



**PATIENT**

Annie Ferreira

**SPECIES**

Canine

**BREED**

Boston Terrier

**SEX**

Female Spayed

**AGE**

12 years

**WEIGHT**

11.6lbs

**PRESENTING CLINICAL SIGNS**

History: History PLN (on Enalapril 5 mg SID). Mildly elevated liver values. Currently, uncontrolled systemic hypertension. Littermate recently diagnosed with sick sinus syndrome. BP: 170-180mmHg. \*Sedated with gabapentin and trazadone.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and Doppler imaging is available.

**Left ventricle:** The LV diameter is decreased with adequate myocardial function. LV wall thicknesses are moderate to severely increased.

**Left atrium:** The left atrium is normal.

**Mitral valve:** The mitral valve is mildly thickened with mild prolapse into the left atrial lumen. Mild central mitral regurgitation.

**Aortic valve/aorta:** The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.

**Right ventricle:** Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. Mild RV hypertrophy.

**Right atrium:** Normal RA dimension.

**Tricuspid valve:** The tricuspid valve appears mildly thickened with septal prolapse and mild to moderate tricuspid regurgitation. Normal velocity.

**Pulmonic valve/pulmonary artery:** The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.

**Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses. **Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 150bpm.

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**2-Dimensional Measurements**

Ao diam (cm)	1.3
LA diam (cm)	1.8
LA:Ao (Swe)	1.3
IVS thickness (cm)	0.9
LVID diastole (cm)	1.7
PW thickness (cm)	1.0
LVID systole (cm)	1.1
FS (%)	35

**Doppler Measurements**

PV Vmax (m/s)	0.8
AoV Vmax (m/s)	0.93
MR Vmax (m/s)	NM
TR Vmax (m/s)	2.5
TR PG (mmHg)	25

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**INTERPRETATION OF THE FINDINGS**

Chronic degenerative valve disease causing mild mitral and mild to moderate tricuspid regurgitation is identified. Lack of significant left or right atrial enlargement indicates the current risk for complication is low. More importantly, significant LV and RV hypertrophy is identified with a small internal dimension. No additional issues are noted in this study.

**HOSPITAL NAME**

Anchor Animal  
Hospital

**REFERRING VET**

Dr. Lavin

Systemic hypertension is mentioned in the history which is likely the cause of LV hypertrophy. This does not explain RV changes and reassessment of lab work is strongly recommended. An alternative explanation may be a combination hypertension and a primary myocardial issue, similar to HCM. Getting the BP controlled and monitoring for improvement would be the only way to differentiate underlying causes. Regardless, both atria are normal, indicating low risk for complication. Reassessing the BP is recommended, as further vasodilation with Amlodipine may be warranted. Highly recommend consultation with an Internal Medicine Specialist in this complicated case.

**INVOICE**

24191

**DATE**

5/15/22



**PATIENT**

Annie Ferreira

No cardiac medications are indicated. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1).

**SPECIES**

Canine

**RECOMMENDATIONS**

- Further evaluation/treatment of systemic hypertension is advised with consultation with IM Specialist recommended.
- Baseline lab work is recommended, if not recently performed.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- 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.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

**BREED**

Boston Terrier

**SEX**

Female Spayed

**AGE**

12 years

**WEIGHT**

11.6lbs

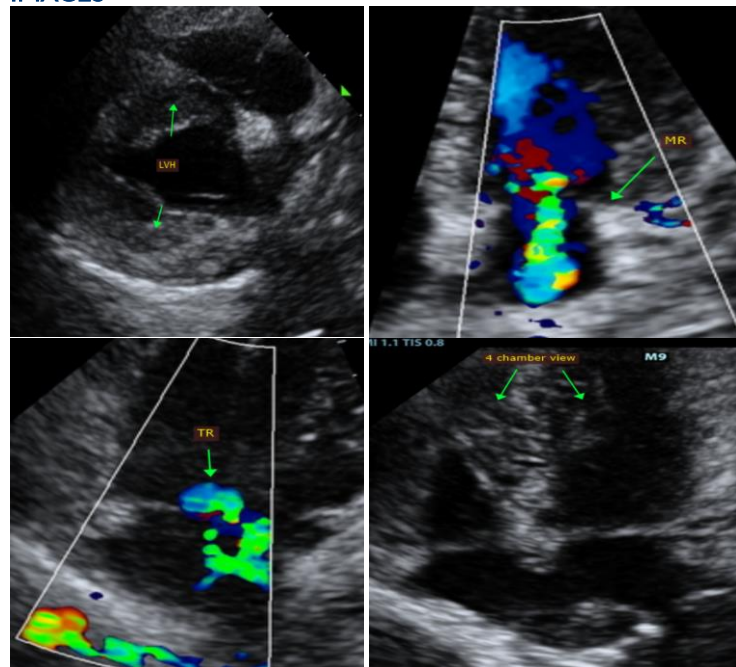
**PLAN**

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

**INTERPRETED BY**

Maggie Machen  
 Lamy, DVM  
 DACVIM (Cardiology)

**IMAGES**



**IMAGING PERFORMED BY**

Pamela Harrigan,  
 RDCS

**HOSPITAL NAME**

Anchor Animal  
 Hospital

**REFERRING VET**

Dr. Lavin

**INVOICE**

24191

**DATE**

5/15/22



**PATIENT**

Annie Ferreira

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**

Boston Terrier

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

**SEX**

Female Spayed

**AGE**

12 years

**WEIGHT**

11.6lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING  
PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Anchor Animal  
Hospital

**REFERRING VET**

Dr. Lavin

**INVOICE**

24191

**DATE**

5/15/22