



PATIENT

Champ Schuaman

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

2011

WEIGHT

8.25lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Stevenson Village
Veterinary Hospital

REFERRING VET

NP

INVOICE

32099

DATE

8.2.23

PRESENTING CLINICAL SIGNS

History: Weight loss noted in Jan 2023 along with a new heart murmur. FeLV/FIV test was negative. Lab work in May concerning for hyperthyroidism. Normal T4 but elevated fT4. Started methimazole and had a dental procedure a month later. Soon after dental procedure, o noticed progressively decreasing appetite and continued weight loss. Lab work monitoring showed T4 was 1.5, ALT was mildly increased compared to starting methimazole. Reevaluated 7/27/23 for continued poor appetite, lethargy, and weight loss.

-Pertinent abnormal PE/Chem/CBC/UA Results: 5/15/23 - ALT 197, AST 109, creat 1.8, T4 2.5, fT4 57.5. 6/22/23 - fT4 21.3 (after starting methimazole 2.5 mg BID). 7/14/23 - ALT 254, AST 123, creat 1.8, CK 2378, T4 - 1.5. 7/27/23 (in house) - ALT 105, Alb 2.5

-Current medications: Methimazole 2.5 mg BID x 2 months, Cerenia 8 mg SID x 6 days.

-Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results: No previous.

-STAT: Not requested

-Imaging performed by: Stephanie Warga RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is moderately hypertrophied with a focal septal bulge. There is a diffusely hyperechoic endocardium consistent with fibrosis and ventricular remodeling. Mild papillary muscle remodeling. The right ventricle is subjectively normal in size and morphology. There no left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. Mild systolic anterior motion (SAM) of the mitral valve present, with an elevated dynamic LVOT velocity. There is trace eccentric mitral regurgitation present secondary to SAM. No other significant valvular regurgitation is present. Trace AI. 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>	LVWd (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	3.7	NM	0.79	1.4	0.71	50	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	NM	1.2	1.2		2.0	0.9	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

The diagnosis is hypertrophic obstructive cardiomyopathy (HOCM). This indicates LV thickening (moderate in this case) with a dynamic LVOT obstruction (SAM) and secondary mitral regurgitation as the cause of the heart murmur. The underlying hypertrophy may be primary or secondary to hyperthyroidism given the relatively recent diagnosis. Follow up will shed light on this (ie monitoring for regression with adequate stabilization). Regardless, there is no left atrial enlargement present, indicating the risk of spontaneous CHF and/or a thrombotic event is currently low. Trivial aortic insufficiency is noted, and a baseline blood pressure is recommended. No additional issues are identified.

Even with disease identified here, a normal left atrial dimension would suggest that current clinical issues are unlikely to be cardiogenic in origin. Other possibilities should be explored. Additionally, while risk for steroid use typically follows LA enlargement (normal in this case), the degree of hypertrophy is concerning, and fluid overload is certainly a possibility. Close monitoring of RR/RE, particularly during the initiation phase, is recommended if steroids are necessary.

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 today's findings, this is not clearly warranted at this time.

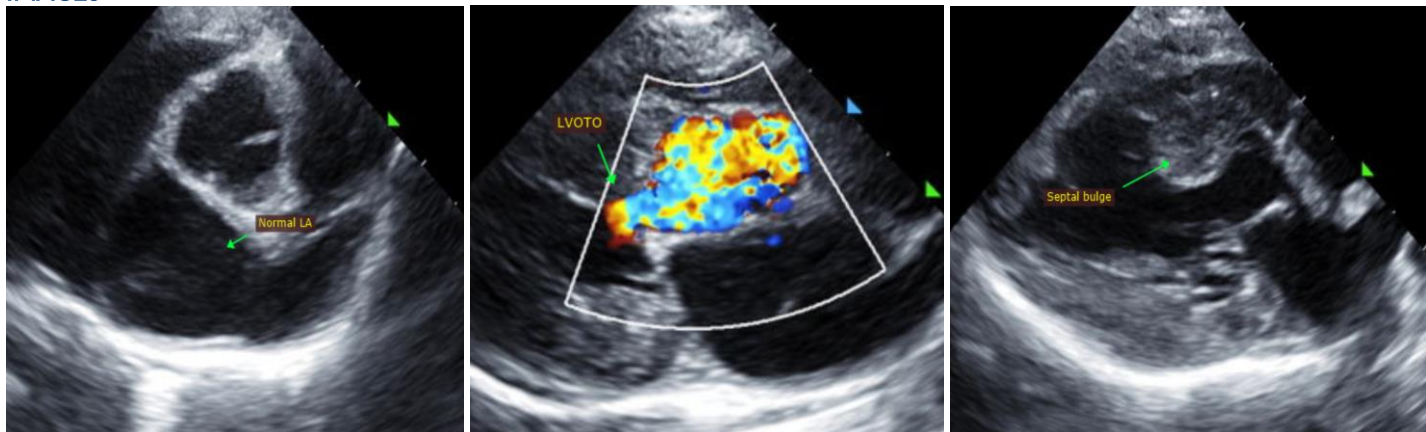
Monitor at home for any respiratory signs or blood clot events (neurologic change, paralysis, etc.). Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (ketamine, glycopyrrolate, atropine).

PLAN

Further systemic evaluation for current clinical issues is recommended. Screening blood pressure and T4 are recommended every 6 months.

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.

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