
**PATIENT**

Bella McGrath

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Female Spayed

**AGE**

10 years

**WEIGHT**

10.8lbs

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

Kelly Reschny, RVT

**HOSPITAL NAME**

 Grand River  
 Veterinary Hospital

**REFERRING VET**

Dr. Chu

**INVOICE**

20449

**DATE**

8/10/21

**PRESENTING CLINICAL SIGNS**

History: Presented for respiratory distress, in which she was breathing hard & labored with her abdomen. Increase lung sounds, muffled heart sounds, enlarged cardiac silhouette (~ 7 ) on radiographs with pulmonary edema. Bella was started on Furosemide 20mg 1/4 tablet PO q8h and VHC Cardiac Care supplement SID. After 24 hours of starting meds, owner finds that Bella's breathing seemed to be improved. Vomited once yesterday, consisted of foam and bile. Her appetite has been much less the past week. Sleeping more as well.

-Current medications: Transdermal, Mirtazapine, Vetmedin, Gabapentin.

-Abnormal PE/Chem/CBC/UA Results: Mild thrombocytopenia at 81, mild azotemia with SDMA at 26, Creat at 374, Urea at 16.7, mild hypercholesterolemia at 6.89.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is moderate to severely hypertrophied. There is a diffusely hyperechoic endocardium consistent with fibrosis and ventricular remodeling. Papillary muscle hypertrophy. The right ventricle appears normal. There is moderate left atrial enlargement present with a horizontal component. No obvious smoke. No right atrial enlargement present. There is systolic anterior motion (SAM) of the mitral valve present creating a significant LVOT on color flow and 2D (not captured on Spectral). There is mild to moderate eccentric mitral regurgitation present secondary to SAM. Trace TR. No AI or PI. No pericardial or pleural effusion noted. No obvious cardiac tumors.

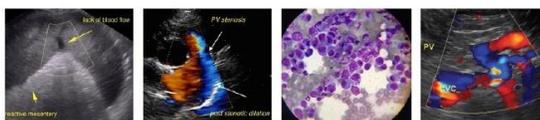
**CARDIAC CHART**

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 (%)
<b>NORMAL PARAMETER</b>	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
<b>PATIENT</b>	4.9	220	0.85	1.0	0.94	44	79
FELINE CARDIAC PARAMETERS	LA/AO <small>(Boon)</small>	LA/AO HEART BASE (Swe) <small>(Abbott)</small>	LA 2D short axis Base view (cm) <small>(Abbott)</small>	LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)	
<b>NORMAL</b>	<1.5	<1.3	<1.2	<1.6	<1.3	<0.9	
<b>PATIENT</b>	1.7	1.7	1.7	2.0	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 thickening (moderate to severe in this case) with a dynamic LVOT obstruction (SAM). There is a significant obstruction and moderate left atrial dilation, indicating the risk of spontaneous CHF and/or a thrombotic event is and will be elevated lifelong. No additional structural



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issues are identified; however, the patient is highly arrhythmic during exam and a **baseline ECG is highly recommended.**

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Given these findings, the prior diagnosis of CHF is supported, and medications should be continued life-long. Current medications do not list continued Lasix which should certainly be reinstated in addition to plavix. Additionally, Pimobendan is contraindicated with a significant LVOTO and should be discontinued. Finally, Atenolol is strongly recommended; however, a baseline ECG should be performed prior to institution to understand underlying rate and rhythm. The prognosis is poor for cats with CHF long term; however, most are able to be managed for an average of 6-12 months on medications if tolerated.

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Monitor at home for any respiratory signs or sign of blood clot events (neurologic change, paralysis, etc.).

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**PLAN**

Administer Lasix, 1-2mg/kg PO q12h. Institute blood thinner Clopidogrel (Plavix) 75mg tablets; give ¼ tab orally once daily (NOTE: this medication is very bitter on the cut edges. Coat in entirety). Discontinue Pimobendan. Baseline ECG is recommended. If heart rate is persistently elevated, 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. Baseline BP is recommended.

**WEIGHT**

10.8lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM DACVIM  
(Cardiology)

Monitor PE, BP, renal panel and heart rate in 10-14 days.

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Kelly Reschny, RVT

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.

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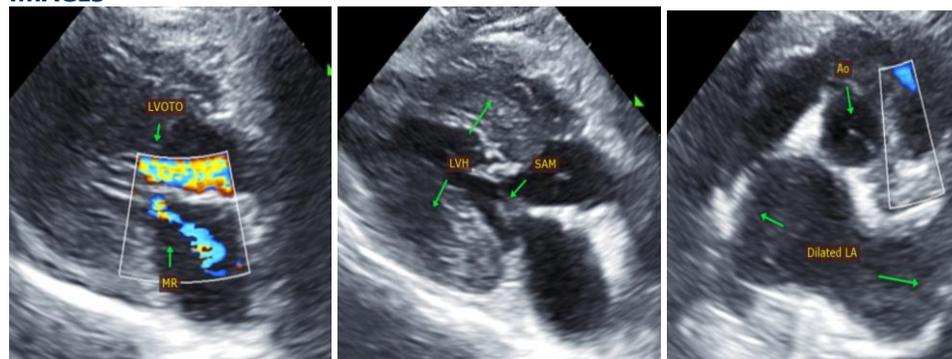
Grand River  
Veterinary Hospital

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

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**IMAGES**

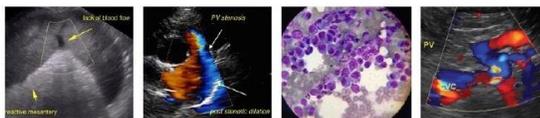


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**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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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.

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DSH

**Maggie Machen Lamy, DVM**

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

info@sonopath.com

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