

**PATIENT**

Franklin Maylor

**SPECIES**

Canine

**BREED**

CKCS

**SEX**

Male Neutered

**AGE**

3.9.15

**WEIGHT**

18.4lbs

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. BAR, BCS 5/9, Wt. 8.35kgs, MM pink and moist, CRT <2sec, integument: Salivary staining on all dorsal paws, erythema/ hyperpigmentation around rectal area, Ophthalmic: Epiphora OU, Oral: Trace calc, tip fracture 404, 208, H/L: Grade 3/6 L Apical Systolic murmur, s/s femoral pulses.

-Current medications: Pimobendan 2.5mg BID.

Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results (01/14/2021 MML): Moderate MR, moderate LAE, mild LVE, trace TR. LA: 2.2, LV: 3.1

-STAT: Not requested

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets (anterior>posterior) with minimal prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with mild to moderate left atrial dilation. Elevated MR velocity. Mildly increased LV diameter with hyperdynamic myocardial function. The tricuspid valve appears mildly thickened, with trace tricuspid regurgitation. Velocity consistent with early pulmonary hypertension. Normal right atrial and ventricular diameter. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities. Mild aortic insufficiency. Trace pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

**CARDIAC CHART****INTERPRETED BY**Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)**IMAGING PERFORMED BY**Stephanie Pearce,  
RDCS, RVT**HOSPITAL NAME**Banfield Pet Hospital  
of Timonium**REFERRING VET**

Dr. Kameka

**INVOICE**

22547

**DATE**

2.14.22

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	7.0	3.2	NM	1.4	41	74	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	NM	0.85	1.0	8.3	1.9	3.2	1.9
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				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)

Adapted from June Boon, Veterinary Echocardiography, 1998  
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435  
Hansson et al, Vet Rad and Ultrasound 2002  
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valve disease persists with evidence of stability. The left heart is similar to previous with some improvement in LA dimension. Early pulmonary hypertension has developed which should be monitored going forward in an asymptomatic dog. Mild aortic insufficiency is unchanged; however, a baseline blood pressure is strongly recommended.

Continue Pimobendan as prescribed with no additional medications indicated. Assessment of progression in the future will help predict long term outcome, however prognosis remains guarded at this stage (B2).

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.

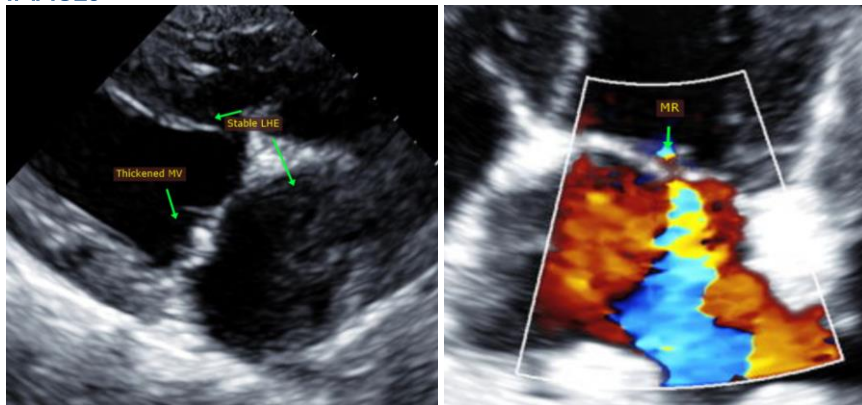
Anesthetic risk is considered mildly elevated. Cardiac protective drug choices (opioid/benzodiazepine premedication, Propofol or alfaxalone induction, iso or sevo gas) are recommended. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Judicious IV fluid rates are recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

## PLAN

Screening baseline recommended every 6 months. Continue Pimobendan as prescribed.

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.

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