



PATIENT

Lady Emily Fernandez

SPECIES

Canine

BREED

Maltese

SEX

Female Spayed

AGE

16 years

WEIGHT

9.6lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Animal General on
Hudson

REFERRING VET

Dr. Ng

INVOICE

25853

DATE

8/18/22

PRESENTING CLINICAL SIGNS

History: Systolic murmur, grade 4/6. Syncopal episodes. No current medications.
-Abnormal PE/Chem/CBC/UA Results: BUN 39, creat. 1.7.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The mitral valve is diffusely thickened with minimal prolapse into the left atrial lumen. There is moderate eccentric mitral regurgitation present. There is moderate left atrial enlargement. There is no significant left ventricular dilation. Left ventricular systolic function is adequate. There is normal systolic flow velocity across the aortic valve, no insufficiency. The aortic valve appears normal. Mild to moderate right atrial/ventricular enlargement. The tricuspid valve is thickened with moderate tricuspid regurgitation. The tricuspid regurgitant velocity is consistent with moderate to severe pulmonary hypertension. The pulmonary artery and pulmonic valve are normal. Trace PI. No pericardial/pleural effusion or cardiac masses are seen.

CARDIAC CHART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	6.2	4.1	1.2	1.75	33	65	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
PATIENT	98	0.7	NM	4.4	2.0	1.7	1.2
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease causing moderate mitral and tricuspid regurgitation. Moderate left atrial enlargement indicates there may be elevated risk for spontaneous congestive heart failure in the future. Moderate pulmonary hypertension is also identified, with right heart and MPA enlargement. Given the combination of findings, recommend institute Pimobendan and Sildenafil at this time in this patient as below.



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Exertional syncope in this patient is most likely cardiogenic in origin secondary to pulmonary hypertension. If the episodes continue despite prescribed therapy, chest radiographs are highly recommended to screen for early decompensation. Close monitoring at home is advised. PAH is often secondary to chronic respiratory disease; however, no chronic symptoms are noted in the history and the cause remains open.

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

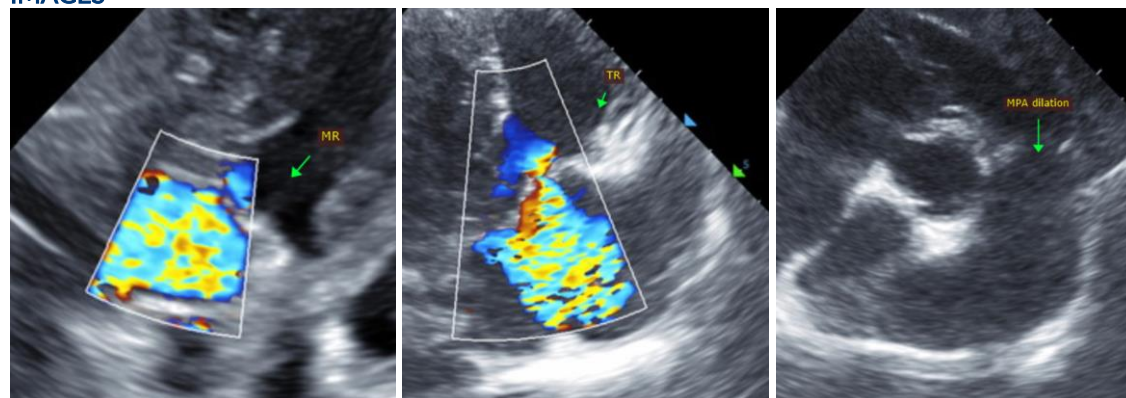
Elective anesthesia is not advised.

PLAN

Institute heart muscle support Pimobendan 0.25-0.3mg/kg PO BID. Institute Sildenafil 1-2mg/kg PO q8h.

Recommend monitor for progression with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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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