

Aortic valve/Aorta: The aortic valve is normal. No obvious stenosis. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.

Right ventricle: Mild right ventricular dilation.

Right atrium: The right atrium is mildly dilated.

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: No pericardial or pleural effusion noted. No obvious cardiac masses.

AGE

14 years

WEIGHT

9.7lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Wignall Animal Hospital

REFERRING VET

Dr. DeMarco

INVOICE

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DATE

8/26/21

2-Dimensional Measurements

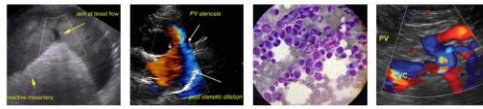
Ao diam (cm)	1.0
LA diam (cm)	1.8
LA:Ao (Swe)	1.8
IVS thickness (cm)	0.42
LVID diastole (cm)	1.8
PW thickness (cm)	0.59
LVID systole (cm)	1.2
FS (%)	37

Doppler Measurements

PV Vmax (m/s)	0.8
AoV Vmax (m/s)	1.5
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

The finding of significant left atrial enlargement in the face of borderline yet irregular LV wall thickness is most consistent with Unclassified Cardiomyopathy (UCM); however, end-stage HCM can also have this appearance. Moderate left atrial dilation is present in addition to significant LV remodeling and fibrosis which indicates diastolic dysfunction. Additionally, the systolic function appears borderline which may be exacerbated by the arrhythmia. Finally, the ECG confirms ventricular bigeminy indicating every other beat is a VPC. VPCs in this case are certainly secondary to structural disease, likely exacerbated by stress.



PATIENT

Baby Cleo Stary

Regardless of categorical classification, the finding of atrial dilation and arrhythmic disease confers risk for progression in the future and medications should be considered. Pimobendan can be considered given the totality of the findings. Additionally, Plavix may be reasonable given atrial dilation to help decrease the risk of a blood clot event in the future. If the patient is able to be medicated, these are recommended as below.

SPECIES

Feline

Additionally, we must determine if treatment is indicated for the arrhythmia. In an asymptomatic cat, it is reasonable to simply monitor going forward given only single VPCs identified. That being said, bigeminy puts the patient at higher risk for complications and/or sudden death in the future, and you could argue Sotalol would a reasonable option. If elected I would consider a very low dose, with careful monitoring of heart rate and blood pressure once initiated. I must reiterate that in an asymptomatic cat it is also reasonable to simply monitor for any clinical signs at home before starting any medications. Discussion with the owner is advised.

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DLH

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AGE

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The long-term prognosis given the totality of the findings is guarded; however, there is a highly variable rate of progression in cats with sub-clinical disease. There will always remain risk for progression to CHF and development of blood clots in the future. Monitoring is certainly advised, particularly should any respiratory signs, collapse or significant lethargy be noted in the future.

WEIGHT

9.7lbs

RECOMMENDATIONS

- Consider institute blood thinner Plavix 75mg tabs; Give ¼ tab by mouth every 24 hours (NOTE: bitter along cut edge, may cause foaming at the mouth; coat in entirety).
- Consider institute Pimobendan (off label use) 1.25mg PO q12h.
- Consider use of Sotalol versus monitoring; if elected recommend Sotalol 0.2mg/kg PO q12h in a compounded liquid. Recheck ECG/BP in 1-2 weeks to assess response.
- If patient develops lethargy or collapse, immediate recheck ECG is recommended to screen for malignant sustained arrhythmias.
- **Elective anesthesia is not advised.**
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes, collapse and/or signs of a blood clot event (paralysis, neurologic changes, etc.)

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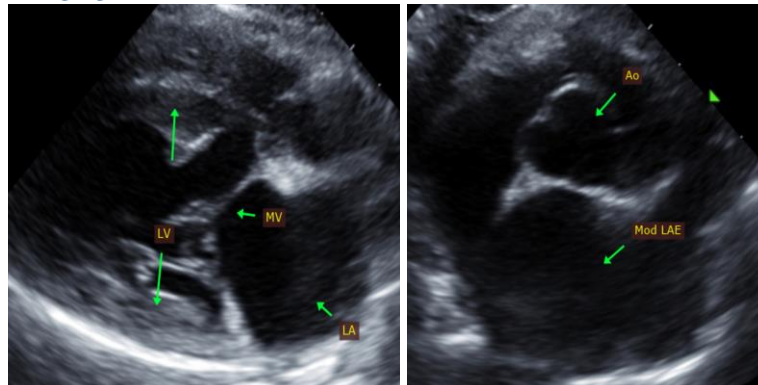
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PLAN

- Recheck BP and ECG every 3-4 months lifelong.
- Recheck echocardiogram in 6 months, sooner if clinical signs arise

IMAGES





PATIENT

Baby Cleo Stary

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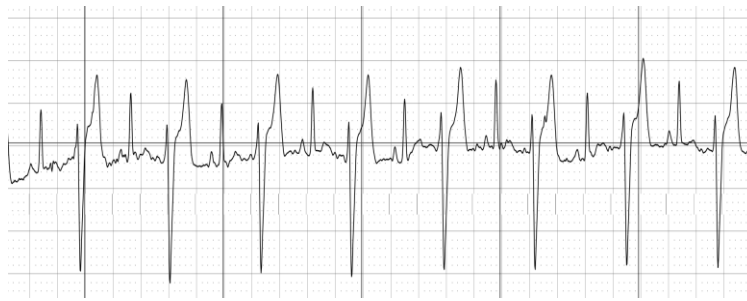
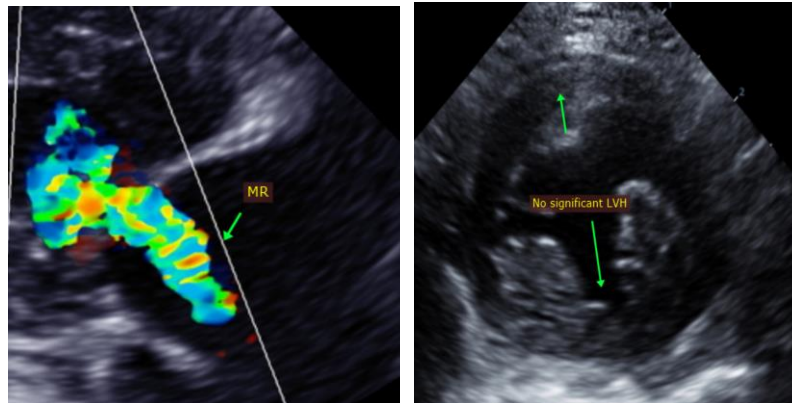
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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