



**PATIENT** Manny Cuevas  
**PRESENTING CLINICAL SIGNS** History: Grade III/VI heart murmur. Hypercalcemia, 13.1; Azotemia: BUN 35, creat 2.5. Urinary bladder and renal stones.

**SPECIES** Feline  
**ECHOCARDIOGRAM FINDINGS** 2D, m-mode, color flow and Doppler imaging is available.  
**Left ventricle:** The left ventricular wall is minimally increased in dimension. There is a diffusely hyperechoic endocardium consistent with fibrosis. Mild symmetric papillary muscle hypertrophy and remodeling.  
**BREED** DMH  
**Left atrium:** The left atrium is normal in dimension. No obvious spontaneous contrast or thrombi seen.  
**SEX** Male Neutered  
**Mitral valve:** The mitral valve is normal in structure and mobility. No obvious systolic anterior motion is seen.  
**Aortic valve/aorta:** The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.  
**AGE** 11 years  
**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.  
**WEIGHT** 15.7lbs  
**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.  
**Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 188bpm.

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**2-Dimensional Measurements**

Ao diam (cm)	1.0
LA diam (cm)	1.2
LA:Ao (Swe)	1.2
IVS thickness (cm)	0.61
LVID diastole (cm)	1.35
PW thickness (cm)	0.60
LVID systole (cm)	0.41
FS (%)	69

**Doppler Measurements**

PV Vmax (m/s)	1.5
AoV Vmax (m/s)	1.1
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**INTERPRETATION OF THE FINDINGS**

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. Both should be ruled out in this case as contributing factors. The patient is azotemic and volume changes can also lead to this appearance. Follow up is advised. Regardless, the degree of disease is mild, with only minimal LVH and no LA dilation. This would indicate the risk for clinical issues is low at this time. No additional issues are identified. No obvious cause of the murmur is seen in this study, making it likely physiologic in origin.

**HOSPITAL NAME**

Norfolk County  
Veterinary Service

**REFERRING VET**

Dr. Poor

**INVOICE**

24194

**DATE**

5/15/22

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.



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**SPECIES**

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**BREED**

DMH

**SEX**

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**AGE**

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**WEIGHT**

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**RECOMMENDATIONS**

- Given these findings, no medications are indicated.
- No cardiac contraindication for general anesthesia. Mild IV fluid restriction is advised.
- 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.
- Monitor at home for any respiratory issues or signs of blood clot events (neurologic change, paralysis, etc.).

**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.

**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.

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