



PATIENT

Max Chaboudy

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

16 years

WEIGHT

11.2lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Potomac Mobile
Veterinary Ultrasound

HOSPITAL NAME

Banfield Pet Hospital,
Sterling Cascades

REFERRING VET

Dr. Jarrett

INVOICE

25922

DATE

8/22/22

PRESENTING CLINICAL SIGNS

History: Grade IV/VI heart murmur. Severe muscle wasting. Ascites sampling: lymphocytic
-Radiographs with radiologist review: ascites without PA or CVD distention. No pleural effusion.
Moderate LAE. No L-CHF.
-Abnormal PE/Chem/CBC/UA Results: (08/22/2022) CBC: NEU 17.64, RBC 6.23, HCT 32.26, MCH 17.7, PLT 46, MPV 15.4
CBC: NEU 13.5, RBC 7.2, MCH 18.3, MCHC 35.6, PLT 97, MPV 16.4
CHEM: ALB 2.2, ALT 194, BUN 41, GGT 9. U/A: 3+leukocytes.
-AUS report: ascites; unknown origin.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is highly irregular with regions of mild hypertrophy, contrasting thinning. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled and hyperechoic. The endocardium also appears remodeled. Both atria are mild to moderately dilated (LA > RA). No spontaneous contrast seen. The right ventricle appears normal. The mitral valve is normal in structure and mobility. Mild central MR. Mild TR. Blood flow through both the LVOT and RVOT are low normal in velocity. No pleural or pericardial effusion seen. 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>	LWVd (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	5.1	130	0.44	1.4	0.65	50	92
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 <small>(m/s)</small>	RVOT VEL <small>(m/s)</small>	E max <small>(m/s)</small>	
NORMAL	<1.5	<1.3	<1.2	<1.6	<1.3	<0.9	
PATIENT	1.7	1.6	1.55	0.7	0.96	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 finding of any degree of atrial enlargement in the face of irregular LV wall thickness is most consistent with Unclassified Cardiomyopathy (UCM); however, end-stage HCM or some prior infectious or inflammatory insult to the myocardium cannot be definitively ruled out. There is also significant LV remodeling and fibrosis which indicates diastolic dysfunction in this senior cat. Serial echocardiography will be helpful to confirm the diagnosis and assess for progression.

Regardless of categorical classification, the finding of any degree of atrial dilation is concerning for progression in the future. The abdominal effusion is somewhat confounding, as typically this degree of dilation should not lead to congestive signs. Two broad possibilities could be argued. First with biatrial dilation atypical congestive heart failure must be considered, albeit most CHF



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occurs with severe atrial dilation and ascites alone would be an uncommon presentation. An alternative explanation would be this patient has subclinical disease and a non-cardiac origin of the effusion. At this time, I would consider the latter more likely although difficult to confirm with nebulous abdominal ultrasound results. All possibilities should still be considered, with neoplasia suspected. I would be very cautious utilizing Lasix in this patient, as a senior cat has high risk for azotemia. That being said, a Lasix trial with cardiac supportive Pimobendan may be reasonable to assess response. Consider an IM consultation if desired in this complicated case.

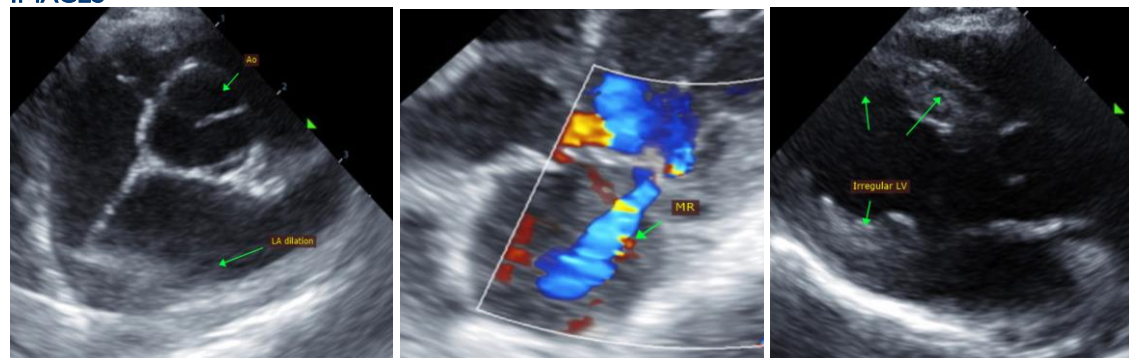
Pending assessment of rate of progression, patient will always remain risk for CHF and/or development of blood clots in the future. Monitoring of sleeping respiratory rates (SRRs) at home is recommended as the best way to screen for recurrent CHF at home. High risk for fluid overload or **steroid intolerance if utilized in the future**, and cautious SRR monitoring is advised.

PLAN

Consider referral/IM consultation. Institute Pimobendan 1.25mg PO q12h. Consider Lasix trial 1mg/kg PO q12h. Institute Spironolactone 1mg/kg PO q12h. If effusion persists despite therapy, alternatives should be reconsidered, such as neoplasia.

Pending progression/regression and results of work up, a recheck echocardiogram is recommended in 6 months, sooner if any decline 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.

Maggie Machen Lamy, DVM
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