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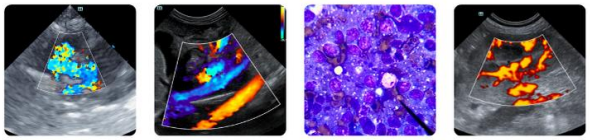

Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT
Natasha Adachi

SPECIES
Feline

BREED
DSH

SEX
Female Spayed

AGE
12.5 years

WEIGHT
10.8lbs

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

IMAGING PERFORMED BY
C. Zumpano, DVM

HOSPITAL NAME
Pikesville Animal Hospital

REFERRING VET
Dr. Zumpano

INVOICE
46388

DATE
1/12/26

PRESENTING CLINICAL SIGNS

History: Presented for entropion repair/dental procedure, eupneic on intake exam with HR 170, no murmur. Premedication with buprenorphine 0.04 mg/kg. anesthetized with 12 mg alfaxan IV and 2 mg total ketamine IV (loading dose for low dose CRI), Patient intubated and maintained on O2/sevoflurane. Patient did not receive IF fluids. HR 170 under anesthesia, BP 130 systolic but pulse oximeter levels could not rise above 91%. After 10-15 minutes of actively trying to improve monitoring parameters thoracic radiographs were taken (dated January 9). Marked pulmonary edema and pleural effusion present, mild generalized cardiomegaly. Anesthesia aborted and patient treated with furosemide and oxygen. Pocus ultrasound noted marked LA enlargement, LV and IVS wall thickness in diastole approx 5mm, LVIDd 15mm, SF 47%. Patient recovered from anesthesia slowly and weaned off oxygen supplementation after 3 hours. Patient discharged on 6.25mg furosemide BID and 1.5 mg vetmedin bid. Patient largely recovered after 1 day and echo performed on Jan 12. Radiographs on Jan 12 noted marked improvement in pleural fluid and pulmonary edema. HR 220-240 on exam with grade 2/6 murmur noted. HR 170. Lab work including thyroid normal

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension with regions of irregularity. No LV dilation with borderline myocardial function. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are remodeled. The left atrium is moderately dilated and bulbous in appearance. No obvious smoke. Trace mitral regurgitation. No tricuspid regurgitation. The right atrium is prominent. The right ventricle is normal. Blood flow through both the LVOT and RVOT is normal in velocity. Scant pericardial effusion. No pleural effusion.

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	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.9	NM	0.51	1.2	0.51	44	80
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	1.9	1.9	1.75		1.0	NM	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

The finding of moderate left atrial dilation in the face of normal LV wall thickness and adequate LV function 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. The wall thickness is normal, ruling out typical hypertrophic disease. No additional issues are identified.

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These findings would suggest the development of pleural effusion was likely due to a combination of anesthesia and underlying structural disease. It is presumed that this is a case of significant yet subclinical disease that was easily pushed into a fluid overloaded state. It is also possible that some degree of pleural effusion was already present prior to induction, although less likely with only mod LA dilation. The differentiation is somewhat academic at this juncture. Continued medications are warranted going forward with addition of Plavix as below.

Even if the patient is doing well and is able to stabilized, prognosis is poor once CHF is diagnosed with an average survival time of <1 year. Patient will always remain risk for recurrent CHF, development of additional blood clots, and/or malignant arrhythmias/sudden death in the future. Monitoring of sleeping breathing rates at home is recommended as the best way to screen for recurrent/impending CHF at home.

Elective anesthesia, fluid therapy and/or steroids should be avoided lifelong.

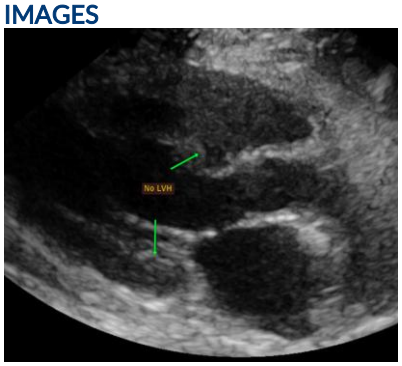
PLAN

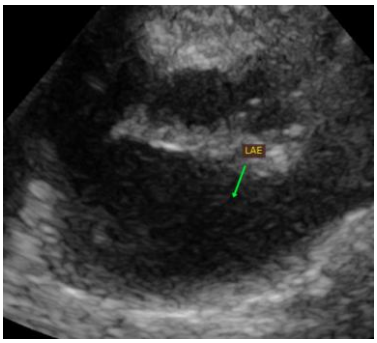
Continue Lasix 1-2mg/kg PO q12h. Institute Plavix 75mg tabs; Give ¼ tab by mouth every 24 hours (NOTE: bitter along cut edge, may cause foaming at the mouth; coat in entirety). Continue Pimobendan 1.25mg PO q12h.

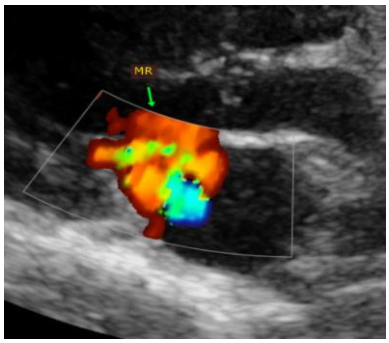
Recheck renal values and BP in 1-2 weeks, then every 3-4 months lifelong. If doing well and BP is >130mmHg, institute ACE0I 0.5mg/kg PO q12h.

Recheck echocardiogram in 6 months once stable on oral medications to reassess for 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.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com