



## PATIENT

Bently Moerike

## SPECIES

Canine

## BREED

Boston Terrier

## SEX

M/N

## AGE

10

## WEIGHT

10 kg

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

## IMAGING PERFORMED BY

Dr. Belan

## HOSPITAL NAME

Prairie Winds VC

## REFERRING VET

Dr. Patel

## INVOICE

21238

## DATE

2/22/23

## PRESENTING CLINICAL SIGNS

Developed new murmur since last wellness exam. 3/6 left side dominant.  
Abnormal PE/Chem/CBC/UA Results: Non recent

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
<b>PATIENT</b>	5.8	3.8	NM	1.5	46	72	0.35
<b>CANINE</b>	<b>HR</b> (BPM)	<b>AV</b>	<b>PV</b>	<b>BODY WEIGHT</b> (kg)	<b>LA</b>	<b>LVIDd</b>	<b>LVIDs</b>
<b>CARDIAC PARAMETERS</b>		<b>VMAX</b> (m/s)	<b>MAX</b> (m/s)		2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6				
<b>PATIENT</b>	157	1.3	1.0	--	3.6	3.4	--

## Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 2 different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented mild thickening consistent with endocardiosis. No evidence of valvular prolapse. Doppler indicated measurable mild to moderate primarily eccentric insufficiency. Borderline increased MR velocity was noted. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. Normal measured LVOT velocity. The **right atrium** and auricle revealed mild increased size with normal structure and content. No evidence of masses was noted. **Tricuspid** valve demonstrated concurrent mild thickening with moderate TR on doppler. The **right ventricle** exhibited increased size compared to the LV. Normal myocardial echogenicity and free wall thickness was noted. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). Normal measured RVOT velocity was noted. No visible **pericardial** or free pleural fluid was noted. A homogenous mass was noted in the area of the heart base, adjacent to the aorta and left atrium was present, measuring 4.5 cm in diameter. No overt arrhythmia was noted.

