



PATIENT **PRESENTING CLINICAL SIGNS**

Toby Mowry

History: Gallop arrhythmia, II/IV systolic murmur. Asymptomatic at annual exam. No murmur or gallop noted after starting on Atenolol 25mg - 1/4 tab PO QD. ProBNP 701.

SPECIES **ECHOCARDIOGRAM FINDINGS**

Feline

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 normal, although irregularity is noted. There is a mildly hyperechoic endocardium consistent with mild fibrosis. The endocardium appears mildly remodeled. The papillary muscles are mildly remodeled and hyperechoic.

SEX

Male Neutered

Left atrium: The left atrium is mildly increased in size. No obvious spontaneous contrast or thrombi seen.

AGE

5 years

Mitral valve: The mitral valve is normal in structure and mobility with trace MR. 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.

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

15lbs

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.

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

2-Dimensional Measurements

Ao diam (cm)	1.0
LA diam (cm)	1.35
LA:Ao (Swe)	1.35
IVS thickness (cm)	0.48
LVID diastole (cm)	1.6
PW thickness (cm)	0.58
LVID systole (cm)	0.9
FS (%)	44

Doppler Measurements

PV Vmax (m/s)	0.70
AoV Vmax (m/s)	0.82
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

IMAGING

PERFORMED BY

Pamela Harrigan,
RDMS

HOSPITAL NAME

Wood River Animal
Hospital

INTERPRETATION OF THE FINDINGS

Overtly normal cardiac structure and function. There is mild remodeling and fibrosis of the left ventricular wall, which most likely represents a normal variant. What is more concerning is the LA measures mildly enlarged and the LV wall dimensions are normal, ruling out typical hypertrophic disease. The LA dimension may be a normal variant; however, early unclassified disease is possible. No matter the categorical diagnosis, a cat with any degree of LA enlargement should be followed up closely, as there is evidence of increasing LA pressure which may progress in the future. Serial echocardiography will be necessary to determine progression. No cause for the murmur is identified in this study, making it likely physiologic in origin (i.e., secondary to tachycardia, volume changes, etc.).

REFERRING VET

Dr. Fischer

INVOICE

30384

DATE

4/21/23

While Atenolol and heart rate control can mask a true outflow tract obstruction, there is no evidence of significant SAM in this case. Atenolol will also often mask a benign murmur, which is suspected in this case. Based upon what is seen here, there is **no**



PATIENT
 Toby Mowry

indication for its continued use at this time in the absence of a significant LVOTO. No medications indicated prior to significant atrial dilation.

SPECIES
 Feline

A BNP elevation may or may not be explained by the results of this study, with mild changes appreciated. Consider alternative explanations for its elevation, such as elevated blood pressure, or renal insufficiency. A false-positive is also possible.

BREED
 DSH

- RECOMMENDATIONS**
- Discontinue Atenolol as discussed.
 - Consider other possible causes of BNP elevation as discussed.
 - The risk for general anesthesia is low, however heart rate stimulating drugs such as atropine, glycopyrrolate, etc. should be avoided unless medically necessary. With mild LA dilation there may be an elevated risk for fluid overload in this patient and judicious IV fluid use is recommended.
 - Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc).

SEX
 Male Neutered

AGE

5 years

PLAN

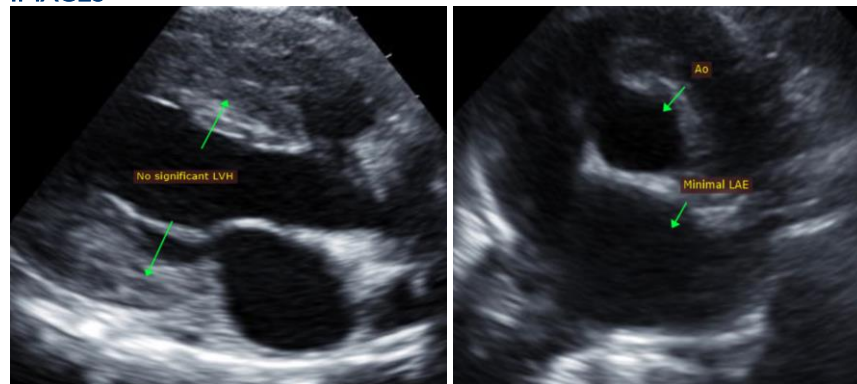
- Recommend recheck echocardiogram in 6 months to screen for progressive atrial dilation and reassess murmur origin.

WEIGHT
 15lbs

IMAGES

INTERPRETED BY

Maggie Machen
 Lamy, DVM
 DACVIM (Cardiology)



IMAGING PERFORMED BY

Pamela Harrigan,
 RDCS

HOSPITAL NAME

Wood River 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. Fischer

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
 30384

Maggie Machen Lamy, DVM
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 info@sonopath.com

DATE

4/21/23

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