



**PATIENT**

Belle Llewellyn

**SPECIES**

Canine

**BREED**

Mix

**SEX**

Female Spayed

**AGE**

5 years

**WEIGHT**

16.9lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Mass Veterinary Services

**REFERRING VET**

Dr. Masloski

**INVOICE**

25443

**DATE**

7/20/22

**PRESENTING CLINICAL SIGNS**

History: Belle referred to evaluate a murmur noted in June 2018. She is clinically doing well with a good appetite and activity level. On exam: NSR, grade I-II/VI murmur with PMI left apical area though growling the entire exam, PSS. lung fields clear. BP: 180mmHg x 2; 200 mmHg x 3 (very stressed). Current medications: 1) Fluoxetine 10mg daily 2) Apoquel 5.4mg daily 3) Glucosamine daily \*Sedated with propofol for study.

**ECHOCARDIOGRAM FINDINGS**

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

**Left ventricle:** The LV diameter is normal with mildly depressed myocardial function. LV wall thicknesses are normal.

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

**Mitral valve:** The mitral valve is mildly thickened with no prolapse into the left atrial lumen. No 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.

**Right atrium:** Normal RA dimension.

**Tricuspid valve:** The tricuspid valve appears normal with trivial 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. A mild step-up is seen in the left branch of the pulmonary artery; however, max velocity is only 1.4m/s.

**Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses.

**Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 120bpm.

**2-Dimensional Measurements**

Ao diam (cm)	1.5
LA diam (cm)	1.7
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.8
LVID diastole (cm)	2.5
PW thickness (cm)	0.8
LVID systole (cm)	1.9
FS (%)	24

**Doppler Measurements**

PV Vmax (m/s)	1.4
AoV Vmax (m/s)	0.93
MR Vmax (m/s)	NA
TR Vmax (m/s)	2.1
TR PG (mmHg)	18

**INTERPRETATION OF THE FINDINGS**

Overtly normal cardiac structure and function. Mild LV dysfunction is suspected to be secondary to heavy sedation. No cause of the murmur is identified in this study. A slight step-up in velocity is seen through the left branch of the pulmonary artery; however, the max recorded velocity is still unlikely to be appreciated on exam. Regardless, this is a benign change. In the absence of significant volume changes (dehydration) or anemia, other possibilities include a physiologic flow murmur only present with elevated heart rates, or a small flow abnormality not seen here. Baseline lab work is recommended if not recently performed. It is reasonable to monitor periodically via recheck echocardiography in the future, particularly should the murmur persist/progress. No significant valvular insufficiencies were noted, and no structural issues identified.



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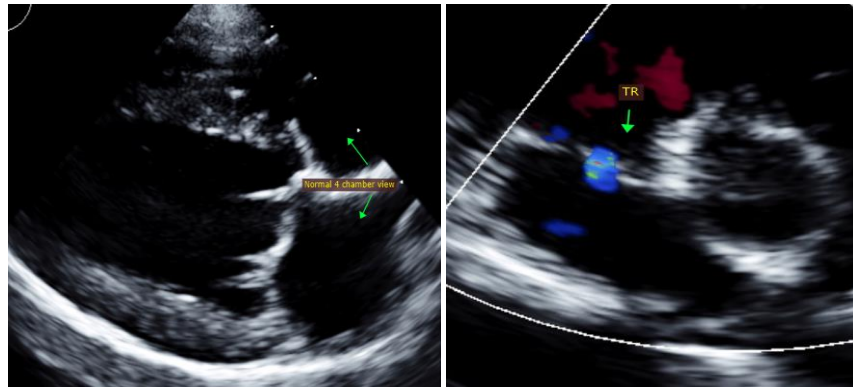
**RECOMMENDATIONS**

- No cardiac medications are indicated at this time. Monitor for any development of cough, labored breathing or exercise intolerance.
- No cardiac contraindication for general anesthesia.

**PLAN**

- Recommend recheck echocardiogram in 12-18 months to screen for progression or development of concurrent cardiac disease that the preexisting murmur may mask.

**IMAGES**



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DACVIM (Cardiology)

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.

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

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

**HOSPITAL NAME**

Mass Veterinary Services

**Echocardiogram performed by:** Pamela Harrigan, RDCS  
Pet Animal Ultrasound Service (4paus.com)

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