
**PATIENT**

Bo Beckingham

**PRESENTING CLINICAL SIGNS**

 History: Vomiting, not eating, and dehydrated. Past 6 months has lost quite a bit of weight.  
 Grade 5/6 murmur.  
 -Abnormal lab results: Elevated TT4.

**SPECIES**

Feline

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is moderate to severely thickened with regions of significant asymmetry. 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 severe left atrial enlargement present. No obvious smoke. No right atrial enlargement present. Normal RVOT velocity. There is significant systolic anterior motion (SAM) of the mitral valve present, with an elevated dynamic LVOT velocity (not captured on spectral doppler). 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.

**BREED**

DSH

**SEX**

Male Neutered

**AGE**

12 years

**CARDIAC CHART**
**WEIGHT**

10.9lbs

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	190	0.99	1.8	0.81	44	80
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	2.0	2.5	2.0		1.2	0.75	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.							

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

Kelly Reschny, RVT

**HOSPITAL NAME**

 Downtown Animal  
 Hospital

**REFERRING VET**

Dr. Ahn

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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

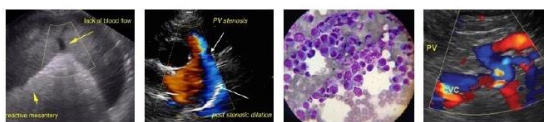
**INVOICE**

29495

**DATE**

3/9/23

Given that this patient is an unregulated hyperthyroid case, these findings may reflect a combination of primary and secondary disease or may simply have developed secondary to tachycardia. Given the totality of the findings and potential for CHF, consider low dose Lasix therapy until the thyroid is controlled. Atenolol is also recommended in this case until the thyroid is well controlled and the heart rate normalizes. Plavix should also be considered, due to risk for a thromboembolic event. A screening blood pressure is highly



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recommended once the patient is stabilized with monitoring as the thyroid is normalized. Prognosis is guarded due to the combination of issues.

**SPECIES**

Feline

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.

**BREED**

DSH

**PLAN**

Immediate institution of thyroid medication, either oral or topical. Consider low dose Lasix 1mg/kg PO q12h. 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.

**SEX**

Male Neutered

Institute Plavix 75mg tabs; Give ¼ tab by mouth every 24 hours (NOTE: bitter along cut edge, may cause foaming at the mouth; coat in entirety).

**AGE**

12 years

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

**WEIGHT**

10.9lbs

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

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM DACVIM  
(Cardiology)

**IMAGES**



**IMAGING PERFORMED BY**

Kelly Reschny, RVT

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.

**HOSPITAL NAME**

Downtown Animal  
Hospital

**REFERRING VET**

Dr. Ahn

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.

**INVOICE**

29495

Maggie Machen Lamy, DVM  
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**DATE**

3/9/23