


**PATIENT**

Finn Bellinger

**SPECIES**

Canine

**BREED**

Terrier Mix

**SEX**

Male Neutered

**AGE**

8 years

**WEIGHT**

8.1

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM, DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

 Mark van Campen,  
 DVM

**HOSPITAL NAME**

 Mississippi Hills  
 Animal Hospital

**REFERRING VET**

Dr. van Campen

**INVOICE**

24499

**DATE**

5/31/22

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. Recently presented for increase in cough.

-Current medications: Furosemide 20mg q12 h. Vetmedin - 2.5mg in AM and 1.25mg in PM. Apoquel.

-Pertinent previous echo findings (10/2021 MML): Moderate MR, moderate LAE, mild LVE, mild TR, mild PAH: 3.3m/s. LA: 2.7, LV: 3.2.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets (anterior&gt;posterior) with minimal prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with mild left atrial dilation. Normal MR velocity. Minimal LV dilation with adequate myocardial function. The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Normal velocity. Normal right atrial and ventricular diameter. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities. No aortic and trace pulmonic insufficiency. No pericardial or pleural effusion noted. No

**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	5.3	2.7	NM	1.6	29	50	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	0.7	0.7	8.1	2.5	2.8	2.0
*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. Compared to the prior study, the left heart dimensions have improved slightly. The degree of MR and TR are unchanged, and no pulmonary hypertension is appreciated. No additional issues are identified.

A progressive cough in this patient is unlikely to reflect CHF. Highly recommend a Radiologist review of the prior films, given a discordant result. No obvious indication for continued Lasix in this case, based upon these findings. Consider respiratory workup/treatment if applicable.



**PATIENT**

Finn Bellinger

Prognosis remains guarded long-term; however, stability is certainly encouraging. Patient will always be at risk for progression in the future.

**SPECIES**

Canine

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.

**BREED**

Terrier Mix

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.

**SEX**

Male Neutered

**PLAN**

Continue Pimobendan as prescribed. No obvious indication for Lasix based upon these findings. Highly recommend Radiologist review of the prior films if there is any question.

**AGE**

8 years

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

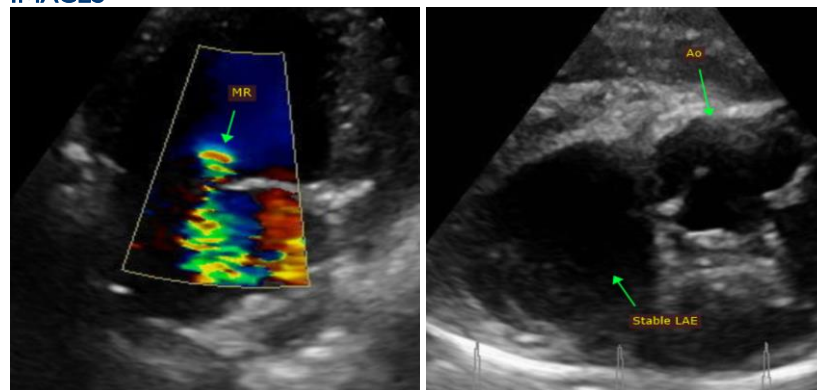
**WEIGHT**

8.1

**IMAGES**

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)



**IMAGING PERFORMED BY**

Mark van Campen,  
DVM

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.

**HOSPITAL NAME**

Mississippi Hills  
Animal Hospital

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.

**REFERRING VET**

Dr. van Campen

**Maggie Machen Lamy, DVM**  
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