



**PATIENT**

Spot Barry

**PRESENTING CLINICAL SIGNS**

History: Grade 3/6 heart murmur.

**SPECIES**

Canine

**BREED**

Cavalier

**SEX**

Male Neutered

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The mitral valve is thickened with mild prolapse into the left atrial lumen. There is severe eccentric mitral regurgitation present. There is severe left atrial enlargement. There is moderate left ventricular dilation. Left ventricular systolic function is adequate. There is normal systolic flow velocity across the aortic valve. The aortic valve appears thickened yet trileaflet with normal mobility. The main pulmonary artery is mildly dilated. Mild to moderate right atrial and ventricular dilation. The tricuspid valve is thickened with mild tricuspid regurgitation. Velocity consistent with mild to moderate pulmonary hypertension. Trace pulmonic and no aortic insufficiency. Scant pericardial effusion. No pleural effusion identified. No cardiac masses are seen.

**CARDIAC CHART**

**AGE**

10 years

**WEIGHT**

20.7lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Diane McFadden

**HOSPITAL NAME**

Andover Animal  
Hospital

**REFERRING VET**

Dr. Urbonaite

**INVOICE**

28967

**DATE**

2/14/23

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	5.5	3.3	NM	2.8	48	90	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	160	0.9	0.7	9.4	3.9	4.3	2.2
*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. Severe left atrial and ventricular dilation indicates the risk for spontaneous left-sided congestive heart failure is elevated. Additionally, there is mild right heart enlargement with mild to moderate pulmonary hypertension, which puts the patient at risk for right-sided congestion, and/or syncope.

Given the degree of structural disease in addition to scant pericardial effusion, the diagnosis is early CHF and life-long cardiac supportive medications are recommended as below. A baseline



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ECG and blood pressure are recommended, in addition to radiographs. If any syncope develops, Sildenafil should also be utilized.

**SPECIES**

Canine

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a worsening cough, labored breathing, exercise intolerance or worsening collapse episodes. Monitoring of sleeping breathing rates is recommended as the best way to screen for progression to CHF at home. Unfortunately, there is high risk for spontaneous CHF, worsening cough and/or malignant arrhythmias and sudden death in the future. The prognosis with this degree of disease is poor, with most dogs able to maintain a good QOL on medications for an average of 8-12 months.

**BREED**

Cavalier

**SEX**

Male Neutered

Elective anesthesia is not advised.

**AGE**

10 years

**PLAN**

Baseline BP, ECG and CXR are recommended. Institute spironolactone 1-2mg/kg PO q12h. Institute Lasix to 1-2mg/kg PO q12h. Institute Pimobendan 0.3mg/kg PO q12h.

**WEIGHT**

20.7lbs

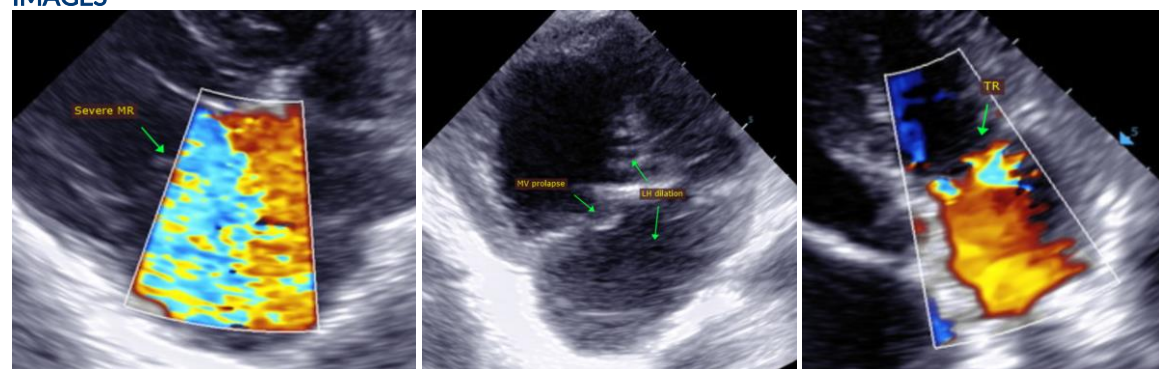
Recheck renal values and BP in 1-2 weeks, then every 3-4 months on diuretic therapy. Pending BP >130mmHg, institute ACEI 0.5mg/kg PO q12h. If exertional syncope develops, institute Sildenafil 1-2mg/kg PO q12h.

A recheck echocardiogram is recommended in 6 months to screen for progression, sooner if clinical signs arise.

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGES**



**IMAGING PERFORMED BY**

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Dr. Urbonaite

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.

**INVOICE**

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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.

**DATE**

2/14/23

Maggie Machen Lamy, DVM  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com