

**PATIENT**

Waffles Grose-Busky

SPECIES

Feline

BREED

DSH

SEX

Female Spayed

AGE

7.11.10

WEIGHT

8.4lbs

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

Dr. Martinoli

INVOICE

25256

DATE

7.12.22

PRESENTING CLINICAL SIGNS

History: Owners noticed her breathing a little fast last night but otherwise seemed normal and was eating ok. Early this morning also seemed normal, played a little and was following owner around and interacting, then later in the morning she was laying down in middle of room and breathing very hard. Waffles (and her brother) was adopted when she was about 6 years old; don't know prior history. Mild heart murmur noted when at rDVM for routine appointment a few years ago.

-Pertinent abnormal PE/Chem/CBC/UA Results: Severe interstitial to alveolar pattern in majority of lung fields Heart appears enlarged; difficult to see entire silhouette due to lung changes. Left kidney severely enlarged

-Current medications: Furosemide, Doxycycline.

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

-Pertinent previous ultrasound results: No previous.

-STAT: Requested by DVM

-Imaging performed by: Andi Parkinson, RDMS

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is mildly increased in dimension. The LV is mildly dilated. The LV wall is normal with regions of thinning. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly remodeled. Systolic function is decreased. The left atrium is mild to moderately dilated and bulbous in appearance. No obvious atrial smoke. Trace mitral regurgitation. The right atrium is mildly dilated. The right ventricle appears normal. No tricuspid regurgitation. Blood flow through both the LVOT and RVOT is 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>	LVWd (cm) <small>(Moise, Pipers)</small>	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	3.8	200	0.33	2.1	0.20	25	52
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	1.5		0.8	0.98	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

The finding of any degree of atrial enlargement in the face of normal/decreased LV wall thickness and poor systolic function is most consistent with Restrictive/Unclassified Cardiomyopathy (UCM); however, some prior infectious or inflammatory insult to the myocardium, end-stage 'burnout' HCM or potentially tachycardia-induced cardiomyopathy cannot be definitively ruled out. There is also significant LV remodeling and fibrosis which indicates diastolic dysfunction.

Regardless of categorical classification, the finding of this degree of LV pathology would certainly be concerning for a cardiac origin of the respiratory changes, consistent with CHF. It should be mentioned; however, that it is unusual to not have a severe LA:Ao increase with organic CHF (can certainly happen with fluid or steroid overload) and other contributing issues (pulmonary disease/infection/infiltration) should continue to be considered. Given the degree of disease, lifelong supportive medications is recommended as below, including off-label Pimobendan use for systolic function support. Coverage with broad-spectrum pulmonary antibiotics is also recommended.

The mean survival time for cats with CHF is <8 months, however most are able to maintain a good quality of life on medications. There will always remain risk for recurrent episodes of CHF, malignant arrhythmias and/or development of blood clots in the future. Monitoring of sleeping breathing rates at home is recommended as the best way to screen for recurrent CHF at home.

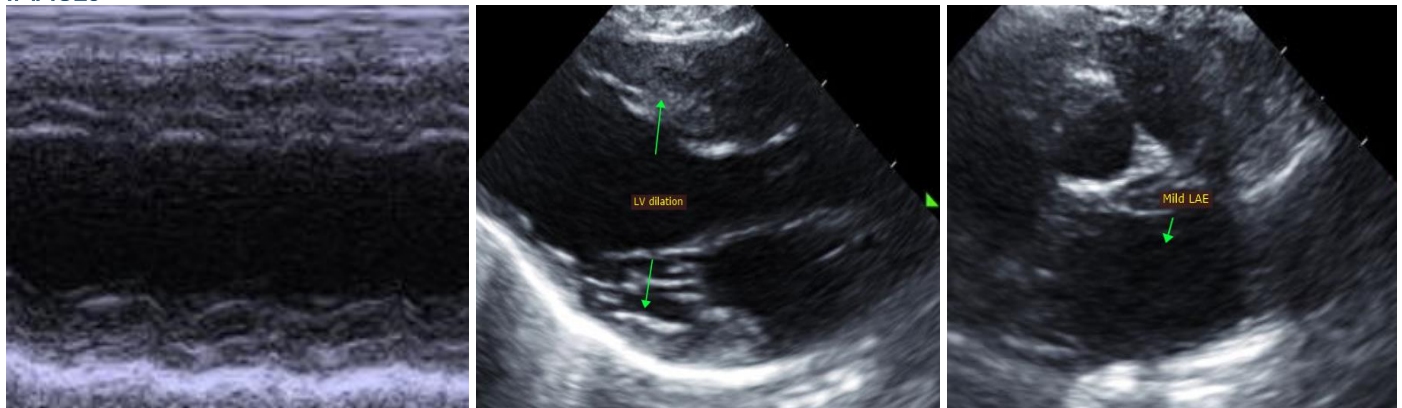
PLAN

A screening blood pressure is recommended. Continue diuretic Lasix 1-2mg/kg PO q12h (2.5mg/kg/day). Institute blood thinner Clopidogrel (Plavix) 75mg tablets; give ¼ tab orally once daily (NOTE: this medication is very bitter on the cut edges). Administer Pimobendan (off label use) 1.25mg PO q12h. Broad-spectrum antibiotic therapy should be continued.

Recheck renal values and status in 10-14 day. If doing well, institute ACE-I 0.5mg/kg PO q12h. Recheck radiographs may also be useful to understand a baseline; consider submit all sets of films with echo report for Radiologist review.

A recheck echocardiogram is recommended in 6 months to assess for progression, sooner if any issues occur 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
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com