



**PATIENT**

Jack Blais

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Male Neutered

**AGE**

14 years

**WEIGHT**

11.56lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**PRESENTING CLINICAL SIGNS**

History: Jack referred to evaluate a heart murmur noted in Dec 2020. History of dermatopathy treated with injections of depomedrol as well as oral prednisolone and a change to a Z/D diet. A ProBNP in December was elevated at 427 with a normal thyroid level. No coughing but does sneeze occasionally with some discharge noted from his nose. He has had some epistaxis noted. Good appetite. He has a mass on his face that needs to be addressed surgically. CV/RESP: NSR, grade III/VI sternal murmur, PSS, lung fields clear, compressible thorax. BP: 200mmHg x 4. No medications. \*Sedated with propofol for study.

**ECHOCARDIOGRAM FINDINGS**

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

**Left ventricle:** The LV diameter is decreased with adequate myocardial function. The LV wall thicknesses are moderately increased with regions of irregularity. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly hypertrophied and hyperechoic.

**Left atrium:** The left atrium is normal. No obvious spontaneous contrast or thrombi seen.

**Mitral valve:** The mitral valve is normal in structure and mobility. No obvious systolic anterior motion is seen. Trace MR.

**Aortic valve/Aorta:** The aortic valve is normal in morphology and mobility. Mildly elevated aortic outflow velocity. Mild aortic insufficiency. The ascending aortic segment appears dilated.

**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.

**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 150bpm.

**IMAGING**

**PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary  
Services

**REFERRING VET**

Dr. Masloski

**INVOICE**

22315

**DATE**

12/7/21

**2-Dimensional Measurements**

Ao diam (cm)	1.1
LA diam (cm)	1.2
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.66
LVID diastole (cm)	1.3
PW thickness (cm)	0.71
LVID systole (cm)	0.52
FS (%)	62

**Doppler Measurements**

PV Vmax (m/s)	0.62
AoV Vmax (m/s)	3.0
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

**INTERPRETATION OF THE FINDINGS**

HCM is a rule out diagnosis, once hypertension and hyperthyroid disease are ruled out. In this patient with severely elevated blood pressure, an aortic leak and a dilated aortic segment, this is likely reflective of hypertensive cardiomyopathy. Some component of primary HCM is not ruled out until the blood pressure is well controlled for an extended period of time. Regardless, vasodilation is recommended to help stabilize the situation. Additionally, screening for causes of SHT is recommended (PLN, adrenal tumor, etc.). The LA is normal, indicating the risk for complication is low at this time. The murmur appears to be due to an LVOT obstruction secondary to the hypertrophy. I would not necessarily



**PATIENT** treat with Atenolol at this time; however, follow up is advised. Prognosis is guarded, due to the highly variable rates of progression with subclinical feline cardiomyopathy.  
**Jack Blais**

**RECOMMENDATIONS**

- SPECIES** Feline
- Given these findings, no cardiac specific medications are indicated.
  - Recommend Amlodipine to effect and screen for underlying causes of SHT.
  - Monitor BP and T4 every 6 months.
- BREED** DSH
- 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). A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance.
- SEX** Male Neutered
- Risk for complication with steroid use typically follows LA dilation, which in this case is low. That being said, any cat can experience unexpected signs of intolerance and monitoring of RR/RE is advised particularly in the initiation phase.
  - Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).

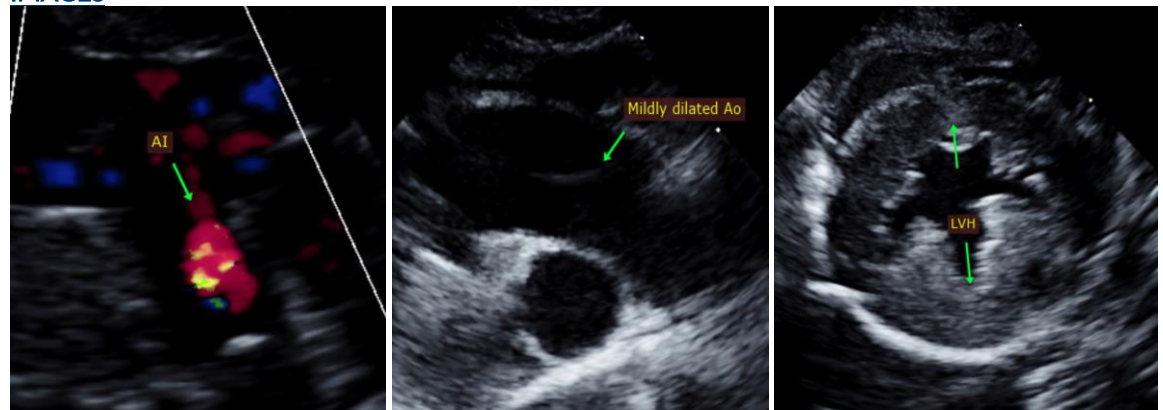
**PLAN**

- AGE** 14 years
- Recommend recheck echocardiogram in 6 months to screen for progression, sooner if any clinical signs arise in the interim.

**WEIGHT**

11.56lbs

**IMAGES**



**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary  
Services

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.

**REFERRING VET**

Dr. Masloski

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.

**INVOICE**

22315

**Maggie Machen Lamy, DVM**  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com

**DATE**

12/7/21

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