

**PATIENT**  
Maggie Saylor

**PRESENTING CLINICAL SIGNS**  
History: Not eating, bloated. Ascites.

**SPECIES**  
Canine

**BREED**  
Maltese Mix

**SEX**  
Female Spayed

**AGE**

14 years

**WEIGHT**  
16lbs

**INTERPRETED BY**  
Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**  
Rebekah Jakum, CVT  
ARDMS/RVT

**HOSPITAL NAME**  
Blud Ridge Veterinary  
Clinic

**REFERRING VET**  
Dr. Filchner

**INVOICE**  
23881

**DATE**  
4/26/22

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The mitral valve is diffusely thickened with prolapse into the left atrial lumen. There is moderate eccentric mitral regurgitation present. The MR velocity is normal. Moderate left atrial enlargement. No left ventricular dilation. Left ventricular systolic function is adequate. Septal flattening in systole. There is normal systolic flow velocity across the aortic valve. The aortic valve appears trileaflet with normal mobility. The main pulmonary artery is mildly dilated. Moderate right atrial and ventricular enlargement. The tricuspid valve is thickened and prolapsing with moderate tricuspid regurgitation. Velocity consistent with moderate pulmonary hypertension (suspected to be an underestimation). Trace pulmonic and no aortic insufficiency. No pericardial or pleural effusion. No cardiac masses are seen. Hepatic congestion and ascites noted.

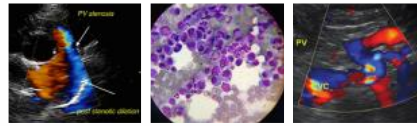
**CARDIAC CHART**

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	5.4	4.1	NM	1.75	60	94	0.12
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	1.5	0.9	7.3	2.0	2.0	0.8
*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)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				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 is identified. Moderate left atrial dilation indicates the risk for spontaneous left-sided congestive heart failure is relatively low. More importantly, there is significant pulmonary hypertension based upon the appearance of the right heart, which puts the patient at risk for right-sided congestion, and/or syncope. Given these findings, the abdominal effusion is most likely cardiogenic in origin and warrants full lifelong cardiac supportive medications including diuretics as below.

The underlying genesis of PAH is poorly understood in cases other than heartworm infestation, though it occurs with increased frequency in a variety of forms of chronic lung disease and in



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patients with idiopathic pulmonary fibrosis. Given the reported cough/gag symptom, further workup/therapy may also be useful including bronchodilators, pulmonary antibiotics, etc.

**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.

**BREED**  
Maltese Mix

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.

**SEX**  
Female Spayed

Elective anesthesia is not advised.

**AGE**  
14 years

**PLAN**

Initiate spironolactone 1-2mg/kg PO q12h. Institute Sildenafil 1-2mg/kg PO 8h. Initiate Lasix 1-2mg/kg PO q12h. Initiate Pimobendan 0.25-0.3mg/kg PO q12h. Abdominocentesis as needed for discomfort, inappetence or respiratory changes.

**WEIGHT**  
16lbs

Recheck renal values and BP in 1-2 weeks, then every 3-4 months on diuretic therapy. If BP is >130mmHg and patient is doing well at home, institute ACEI 0.5mg/kg PO q12h (if hypotensive do not utilize).

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(Cardiology)

A recheck echocardiogram is recommended in 4-6 months to screen for progression, sooner if clinical signs arise.

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Rebekah Jakum, CVT  
ARDMS/RVT

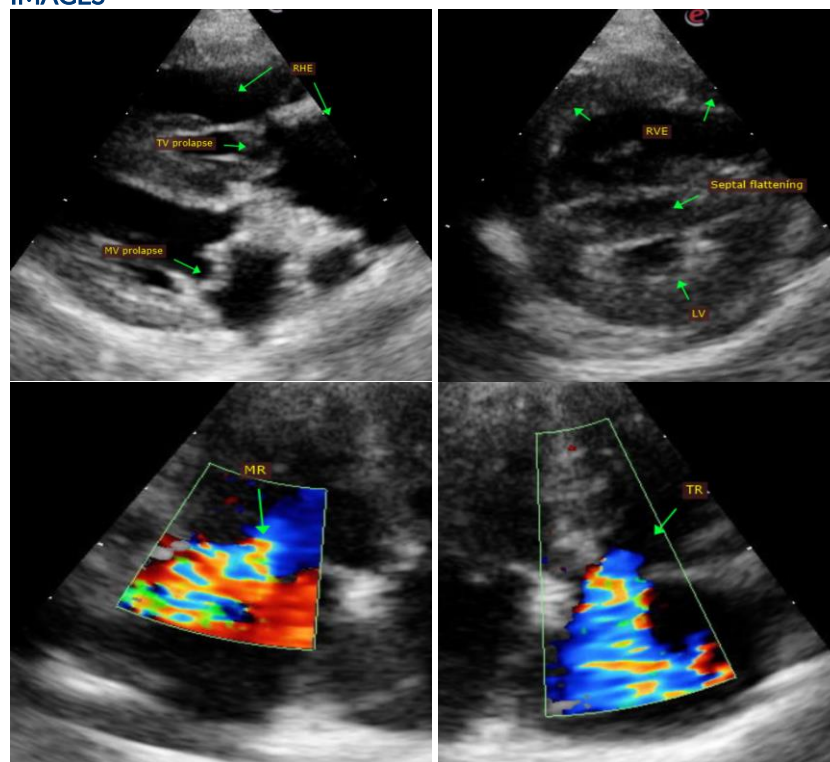
**IMAGES**

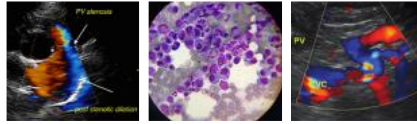
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**SPECIES**

Canine

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.

**BREED**

Maltese Mix

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

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