

**PATIENT**

Izabella Killian

SPECIES

Feline

BREED

DSH

SEX

Female Spayed

AGE

3.16.07

WEIGHT

9lbs

INTERPRETED BYMaggie Machen Lamy,
DVM, DACVIM
(Cardiology)**HOSPITAL NAME**Churchville Veterinary
Clinic**REFERRING VET**

Dr. Uhland

INVOICE

23294

DATE

3.25.22

PRESENTING CLINICAL SIGNS

History: Recheck echo. Was recently diagnosed 3/3/22 hyperthyroid and started on Methimazole.
 -Pertinent abnormal PE/Chem/CBC/UA Results: 3/3/22 T4 mildly elevated 4.9, Pro BNP significantly elevated 1084, urine protein: crea 0.4.
 -Current medications: Methimazole 2.5mg in AM started 3/18/22
 -Sedation used: Not required to complete full diagnostic ultrasound.
 -Pertinent previous ultrasound results (5/2020 MML): Mild LVH with a septal bulge, SAM. LVOT: 4.0m/s. Mild MR.
 -STAT: Not requested.
 -Imaging performed by: Stephanie Pearce RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is increased in dimension with a focal septal thickening. There is a diffusely hyperechoic endocardium consistent with fibrosis. The endocardium also appears remodeled. Mild papillary hypertrophy noted. The left atrium is normal in dimension. The right atrium is normal in size. The right ventricle appears normal. There is systolic anterior motion (SAM) of the mitral valve present on 2D and color flow; moderately elevated velocity with a dynamic profile. There is mild eccentric mitral regurgitation present secondary to SAM. Trace aortic insufficiency. No other obvious valvular regurgitation is present. RVOT velocity is normal. There is no pericardial effusion noted. No pleural effusion appreciated. No obvious cardiac tumors.

CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) <small>(Moise, Pipers)</small>	LVIDd (cm) <small>(Moise, Pipers)</small>	LWVd (cm) <small>(Moise, Pipers)</small>	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.1		0.77	1.1	0.66	63	90
FELINE CARDIAC PARAMETERS	LA/AO <small>(Boon)</small>	LA/AO HEART BASE (Swe) <small>(Abbott)</small>	LA 2D short axis Base view (cm) <small>(Abbott)</small>	LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)	
NORMAL	<1.5	<1.3	<1.2	<1.6	<1.3	<0.9	
PATIENT	NM	1.2	1.1	3.5	1.5	NM	

Adapted from June Boon, Veterinary Echocardiography, 1998
 Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Hypertrophic obstructive cardiomyopathy (HOCM) persists without evidence of progression. While the obstruction remains significant, the left atrium remains normal indicating low risk for obvious complication. The LV wall thicknesses are similar to the previous study with a focal septal bulge and overall hypertrophy. Trivial aortic insufficiency is noted, and a baseline blood pressure is recommended. No additional issues are identified.

Given these findings, the debate over the use of Atenolol remains relevant. Given a lack of progression compared to nearly 2 years ago, it is reasonable to simply continue to monitor going forward. BP and T4 should be monitored every 6 months, particularly in light of recent diagnosis.

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

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.

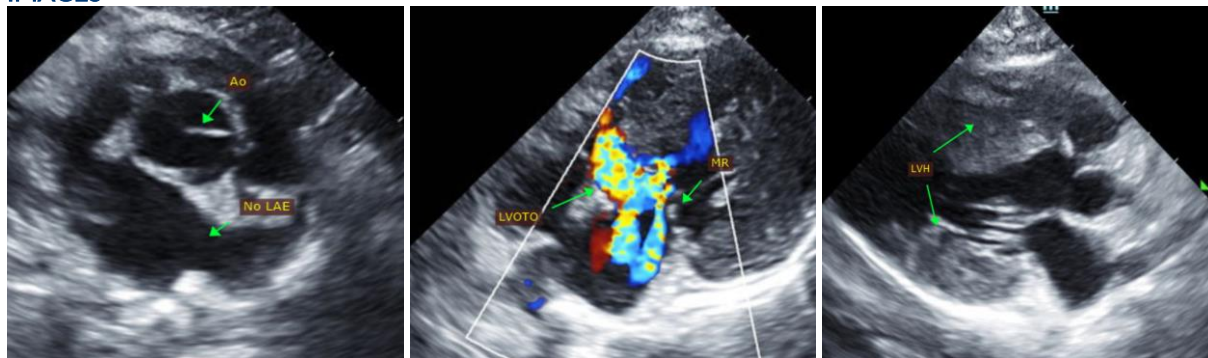
PLAN

If elected, administer titrating dose of atenolol: 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.

Screening blood pressure and T4 is recommended every 6 months lifelong.

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

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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