

PATIENT

Gizmo Terchiack

PRESENTING CLINICAL SIGNS

History: Grade II-III/VI systolic murmur; no clinical signs.

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

5 years

WEIGHT

9.5lbs

ECHOCARDIOGRAM FINDINGS

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

Left ventricle: The LV diameter is normal with adequate myocardial function. The LV wall thicknesses are irregular; however, no obvious thickening is seen. There is a mildly hyperechoic endocardium consistent with fibrosis. The papillary muscles appear hyperechoic. The endocardium appears remodeled.

Left atrium: The left atrium is mildly dilated. No obvious spontaneous contrast or thrombi seen.

Mitral valve: The mitral valve is normal in structure and mobility. Systolic anterior motion is seen with mild MR.

Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Severely increased aortic outflow velocity with a dynamic profile. No aortic insufficiency.

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 188bpm.

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

2-Dimensional Measurements

Ao diam (cm)	0.8
LA diam (cm)	1.5
LA:Ao (Swe)	1.6
IVS thickness (cm)	0.51
LVID diastole (cm)	1.5
PW thickness (cm)	0.42
LVID systole (cm)	0.4
FS (%)	75

Doppler Measurements

PV Vmax (m/s)	1.4
AoV Vmax (m/s)	5.1
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

IMAGING

PERFORMED BY

Pamela Harrigan,
RDCS

INTERPRETATION OF THE FINDINGS

The cause of the murmur is a significant LVOT obstruction and mitral regurgitation. What is unusual is the LV is NOT significantly hypertrophied, despite a severe outflow tract obstruction. It is unclear if this is a form of early HOCM, or a form of Unclassified Disease. Regardless, the degree of obstruction and MR are significant, and mild LA dilation has developed. While the risk of spontaneous CHF and/or a thrombotic event is currently low, there is concern for progression in the future. Going forward a screening BP and T4 are recommended every 6 months, as both can exacerbate disease. No additional issues are identified.

HOSPITAL NAME

East Boston Animal
Hospital

REFERRING VET

Dr. Chopra

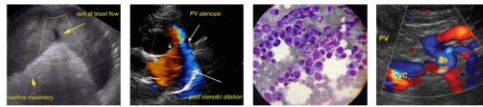
INVOICE

31856

DATE

7/16/23

While no medications have been shown to definitively alter long term outcome at this stage of disease, atenolol is often initiated to decrease the outflow obstruction. Given the degree of obstruction and mild LA dilation, recommend initiate at this time as below. If there is difficulty medicating at home, an alternative approach would be closely monitoring for progression in the next 6 months. Discussion with the owner is advised.



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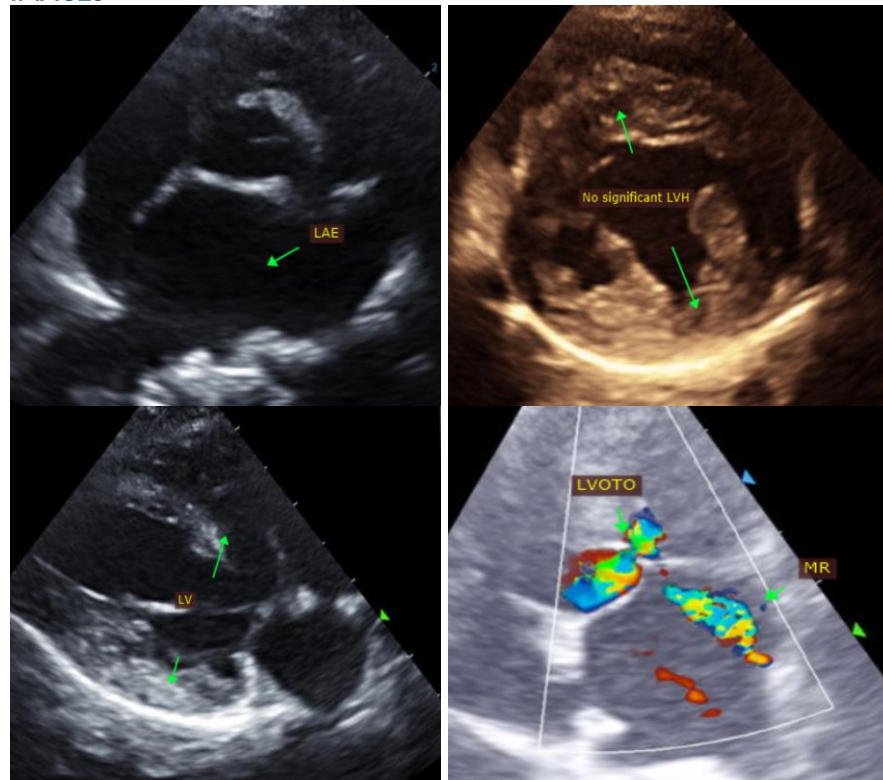
RECOMMENDATIONS

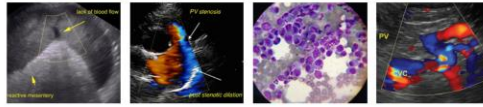
- If able, administer titrating dose of atenolol if able: 25mg tablets; Give ¼ tab once daily. Recheck heart rate in 1-2 weeks with target stressed rate of 140-160bpm 12-24 hours post-administration. Increase as needed until target reached.
- Monitor BP/T4 q6mo.
- Anesthetic risk is considered mild, 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). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, and isoflurane maintenance.
- Risk for complication with steroid use typically follows LA dilation, which in this case is mildly elevated. Monitoring of RR/RE is advised particularly in the initiation phase.
- Monitor at home for any respiratory signs or blood clot events (neurologic change, paralysis, etc.) in the future.

PLAN

- Recommend recheck echocardiogram in 6 months to assess for progression, sooner if clinical issues arise.

IMAGES





PATIENT
Gizmo Terchiack
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.

SPECIES
Feline
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.

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

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

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