



PATIENT

Victoria Walker

PRESENTING CLINICAL SIGNS

History: Grade 3/6 heart murmur. ProBNP: 145. BP 194/117 (146) averaged mmHg.
-Current medications: Phenylpropanolamine 10mg every 12 hours - urinary incontinence.

SPECIES

Feline

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal with no evidence of hypertrophy. There is a diffusely hyperechoic endocardium consistent with fibrosis and ventricular remodeling. Papillary muscle hypertrophy. The right ventricle is subjectively normal in size and morphology. There is mild left atrial enlargement present. No right atrial enlargement present. Mildly elevated RVOT velocity with a dynamic profile. There is systolic anterior motion (SAM) of the mitral valve present, with an elevated LVOT velocity (dynamic profile). There is mild eccentric mitral regurgitation present secondary to SAM. No other obvious valvular regurgitation is present. There is no pericardial effusion noted. No pleural effusion appreciated.

BREED

Devon Rex

SEX

Female SPayed

AGE

8 years

CARDIAC CHART

WEIGHT

6.3lbs

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	2.9	200	0.42	1.3	0.40	60	92
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		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	1.1	1.3	1.1		2.1	2.4	NM

INTERPRETED BY

Maggie Machen Lamy,
DVM DACVIM
(Cardiology)

*Note: All measurements based upon multi-modal images and methods. An average value is reported.

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.

IMAGING PERFORMED BY

Kelly Reschny, RVT

HOSPITAL NAME

Gagemount Animal
Hospital

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is an LVOT obstruction and mitral regurgitation. What is unusual is the LV is NOT significantly hypertrophied, despite a significant 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. There is also a dynamic RVOT obstruction, which appears benign. 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.

REFERRING VET

Dr. Keir

INVOICE

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The reported blood pressure is elevated, and should be reassessed for accuracy particularly given no reported clinical signs of severe hypertension (retinal changes, etc) or evidence of LVH on echo. Ideally obtain serial measurements in a controlled, low stress environment and continue until 3 consecutive readings plateau within 5mmHg of variability. If persistently >180mmHg despite a relatively calm demeanor, recommend

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institution of amlodipine to effect. Additionally if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushings, PLN, adrenal tumor, etc), as primary disease is relatively uncommon and a rule out diagnosis.

SPECIES

Feline

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.

BREED

Devon Rex

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. Risk for complication with steroid use typically follows LA dilation, which in this case is mildly elevated. If needed, monitoring of RR/RE is advised particularly in the initiation phase.

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

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6.3lbs

PLAN

Screening BP/T4. 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.

INTERPRETED BY

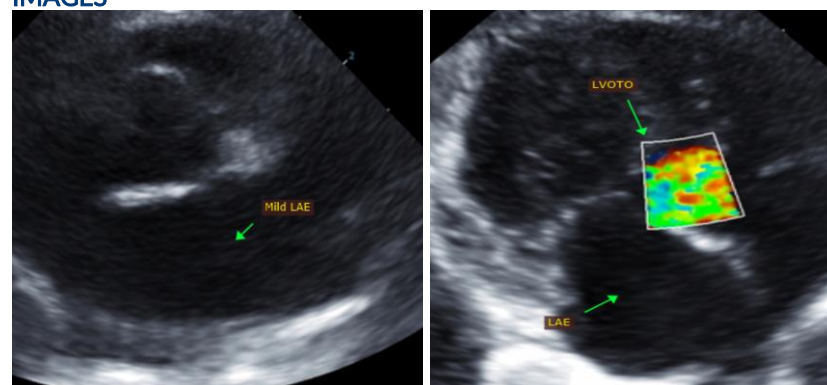
Maggie Machen Lamy,
DVM DACVIM
(Cardiology)

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

IMAGES

IMAGING PERFORMED BY

Kelly Reschny, RVT



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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.

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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



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findings or if I can be of any further assistance, please contact me.

SPECIES

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