



PATIENT

Socks Ominger

SPECIES

Feline

BREED

DLH

SEX

Male Neutered

AGE

14 years

WEIGHT

10.8lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Dr. Belan, DVM

HOSPITAL NAME

Healthy Paws Forward
Animal Clinic

REFERRING VET

Dr. Boisen

INVOICE

20433

DATE

8/9/21

PRESENTING CLINICAL SIGNS

History: 3/6 murmur. Tachycardia. Diagnosed as hyperthyroid on date of exam. Dyspneic.

-Current medications: Furosemide 2mg/ kg per os BID.

-Chest x rays: Mild cardiomegaly.

-Abnormal PE/Chem/CBC/UA Results: Elevated T4.

ECHOCARDIOGRAM FINDINGS

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

CARDIAC CHART

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	4.9	270	0.80	1.2	0.83	52	86
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	1.7	1.8	1.7		4.2	1.8	NM
<p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i></p> <p>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.</p>							

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The diagnosis is hypertrophic obstructive cardiomyopathy. This indicates LV hypertrophy (moderate to severe in this case) with a dynamic LVOT obstruction (SAM) and secondary MR. The hypertrophy is significant and there is moderate left atrial enlargement, indicating the risk of spontaneous CHF and/or a thrombotic event is elevated. No additional issues are identified.

Given that this patient is an unregulated hyperthyroid case, these findings may reflect a combination of primary and secondary disease or may simply be secondary to tachycardia. The most concerning finding is tachypnea with moderate atrial enlargement. Dyspnea may be due to



PATIENT

Socks Ominger

SPECIES

Feline

BREED

DLH

SEX

Male Neutered

AGE

14 years

WEIGHT

10.8lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Dr. Belan, DVM

HOSPITAL NAME

Healthy Paws Forward
Animal Clinic

REFERRING VET

Dr. Boisen

INVOICE

20433

DATE

8/9/21

CHF or may simply be due to stress/thyroid storming. Chest radiographs are recommended. If CHF is noted or the patient responded to Lasix, I would certainly continue this until the thyroid is controlled. Given the totality of the findings, I do recommend atenolol in this case as well until the thyroid is well controlled. A screening BP is highly recommended, with monitoring as the thyroid is normalized. Prognosis is guarded due to the combination of issues.

Elective anesthesia is not advised until the patient is stabilized.

Monitor at home for any change in RR/RE, exercise intolerance, and/or signs of a blood clot going forward.

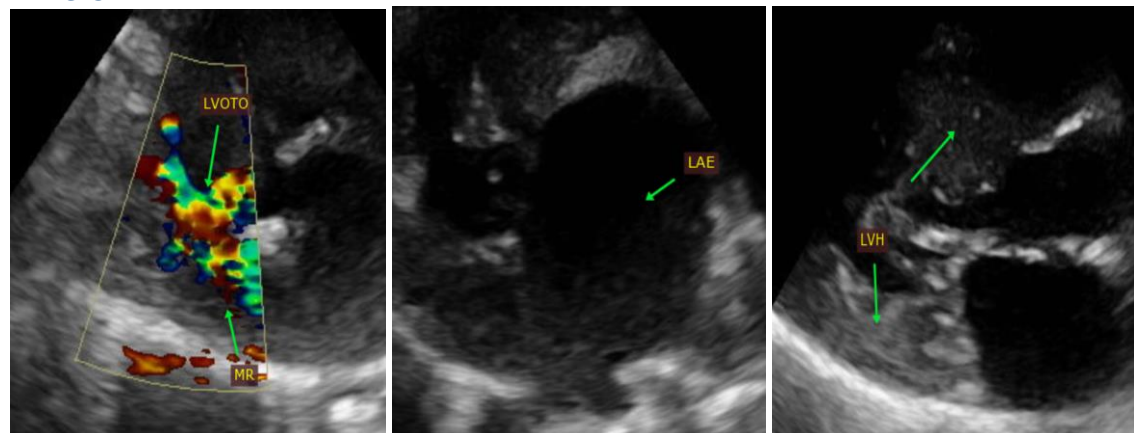
PLAN

Immediate institution of thyroid medication, either oral or topical. CXR; if CHF is noted or patient responded well to Furosemide, I would certainly continue this for the short-term 1-2mg/kg PO q12h. If patient is currently doing well at home (ie no longer dyspneic), institute 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.

Once thyroid is deemed well controlled, a brief screening of atrial dimension is recommended. If normalized, discontinue Lasix at that time. Additionally, wean atenolol and discontinue with careful monitoring of HR once discontinued.

Recommend recheck echocardiogram 6 months post-euthyroid status to assess for progression/regression.

IMAGES





PATIENT

Socks Ominger

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.

SPECIES

Feline

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.

BREED

DLH

Maggie Machen Lamy, DVM

Diplomate of the American College of Veterinary Internal Medicine (Cardiology)

info@sonopath.com

SEX

Male Neutered

AGE

14 years

WEIGHT

10.8lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Dr. Belan, DVM

HOSPITAL NAME

Healthy Paws Forward
Animal Clinic

REFERRING VET

Dr. Boisen

INVOICE

20433

DATE

8/9/21