

**PATIENT**

Aslan Nuttal

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

9.13.05

WEIGHT

13.6lbs

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

Dr. Norangelo

INVOICE

26927

DATE

10.17.22

PRESENTING CLINICAL SIGNS

History: Recheck echo. Previous history of calcium elevation and heart murmur evaluated at another hospital. Pet presented 10/4/22 for inappropriate urination and defecation. Stable kidney changes and persistent calcium elevation but new anemia. Heart murmur unchanged at 2/6 PMI L apex, had been previously.

-Pertinent abnormal PE/Chem/CBC/UA Results: See attached.

-Current medications: mirataz transdermal as needed

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

-Pertinent previous ultrasound results (4/12/21 MML): No LVH or LAE, trace MR. IVSd: 0.63, LVWd: 0.43, LA: 1.1.

-STAT: Not requested

-Imaging performed by: Andi Parkinson, BS, RDMS.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is irregular with irregular with regions of minimal hypertrophy. Adequate systolic function. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are remodeled and mildly enlarged. The mitral valve is normal with trace MR. The left atrium is mild to moderately dilated and bulbous in appearance. No obvious smoke. The right atrium is normal. Tricuspid valve is normal with trace TR. The right ventricle appears normal. Blood flow through both the LVOT and RVOT is normal in velocity. No pericardial effusion seen. No pleural effusion. 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	6.2	220	0.60	1.7	0.60	50	84
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	1.7	1.7		0.85	0.70	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, there is development of concerning changes. Of greatest concern, the left atrium is mild to moderately dilated, which was not previously noted. The LV wall thickness is also minimally increased, with may suggest hypertrophic cardiomyopathy; however, an unclassified cardiomyopathy (UCM), is also possible. Regardless, mild to moderate left atrial dilation suggests there may be risk for complication going forward. No additional issues are identified.

Given these findings and reported systemic issues, it is unclear if there is any exacerbating factor at play. Strongly recommend a blood pressure assessment.

Regardless of categorical classification, the finding of left atrial dilation confers risk for progression in the future and medications should be considered even without symptoms. Close monitoring of RR/RE is advised at home. Pimobendan can be considered if the patient is easily medicated. Additionally, Plavix may be reasonable given atrial dilation to help decrease the risk of a blood clot event in the future. In an asymptomatic cat, if there is difficulty or reluctance to medicate at home it is reasonable to simply monitor going forward.

The long-term prognosis given the totality of the findings is guarded; however, there is a highly variable rate of progression in cats with subclinical disease. There will always remain risk for progression to CHF and development of blood clots and/or sudden death in the future.

Monitoring is certainly advised, particularly should any respiratory signs, collapse or significant lethargy be noted in the future.

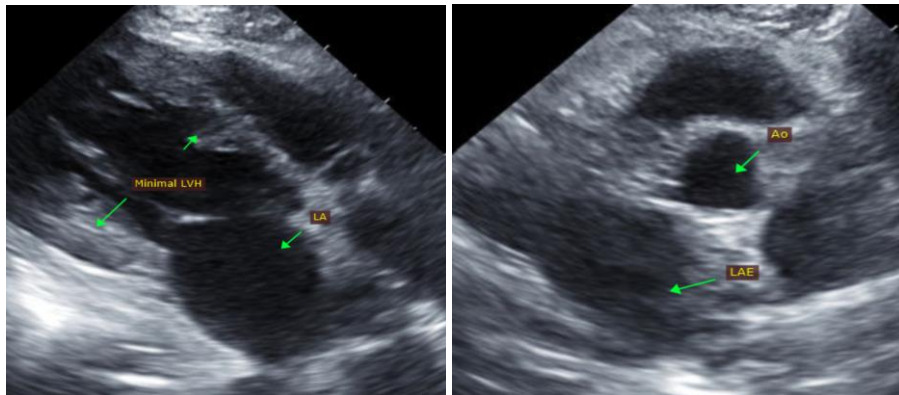
Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

PLAN

Screening BP and T4 are recommended every 6 months. If elect to medicate, oral medications are as follows: Institute blood thinner Clopidogrel (Plavix) 75mg tablets; give ¼ tab orally once daily (NOTE: this medication is very bitter on the cut edges). Institute off label Pimobendan 1.25mg PO q12h.

A recheck echocardiogram is recommended in 6 months to assess progression.

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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