



PATIENT

Bruno Torres

PRESENTING CLINICAL SIGNS

History: Grade IV/VI heart murmur- only recently ausculted. Assess prior to anesthesia.
Current medications: gabapentin and trazadone.

SPECIES

Feline

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is mild to moderately hypertrophied with regions of asymmetry. There is a mildly hyperechoic endocardium consistent with fibrosis. Mild papillary muscle hypertrophy. The right ventricle is normal. There is mild to moderate left atrial enlargement present. No right atrial enlargement present. RVOT velocity is normal. Abnormal anterior motion of the mitral valve is present, with the tip visible in the LVOT during systole (see below). Elevated LVOT velocity on color flow (not captured on doppler) with a dynamic profile. The anterior leaflet of the MV is elongated, consistent with dysplasia. Stenosis is not ruled out. There is moderate eccentric mitral regurgitation present. Elevated velocity. No obvious aortic or pulmonic insufficiency is noted. No obvious intra or extracardiac shunts seen. There is no pericardial effusion noted. No pleural effusion appreciated.

AGE

1.9 years

CARDIAC CHART

WEIGHT

10lbs

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LWVd (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	4.5	278	0.68	1.9	0.67	55	88
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	1.9	1.6	1.5		1.6	1.0	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

Potomac Mobile
Veterinary Ultrasound

HOSPITAL NAME

Anicura Veterinary
Clinic

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The diagnosis and cause of the murmur is mitral valve dysplasia leading to LV hypertrophy, an obstructive LVOT flow pattern and secondary mitral regurgitation. A primary hypertrophic component cannot be ruled out as a concurrent issue; however, is less likely given the age of the patient. Concurrent stenosis is also a possibility with this type of valve abnormality. Regardless, there is mild to moderate left atrial dilation present, indicating the risk of spontaneous CHF and/or a thrombotic event is currently low; however, there is great concern for progression going forward.

REFERRING VET

Dr. Jarrett

INVOICE

22997

DATE

3/8/22

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. In cases of solely primary MV dysplasia this can lead to improvement in the degree of obstruction and hypertrophy. Given today's findings and marked tachycardia, it is recommended to initiate at this time as below. No additional medications are indicated at this time.



PATIENT

Bruno Torres

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

1.9 years

WEIGHT

10lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Potomac Mobile
Veterinary Ultrasound

HOSPITAL NAME

Anicura Veterinary
Clinic

REFERRING VET

Dr. Jarrett

INVOICE

22997

DATE

3/8/22

Monitor at home for any respiratory signs or evidence of blood clot events (neurologic change, paralysis, etc.). Prognosis is guarded, given the highly variable rates of progression with subclinical feline cardiomyopathy. Many cats will remain asymptomatic until mid-life or beyond, while others develop CHF within the first years. Many cats will remain asymptomatic until mid-life or beyond, while others develop CHF within the first years. Close monitoring for progression to LA dilation in the future will help determine long term prognosis.

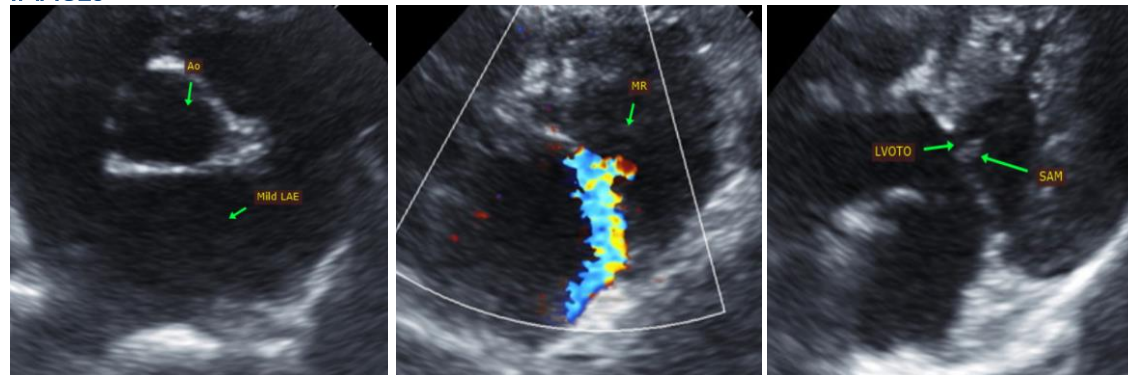
Anesthetic risk is considered moderately elevated, with risk for fluid overload, spontaneous CHF, hypotension, etc. Judicious IV fluid rates are advised to avoid fluid overload. Drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Avoid ketamine, telazol, acepromazine and Dexdomitor. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance.

PLAN

Administer 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 is reached. Screening blood pressure is recommended if possible.

Recommend recheck echocardiogram in 6 months to assess for progression and response to therapy, 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