



PATIENT
Kagura Schumacher

PRESENTING CLINICAL SIGNS

History: Tachycardia (260bpm). Early renal disease. Proteinuria. Hypertension. BP: 178, 136mmHg.
 -Current medications: Amlodipine 2.5mg ½ tab q24h; since 10/2022.
 -Abnormal PE/Chem/CBC/UA Results: ProBNP 154, SDMA 24, BUN 53, Creat 3.1, usg 1.010 3+ urine protein, Na 145, Cl 111.

SPECIES
Feline

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

BREED
DSH

A single lead ECG is available; 50mm/s, 20mm/mV. The average heart rate is 230bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. No ectopic beats, pauses or dysrhythmias observed.

SEX
Female Spayed

ECG diagnosis: Normal sinus tachycardia.

AGE
13 years

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is mildly increased in dimension. There is a diffusely hyperechoic endocardium consistent with fibrosis. Mild symmetric papillary muscle hypertrophy and remodeling. The right ventricle is subjectively normal in size and morphology. There is no left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. Trace TR. Normal LVOT velocity. There is no obvious systolic anterior motion (SAM) of the mitral valve present. No MR. There is no pericardial effusion noted. No pleural effusion appreciated. No obvious cardiac tumors.

WEIGHT
7.4lbs

CARDIAC CHART

INTERPRETED BY
Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

| FELINE CARDIAC PARAMETERS | BODY WEIGHT (kg) | HR (BPM) | IVSd (cm) (Moise, Pipers) | LVIDd (cm) (Moise, Pipers) | LWVd (cm) (Moise, Pipers) | FS (%) | EF (%) |
|---------------------------|------------------|---------------------------------|--|----------------------------|---------------------------|----------------|-------------|
| NORMAL PARAMETER | ----- | 150-240 | 0.35-0.55 | <2 (mean 1.5) | 3.5-0.55 | 35-67 | 80-100 |
| PATIENT | 3.4 | 240 | 0.64 | 1.0 | 0.60 | 68 | 96 |
| FELINE CARDIAC PARAMETERS | LA/AO (Boon) | LA/AO HEART BASE (Swe) (Abbott) | LA 2D short axis Base view (cm) (Abbott) | | LVOT VEL (m/s) | RVOT VEL (m/s) | E max (m/s) |
| NORMAL | <1.5 | <1.3 | <1.2 | | <1.6 | <1.3 | <0.9 |
| PATIENT | 1.66 | 1.2 | 1.2 | | 1.0 | 1.1 | NM |

**Note: All measurements based upon multi-modal images and methods. An average value is reported.*
 Adapted from June Boon, Veterinary Echocardiography, 1998
 Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.

IMAGING PERFORMED BY
Jenna Walsh, CVT

HOSPITAL NAME
Faithful Friends
Animal Clinic

REFERRING VET
Dr. Hiett

INVOICE
31538

DATE
6/26/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. In this cat with known systemic hypertension, this may be the explanation. Follow up is recommended. Additionally, pseudohypertrophy may be contributing given reported azotemia. Regardless, degree of disease is mild, with only mild LVH and no LA dilation. This would indicate the risk for clinical issues is low at this time. No additional issues are identified.



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The ECG does show a sinus tachycardia, which is typically benign in origin. While mild HCM would not cause tachycardia per se, a combination of stress and volume depletion is suspected.

SPECIES

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No medications are indicated prior to significant atrial dilation. It is important to note that no medications have been shown to definitively alter long term outcome at this stage, particularly in the absence of SAM.

BREED

DSH

The reported blood pressures are too variable to interpret. Ideally obtain serial measurements in a controlled, low stress environment and continue until the readings plateau within 5mmHg of variability for 3+ readings. Up titration of Amlodipine or additional vasodilation may be warranted depending on persistence of the readings, underlying conditions, etc. Consider IM consultation in this complicated case.

SEX

Female Spayed

Monitor at home for any respiratory issues or signs of blood clot events (neurologic change, paralysis, etc.). Anesthetic risk is considered mild, however judicious fluid administration is advised if needed with careful RR/RE monitoring to screen for fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Risk for complication with steroid use typically follows LA dilation, which in this case is mildly elevated. If needed, monitoring of RR/RE is advised particularly in the initiation phase.

AGE

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WEIGHT

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PLAN

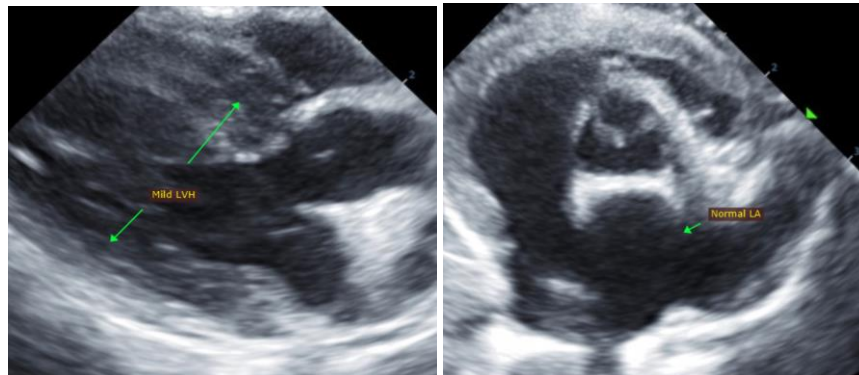
A screening blood pressure and T4 are recommended, then every 6 months lifelong.

A recheck echocardiogram is recommended in 6 months to assess for progression, sooner if any issues arise in the interim.

INTERPRETED BY

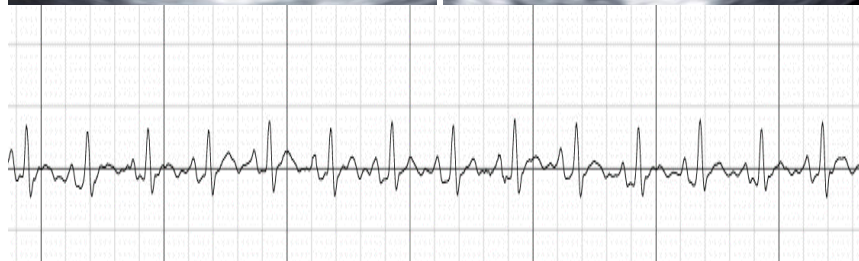
Maggie Machen
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(Cardiology)

IMAGES



IMAGING PERFORMED BY

Jenna Walsh, CVT



HOSPITAL NAME

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REFERRING VET

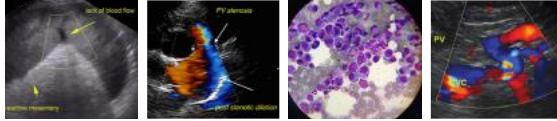
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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