

**PATIENT**

Sampson Allen

**SPECIES**

Canine

**BREED**

Basset Mix

**SEX**

Male Neutered

**AGE**

9 years

**WEIGHT**

48.6lbs; 22kgs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Liz Gray, DVM

**HOSPITAL NAME**

Brookwood Animal  
Clinic

**REFERRING VET**

Dr. Loomis

**INVOICE**

22702

**DATE**

2/20/22

**PRESENTING CLINICAL SIGNS**

History: Recheck echo. Grade 5/6 systolic heart murmur.  
-Current medications: Vetmedin 5mg BID, Enalapril 10mg BID, Furosemide 40mg BID, Spironolactone 25mg q, Sildenafil 37.5mg BID.  
-Pertinent previous echo findings (08/2021 by Gretchen Rowe): Severe CVD. LA: 4.4, LV: 4.7, TR: 3.3m/s.

**ECHOCARDIOGRAM FINDINGS**

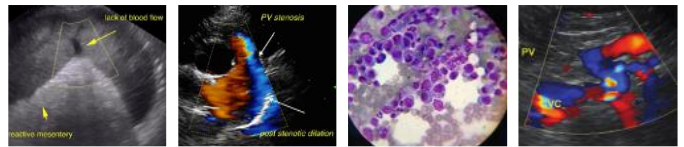
2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with prolapse into the left atrial lumen. Severe eccentric mitral regurgitation with severe left atrial dilation. Normal MR velocity. Mild LV dilation with hyperdynamic myocardial function. The tricuspid valve appears normal, with mild TR. Mildly elevated velocity. Normal right atrial and ventricular diameter and morphology. The pulmonic and aortic valves are normal in morphology and mobility. Normal aortic and pulmonic outflow velocities with laminar flow. No AI/PI. No pericardial or pleural effusion noted. No obvious cardiac masses. A sinus rhythm is noted throughout the study (single lead ECG attached).

**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	5.6	2.5	NM	2.4	48	80	0.2
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	200	1.0	0.8	22.0	4.2	4.9	3.0
*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)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Chronic degenerative valve disease causing severe mitral and mild tricuspid regurgitation persists. While severe the left heart dimensions are similar to the prior study. Severe atrial enlargement indicates the risk for spontaneous congestive heart failure is elevated. Mild pulmonary hypertension is noted, which is likely secondary to chronic LA pressure elevation. No additional issues are identified.



**PATIENT**

Sampson Allen

**SPECIES**

Canine

**BREED**

Basset Mix

**SEX**

Male Neutered

**AGE**

9 years

**WEIGHT**

48.6lbs; 22kgs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Liz Gray, DVM

**HOSPITAL NAME**

Brookwood Animal  
Clinic

**REFERRING VET**

Dr. Loomis

**INVOICE**

22702

**DATE**

2/20/22

Given the severity of disease, it is reasonable to continue full cardiac support as was previously recommended, utilizing Furosemide, ACE-I, Pimobendan and Spironolactone. Sildenafil is typically only warranted if the patient shows clinical signs of PAH (exertional syncope or dyspnea), or severely elevated pressures are documented on the echo. The prior report as well as today's shows only mild pulmonary hypertension; however, further historical information may suggest this is an improvement. Cough suppression to improve QOL can also be considered (hydrocodone, 0.2-0.4mg/kg up to q4-6h PRN) for any residual mechanical cough in the face of normal sleeping respiratory rates. The average survival time of canine patients with active pulmonary edema is 8-9 months on medications, however they generally are able to maintain a good quality of life for that period. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for acute progression of the cough, labored breathing, exercise intolerance or collapse episodes in the future.

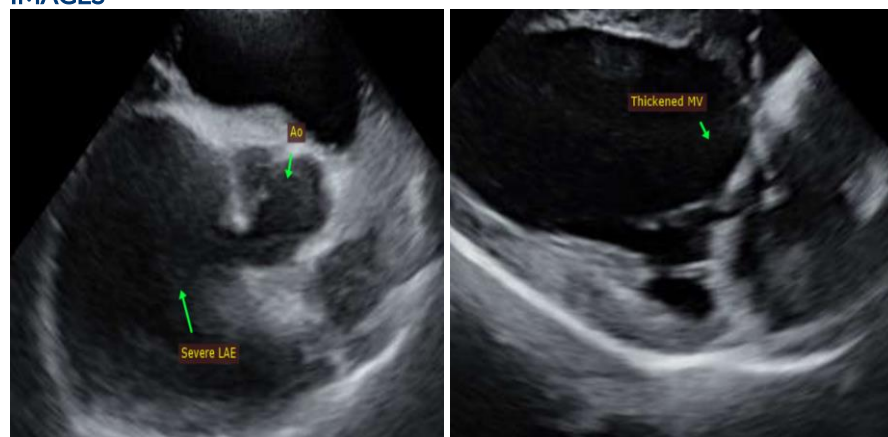
**PLAN**

Reasonable to continue full cardiac support as previously recommended, including Sildenafil therapy.

Monitor SRRs at home. Monitor renal values and BP every 3-4 months while on diuretics. Consider hydrocodone if needed for QOL.

Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of associated clinical signs occurs 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