

**PATIENT**

Mama deWitt

SPECIES

Feline

BREED

DSH

SEX

Female Spayed

AGE

11.2.11

WEIGHT

12.6lbs

INTERPRETED BYMaggie Machen Lamy,
DVM, DACVIM
(Cardiology)**HOSPITAL NAME**Eastern Animal
Hospital**REFERRING VET**

Dr. Warner-Jones

INVOICE

23667

DATE

4.14.22

PRESENTING CLINICAL SIGNS

History: Recheck echo. BNP and T4 are rising.

-Pertinent abnormal PE/Chem/CBC/UA Results: USG 1.051, +1 proteinuria, BNP 537, T4 4.6.

-Current medications: Was on Felimazole 2.5mg SID. Transitioning to Suspension Methimazole BID. Gabapentin 100mg 2 hours prior to scan.

-Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results (12/17/2020 MML): No LVH, remodeled LV, normal LA, mild MR, intermittent LVOTO. IVSd: 0.44, LVWd: 0.45

-STAT: Not requested

-Imaging performed by: Andi Parkinson, RDMS.

ELECTROCARDIOGRAPHIC FINDINGS

A six lead ECG is available at both 25 and 50mm/s; 5mm/mV. The average heart rate is 170bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is normal. No ectopic beats, pauses or dysrhythmias observed.

ECG diagnosis: Normal sinus rhythm.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. The LV wall thicknesses are mildly increased. 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 no 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) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	5.7	193	0.65	1.25	0.64	56	90
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	NM	1.2	1.25		0.84	0.74	NM

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

Compared to the prior study, mild LV hypertrophy has developed. Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. Both should be ruled out in this case as contributing factors. In a patient with a reportedly elevated T4 this may be related, and a baseline blood pressure is recommended. Interestingly, the previously noted LVOTO is not present in this study. No additional issues are identified, and the LA is normal. The ECG is unremarkable with a normal sinus rhythm.

Even with progressive changes seen here, prognosis remains guarded due to the highly variable rates of progression. Given these findings, no medications are indicated prior to significant atrial dilation.

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

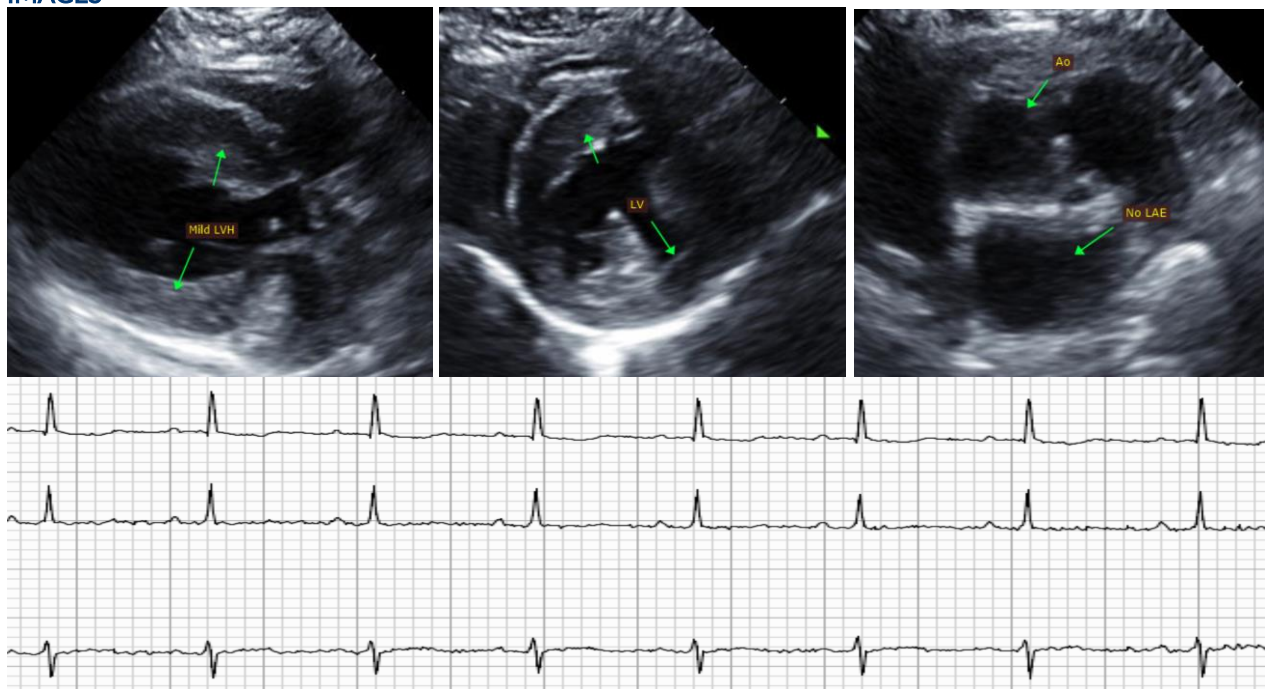
Anesthetic risk is considered mild, however judicious fluid administration is advised if needed with careful RR/RE monitoring to screen for fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Risk for complication with steroid use typically follows LA dilation, which in this case is mildly elevated. If needed, monitoring of RR/RE is advised particularly in the initiation phase.

PLAN

A screening blood pressure is recommended.

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

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.

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