



PATIENT

Benjamin Connellan

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

16 years

WEIGHT

8.9lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Jacque Pankatz,
DVM

HOSPITAL NAME

Mountain Vista
Veterinary Hospital

REFERRING VET

Dr. Pankatz

INVOICE

28850

DATE

2/8/23

PRESENTING CLINICAL SIGNS

History: Diagnosed hyperthyroid in July 2021, started tapazole. Heart murmur first noticed in July 2021; grade 4/6. Murmur was not present in March 2021. November 2021 had anemia, was positive for Candidatus M. Haemominutum. Started on antibiotics and did well. 3 syncopal episodes in the last 3 months. Heart murmur now grade 5/6. Butorphanol and propofol were given due to fractious nature for this exam
-ECG (IDEXX July 2021): Left axial shift and tachycardia.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is moderately increased in dimension with a septal bulge. There is a diffusely hyperechoic endocardium consistent with fibrosis. Papillary hypertrophy noted. The left atrium is normal. The right atrium is normal in size. The right ventricle appears normal. There is systolic anterior motion (SAM) of the mitral valve present on multimodal imaging There is mild to moderate eccentric mitral regurgitation present suspected secondary to SAM (6.0m/s). No other obvious valvular regurgitation is present. Normal aortic valve with no AI. RVOT velocity is normal. Normal pulmonic valve with no PI. 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	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.0	NM	0.73	1.1	0.70	63	94
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)	
NORMAL	<1.5	<1.3	<1.2	<1.6	<1.3	<0.9	
PATIENT	1.4	1.2	1.1	1.76	0.9	NM	
<p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i> 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 thickening (moderate in this case) with a dynamic LVOT obstruction (SAM) and secondary MR. The LA is normal, indicating the risk for spontaneous CHF and/or a thrombotic event is low at this time. It is suspected that the LVOTO is more significant than is appreciated here, likely due to heavy sedation. No additional issues are identified. Baseline lab work (to rule out a pseudohypertrophy component) and blood pressure are recommended.

It is certainly possible that tachycardia and the resultant obstruction to flow resulted in the collapse episode, and heart rate control is indicated to both assess short term



PATIENT

Benjamin Connellan

response/improvement in episodes, and for long term benefit. If the episodes continue despite heart rate control, other systemic/neurologic or arrhythmic causes should be investigated.

SPECIES

Feline

Monitor at home for any recurrent episodes, respiratory signs or blood clot events (neurologic change, paralysis, etc.). Prognosis is guarded long term, due to the highly variable outcomes with subclinical feline cardiomyopathy.

BREED

DSH

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 (glycopyrrolate, atropine). Avoid vasodilators as this may worsen the obstruction. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance. Additionally, steroids should be used with caution on older cats, as even a 'normal' geriatric heart can develop evidence of intolerance and fluid retention.

SEX

Male Neutered

PLAN

Baseline lab work recommended Administer titrating dose of atenolol: 25mg tablets; Give ¼ tab once daily. Assess BP and T4 every 6 months.

AGE

16 years

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

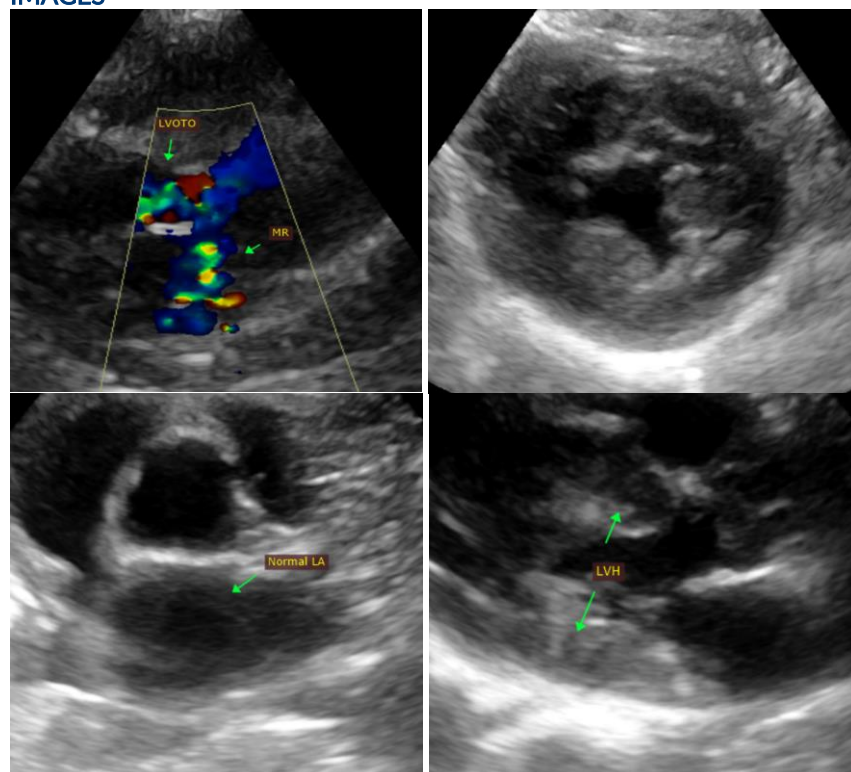
WEIGHT

8.9lbs

IMAGES

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)



IMAGING PERFORMED BY

Jacque Pankatz,
DVM

HOSPITAL NAME

Mountain Vista
Veterinary Hospital

REFERRING VET

Dr. Pankatz

INVOICE

28850

DATE

2/8/23



PATIENT

Benjamin Connellan

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

16 years

WEIGHT

8.9lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Jacque Pankatz,
DVM

HOSPITAL NAME

Mountain Vista
Veterinary Hospital

REFERRING VET

Dr. Pankatz

INVOICE

28850

DATE

2/8/23

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