IMAGING PERFORMED BY

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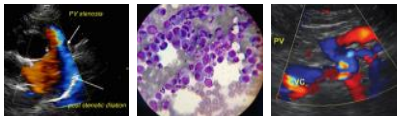

SonoPath
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PATIENT
Bruno Garcia

SPECIES
Feline

BREED
Himalayan

SEX
Male Neutered

AGE
7.28.13

WEIGHT
9.5lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME
Nexus Veterinary Specialists

REFERRING VET
Dr. Steele

INVOICE
32384

DATE
8.16.23

PRESENTING CLINICAL SIGNS

History: GI issues since April.
-Pertinent abnormal PE/Chem/CBC/UA Results: BNP elevation.
-Current medications: Allerderm EOD around eyes
-Blood pressure: 200mmHg.
-Sedation used: Not required to complete full diagnostic ultrasound.
-Pertinent previous ultrasound results: No previous.
-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 normal in dimension. The LV chamber is borderline increased in dimensions with mild increase in sphericity and adequate systolic function. There is mild endocardial remodeling and fibrosis. The papillary muscles are normal in size and hyperechoic. The left atrium is moderately dilated. No obvious smoke seen. The right atrium appears normal. The right ventricle appears normal. The mitral valve is normal in structure and mobility. Trace MR. The tricuspid valve appears normal. No TR. Normal flow through both the RVOT and LVOT. Trace/mild AI. No PI. No pleural or pericardial effusion seen. 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	4.3	160	0.43	1.64	0.47	50	92
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		1.0	0.9	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

Significant underlying cardiomyopathy is noted, with moderate left atrial enlargement. The LV wall dimension is largely normal in this patient, without significant hypertrophy or remodeling and systolic function is intact. These findings in total are concerning for Unclassified cardiomyopathy (UCM), and close monitoring is advised going forward. Serial echocardiography will be necessary to determine progression. There is also a small aortic valve insufficiency, in addition to reported systemic hypertension, which likely warrants therapy.

Due to significant left atrial dilation, consider institution of Pimobendan and Plavix at this juncture. It is important to note however that no medications have been shown to change the course of disease at this stage, and this cat is reportedly asymptomatic. If the cat is difficult to medicate, an alternative approach would be to monitor for progression in 6 months prior to instituting medications. There is however risk for progression to clinical signs/CHF in that period, and our goal would be to prolong time to symptoms. Prognosis is guarded with this degree of atrial dilation, with risk for CHF, blood clot events, arrhythmias and/or sudden death going forward.

The reported BP is significantly elevated with an aortic valve insufficiency. If the reading is thought to be accurate (i.e., independent of stress), vasodilator therapy using Amlodipine is likely warranted. Additionally, evaluation for possible underlying issues, such as renal insufficiency is recommended. Consultation with IM may be warranted in the complicated case with GI issues.

Even if Pimobendan is on board, this cat does have an increased risk for anesthetic complication, with high 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, and isoflurane maintenance.

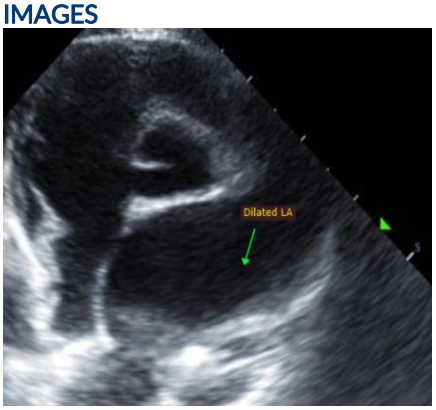
Monitor for any development of clinical signs at home, including labored breathing, cough or signs of a blood clot (paralysis, neurologic change).

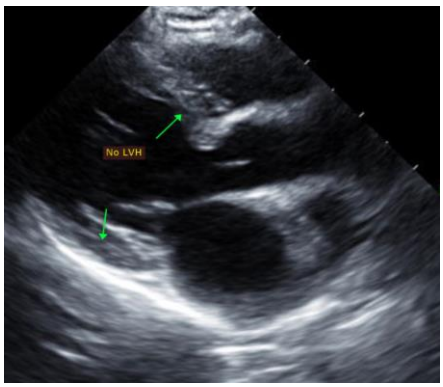
PLAN

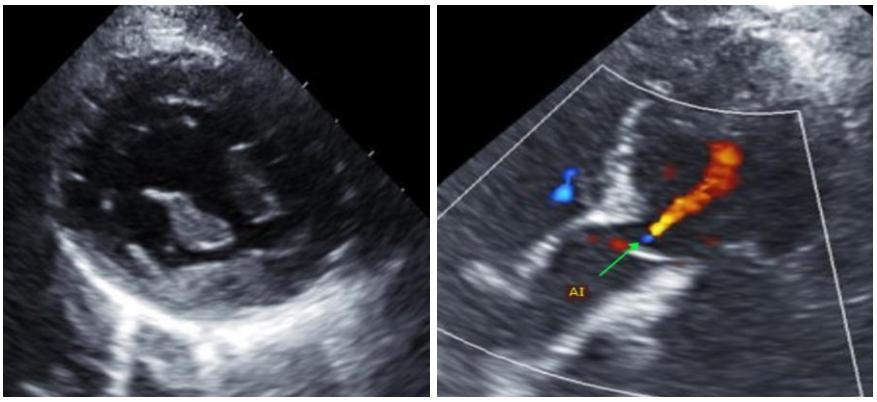
Consider institute heart muscle support Pimobendan 1.25mg PO q12h. Consider institute blood thinner Clopidogrel (Plavix) 75mg tablets; give ¼ tab orally once daily (NOTE: this medication is very bitter on the cut edges and should be coated in entirety or administer in a gel cap). Consider reassess BP versus treat/IM consultation as discussed.

A recheck echocardiogram is recommended in 6 months to screen for progressive LA dilation, sooner if clinical signs 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
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