



PATIENT

James Bond Juarez

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

12.5 years

WEIGHT

12.2lbs; 5.5kgs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Truckee Meadows
Veterinary Hospital

REFERRING VET

Dr. Kuester

INVOICE

24450

DATE

5/26/22

PRESENTING CLINICAL SIGNS

History: Recheck echo. Diagnosed with hyperthyroidism 4/2022 and started on Methimazole.
-Pertinent previous echo findings (11/2021 MML): Mild LVH, mild LAE. IVSd; 0.6, LVWd: 0.6, LA: 1.44
-Sedation: Gabapentin 100mg with low dose of Torb and Alfaxalone.

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 25mm/s, 20mm/mV. The underlying rhythm is sinus in origin with a regular rhythm, heart rate of 200bpm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. VPCs noted throughout; monomorphic, primarily singles only. A brief run of an irregular ventricular rhythm is noted with a single tight couplet. No supraventricular beats, pauses or other dysrhythmias observed. ECG diagnosis: Sinus tachycardia with ventricular arrhythmias.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is highly asymmetric with a thin septum and a mildly hypertrophied free wall. The LV has a slightly spherical appearance with adequate systolic function. There is a diffusely hyperechoic endocardium consistent with fibrosis. Mild symmetric papillary muscle hypertrophy and remodeling. The right ventricle is subjectively normal in size and morphology. There is mild to moderate left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. Trace TR. Normal LVOT velocity. There is no obvious systolic anterior motion (SAM) of the mitral valve present. No MR. 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	5.5	196	0.38	1.76	0.65	57	90
FELINE CARDIAC PARAMETERS	LA/AO <small>(Boon)</small>	LA/AO HEART BASE <small>(Swe) (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	NM	1.6	1.6		1.1	0.8	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

Hypertrophic cardiomyopathy (HCM) persists with evidence of progression. The septum is significantly thinned compared to the prior study, which is concerning for an infarcted region. The free wall is similar to previous, with mild hypertrophy. Additionally, the LV appears spherical



PATIENT

James Bond Juarez

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

12.5 years

WEIGHT

12.2lbs; 5.5kgs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Truckee Meadows
Veterinary Hospital

REFERRING VET

Dr. Kuester

INVOICE

24450

DATE

5/26/22

which is likely in response to the septal change. Finally, the left atrium is slightly increased comparatively, although remains within the mild category.

The ECG also shows ventricular arrhythmias with primarily isolated beats; however, a brief run is appreciated. This is concerning in light of the echo findings and is likely secondary to LV fibrosis. In an asymptomatic cat, it is difficult to know if we should treat or not. If the patient is able to medicate, a low dose of Atenolol is recommended as below in hopes of decreasing sympathetic drive. The patient will always be risk for development of clinical signs, such as syncope and/or sudden death.

Given the appearance of the LV, Pimobendan is recommended in this case as below. No obvious indication for additional medications at this time; however, close monitoring is advised.

Prognosis is guarded long-term with risk for progression to CHF going forward.

Elective anesthesia is not advised.

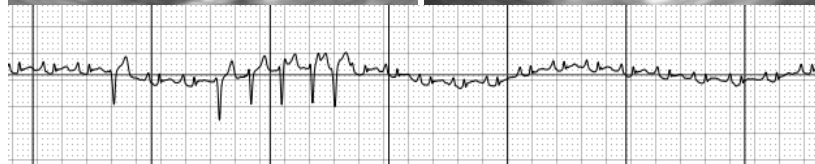
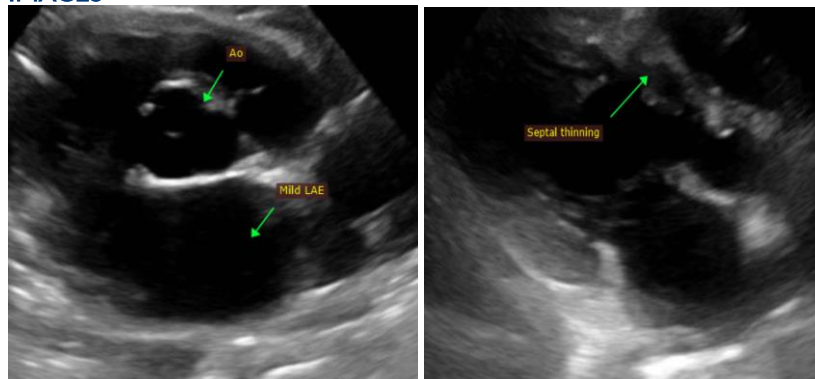
PLAN

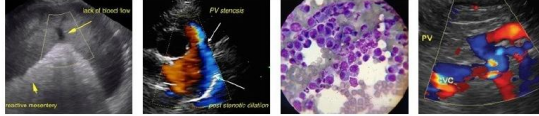
If able, institute Atenolol 25mg tablets; Give ¼ tab once daily. Recheck heart rate in 1-2 weeks with target stressed rate of 140-160bpm 12-24 hours post-administration. Increase as needed until target reached. Institute Pimobendan 1.25mg PO q12h. Recheck ECG in 1-2 weeks to assess response.

A screening blood pressure and T4 every 6 months lifelong.

A recheck echocardiogram is recommended in 6 months to assess for progression, sooner if any issues arise in the interim.

IMAGES





PATIENT

James Bond Juarez

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

12.5 years

WEIGHT

12.2lbs; 5.5kgs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Truckee Meadows
Veterinary Hospital

REFERRING VET

Dr. Kuester

INVOICE

24450

DATE

5/26/22

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