## ULTRASONOGRAPHIC FINDINGS

- Heart base mass- sarcoma, chemodectoma or other



**PATIENT**

- Compensated MR, normal LA/LV

Bently Moerike

- Moderate pulmonary hypertension with mild RA/RV enlargement

**SPECIES**

Canine

**BREED**

Boston Terrier

**SEX**

M/N

**AGE**

10

**WEIGHT**

10 kg

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

**IMAGING PERFORMED BY**

Dr. Belan

**HOSPITAL NAME**

Prairie Winds VC

**REFERRING VET**

Dr. Patel

**INVOICE**

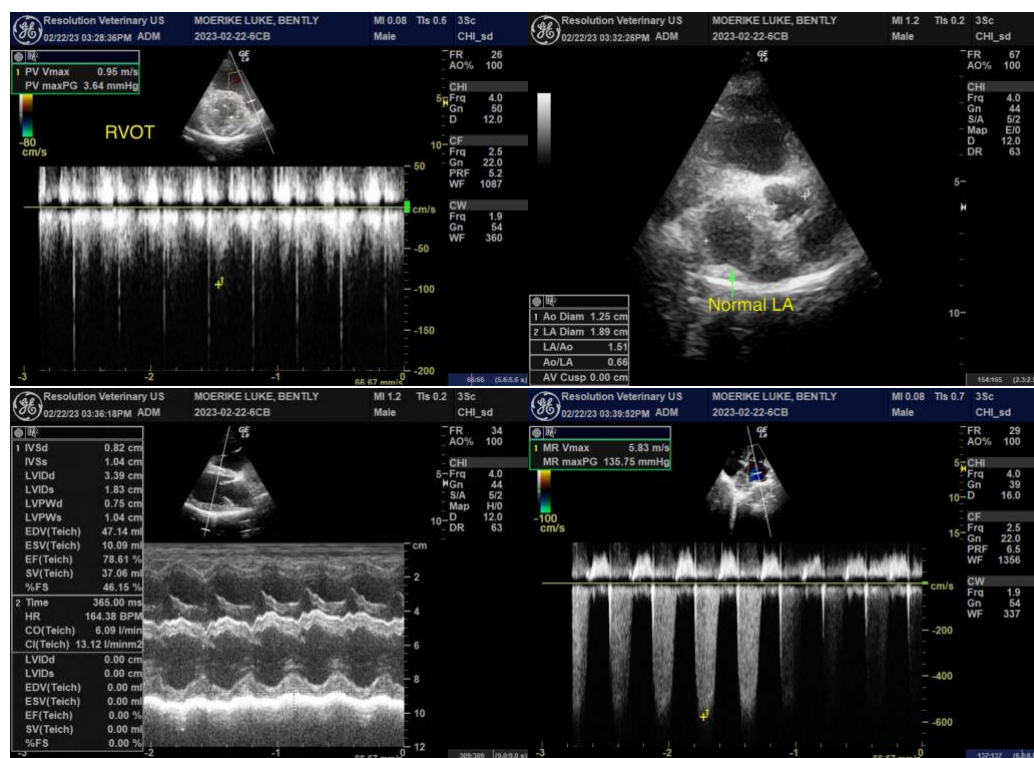
21238

**DATE**

2/22/23

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The lack of left atrium enlargement indicates that the current and future risk secondary to MR is relatively low. The estimated pulmonary pressure gradient based on measured TR velocity is equivalent to moderate pulmonary hypertension (approximately mmHg pulmonary pressure). Given the lack of reported clinical signs suggestive of clinical pulmonary hypertension, close monitoring going forward is advised. Cardiac reassessment is suggested if evidence of pulmonary hypertension, i.e., syncope, coughing, tachypnea, etc., +/- empirical Sildenafil at initial low-end dose may be indicated. Referral for further assessment of the heart base mass and potential oncology consult is likely ideal. If referral is not elected, serial sonographic monitoring of the heart base mass for evidence of progression and/or development of malignant arrhythmias or secondary effusion is recommended.





**PATIENT**

Bently Moerike

**SPECIES**

Canine

**BREED**

Boston Terrier

**SEX**

M/N

**AGE**

10

**WEIGHT**

10 kg

**INTERPRETED BY**

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

**IMAGING PERFORMED BY**

Dr. Belan

**HOSPITAL NAME**

Prairie Winds VC

**REFERRING VET**

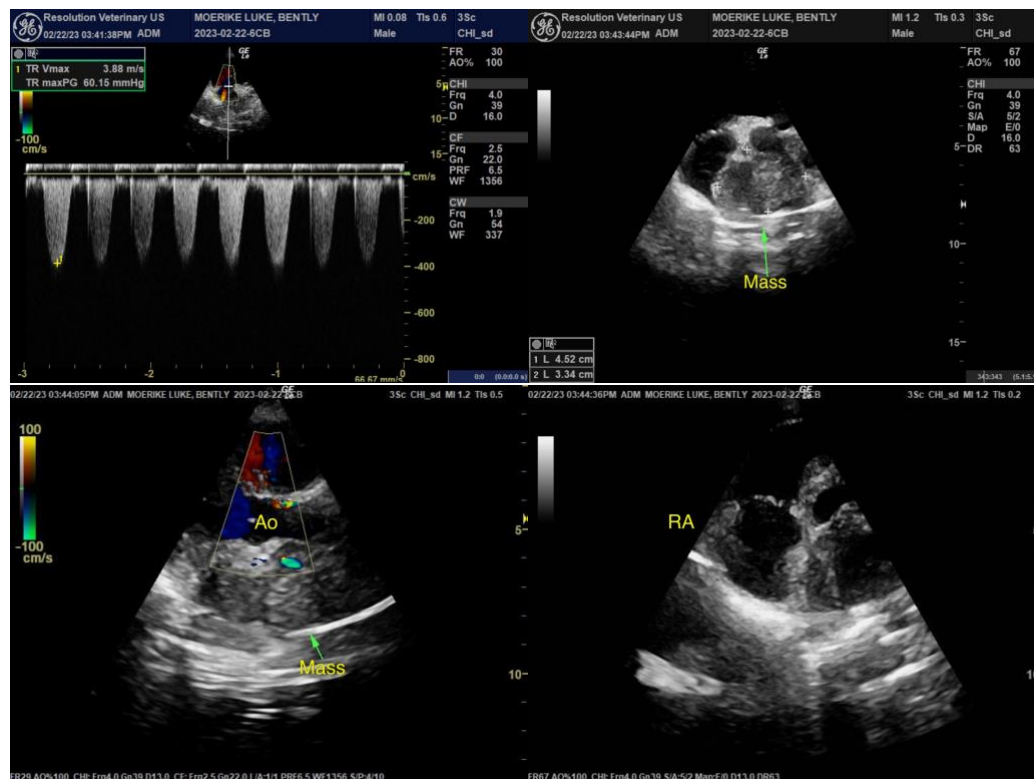
Dr. Patel

**INVOICE**

21238

**DATE**

2/22/23



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

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
[info@SonoPath.com](mailto:info@SonoPath.com)