
**PATIENT**

Stella Rose-Williams

**SPECIES**

Canine

**BREED**

Boston Terrier

**SEX**

Female Spayed

**AGE**

14 years

**WEIGHT**

26.9lbs

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

Crystal Hill, RVT

**HOSPITAL NAME**

 The Maples Animal  
 Hospital

**REFERRING VET**

Dr. Kazienko

**INVOICE**

25249

**DATE**

7/11/22

**PRESENTING CLINICAL SIGNS**

History: Was seen recently at emergency vet and owner thought he was told that they saw a heart mass. Has been coughing, with increasing frequency. Most notable after time outside, when she walks up the stairs or after drinking water. Has been on Theophylline SR and Gabapentin.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Uniform hypoechoic mass associated with the aortic body; 2.7 x 3.2cm in best viewed cross section. The mass is well encapsulated. No obstruction to blood flow or imposition on cardiac chambers is seen at this time. The mitral valve is thickened with mild prolapse and mild mitral regurgitation. LV function is adequate. Left atrium is normal. LV is normal in diameter. Mildly thickened TV with trace TR. Normal velocity. Normal right heart chamber dimensions. The pulmonic and aortic valves are normal in appearance. Normal LVOT and RVOT velocity. No AI or PI identified. No pericardial or pleural effusion.

**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	NM	2.1	1.3	1.3	51	83	0.4
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	130	1.8	1.2	12.2	1.8	3.2	1.6
*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 mild mitral and tricuspid regurgitation. Minimal left atrial enlargement indicates the current risk for complication is low. No significant right heart enlargement is seen. No additional issues are noted in this study.

There is also suspect cardiac neoplasia associated with the heart base/aortic body. This is not a definitive finding, as this abnormality cannot be seen from all views. If confirmed, the most likely tumor type given this location and the breed is a chemodectoma, however



**PATIENT**

Stella Rose-Williams

other more malignant differentials cannot be ruled out. Chemodectomas are often incidental findings as is suspected to be the case here, only causing clinical signs if blood flow is obstructed, pericardial effusion occurs, or a metastatic lesion causing systemic issues. Given a lack of definitive evidence, a CT is strongly recommended in this case. An alternative would be a referral to a local Cardiologist for advanced imaging +/- Radiologist review of the prior films.

**SPECIES**

Canine

**BREED**

Boston Terrier

The prognosis with cardiac chemodectomas is fair. The limiting factor is often hemorrhage into the pericardium, impingement of cardiac blood flow secondary to tumor growth, or metastasis to the thorax or abdomen. Chemotherapy and/or radiation therapy can also be discussed with an Oncologist.

**SEX**

Female Spayed

Given these findings, a cardiac origin of the cough is not suspected. The tumor is unlikely to be causing issues at this size as discussed, although this may certainly change as the mass grows. Consider primary respiratory disease and use of hydrocodone is recommended. Should the tumor increase in dimension and lead to congestion, this is most commonly right-sided congestion (ascites/effusions) with increasing pulmonary pressures and syncope with exertion. Monitoring is advised.

**AGE**

14 years

No cardiac medications are indicated at this time. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

**WEIGHT**

26.9lbs

Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM DACVIM  
(Cardiology)

Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

**IMAGING PERFORMED BY**

Crystal Hill, RVT

**PLAN**

Further systemic evaluation is advised. Highly recommend referral and advanced imaging as discussed. Consider hydrocodone for QOL.

**HOSPITAL NAME**

The Maples Animal  
Hospital

If declined, recheck tumor size via echocardiography in 6 months, sooner if clinical signs arise.

**REFERRING VET**

Dr. Kazienko

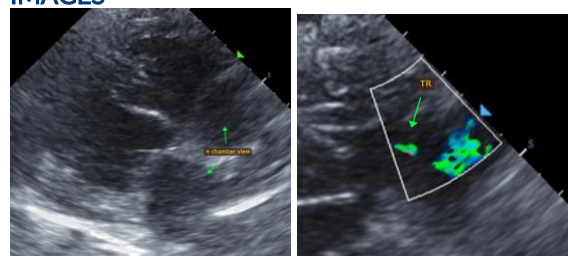
**INVOICE**

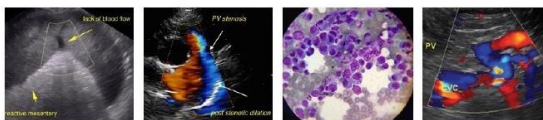
25249

**DATE**

7/11/22

**IMAGES**





**PATIENT**

Stella Rose-Williams

**SPECIES**

Canine

**BREED**

Boston Terrier

**SEX**

Female Spayed

**AGE**

14 years

**WEIGHT**

26.9lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM DACVIM  
(Cardiology)

**IMAGING  
PERFORMED BY**

Crystal Hill, RVT

**HOSPITAL NAME**

The Maples Animal  
Hospital

**REFERRING VET**

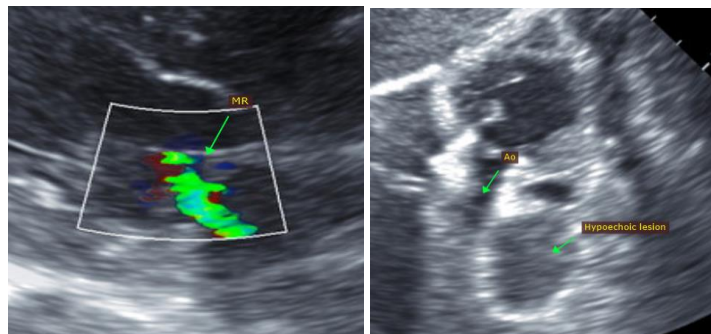
Dr. Kazienko

**INVOICE**

25249

**DATE**

7/11/22



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