



PATIENT
Brutus Schmidt

PRESENTING CLINICAL SIGNS

History: Grade III/VI systolic murmur noted since 2017. No clinical signs. Echo prior to anesthesia for dental procedure. Two weeks ago, started Amlodipine 2.5 mg, 1/2 tap once daily. BP: Pretreatment: 200-230mmHg x 15. Today: 135-155mmHg x 15. ProBNP 958. Sedated with gabapentin and butorphanol.

SPECIES
Feline

ECHOCARDIOGRAM FINDINGS

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

BREED
DSH

Left ventricle: The LV diameter is normal with adequate myocardial function. The LV wall thicknesses are mildly increased globally with regions of irregularity. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles appear hyperechoic and asymmetric with mild hypertrophy. The endocardium appears mildly remodeled.

SEX
Male Neutered

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

AGE

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

16 years

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

WEIGHT
8.3lbs

Right ventricle: Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

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. Mildly increased RVOT velocity with a dynamic profile.

Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.

Heart rhythm: ECG reveals a sinus rhythm with an average HR of 200bpm.

2-Dimensional Measurements

Doppler Measurements

Ao diam (cm)	0.9
LA diam (cm)	1.5
LA:Ao (Swe)	1.6
IVS thickness (cm)	0.69
LVID diastole (cm)	1.3
PW thickness (cm)	0.68
LVID systole (cm)	0.56
FS (%)	57

PV Vmax (m/s)	2.2
AoV Vmax (m/s)	3.0
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

IMAGING PERFORMED BY

Pamela Harrigan,
RDCS

HOSPITAL NAME

Anchor Animal
Hospital

REFERRING VET

Dr.Pietsch

INVOICE

23154

DATE

3/17/22

INTERPRETATION OF THE FINDINGS

The diagnosis is hypertrophic obstructive cardiomyopathy. This indicates LV hypertrophy (mild in this case) with a dynamic LVOT obstruction (SAM) and secondary MR. There is mild left atrial dilation, indicating the risk of spontaneous CHF and/or a thrombotic event, while currently low, may be elevated in the future. Going forward a screening BP and T4 are recommended every 6 months, as both can exacerbate disease. Additionally, there is a dynamic RVOT obstruction, which is a benign flow abnormality that likely contributes to murmur intensity.



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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.

SPECIES
 Feline

These findings may or may not be related to historical hypertension, depending on chronicity. Follow up is advised to monitor for improvement versus progression going forward now that BP is well controlled. Given the abnormal valve motion, primary disease is suspected however.

BREED
 DSH

RECOMMENDATIONS

SEX
 Male Neutered

- 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.

AGE
 16 years

- Monitor BP/T4 q6mo. Continue amlodipine as indicated.
- 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, isoflurane maintenance.

WEIGHT
 8.3lbs

- Monitor at home for any respiratory signs or blood clot events (neurologic change, paralysis, etc.) in the future.

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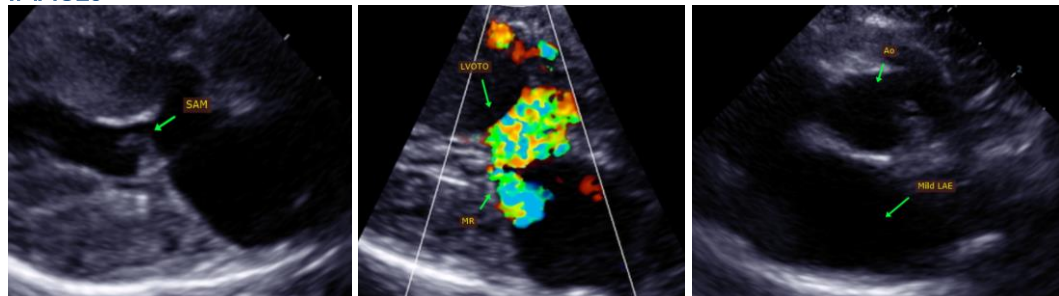
PLAN

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

IMAGES

IMAGING PERFORMED BY

Pamela Harrigan,
 RDMS



HOSPITAL NAME

Anchor Animal
 Hospital

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. Pietsch

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