



PATIENT

Sebastian Hunt

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

PRESENTING CLINICAL SIGNS

History: Presented for vomiting and sneezing. Grade 3/6 heart murmur. Assess prior to anesthesia. -Abnormal PE/Chem/CBC/UA Results: ProBNP abnormal. Hyperthyroid being managed with felimazole.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is mildly hypertrophied. 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 to moderate left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. There is systolic anterior motion (SAM) of the mitral valve present, with a mildly elevated LVOT velocity. 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. Tachycardia throughout.

CARDIAC CHART

AGE

15 years

WEIGHT

12.4lbs

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging MI

REFERRING VET

Briarwood Veterinary Hospital

INVOICE

28456

DATE

1/19/23

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LWVd (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	5.6	NM	0.60	1.27	0.62	62	93
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	NM	1.6	1.58		2.1	1.6	NM

**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.*

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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 to moderate left atrial dilation, which is concerning for progression in the future. A screening BP and T4 are recommended every 6 months, as both can exacerbate disease. Finally, **the patient is notably tachycardic throughout the study and an ECG is strongly recommended prior to anesthesia.**

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 hypertrophy 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.

Pending ECG assessment, anesthetic risk is considered moderate and judicious IV fluid rates are advised to avoid fluid overload. Additionally drugs that stimulate heart rate should be avoided

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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.

SPECIES

Feline

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

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PLAN

Screening BP, T4 and ECG as discussed. 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.

SEX

Male Neutered

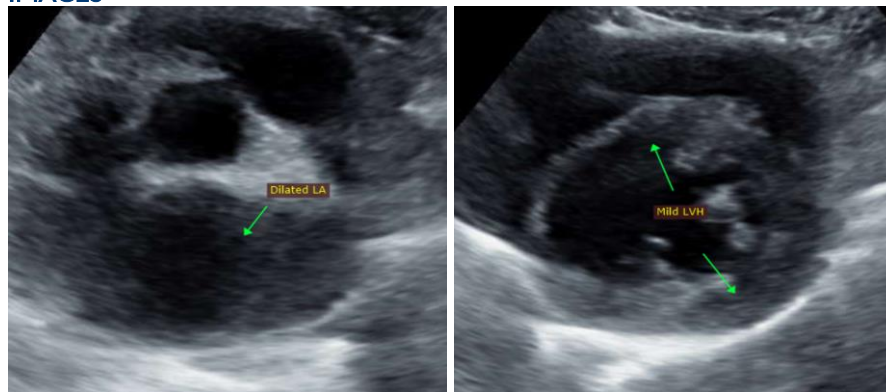
Recommend recheck echocardiogram in 6 months to assess for progression, sooner if clinical

IMAGES**AGE**

15 years

WEIGHT

12.4lbs

**INTERPRETED BY**

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

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.

IMAGING PERFORMED BY

Amy Mayhew, LVT

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

HOSPITAL NAME

SVS Imaging MI

Maggie Machen Lamy, DVM
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