



**PATIENT**

Brady Caliendo

**SPECIES**

Canine

**BREED**

Shetland Sheepdog

**SEX**

Male Neutered

**AGE**

13 years

**WEIGHT**

27.8lbs

**PRESENTING CLINICAL SIGNS**

History: Seen at ER for coughing, wheezy lung sounds. Perihilar edema on radiographs - early CHF. Grade II/VI systolic murmur. BP: 221, 230, 233, 241mmHg.

Current medications: Furosemide 12.5mg, 1 tab BID; Pimobendan 5mg, 1 tab BID; Enalapril 5mg, 1.5-tab SID \*No sedation for study.

**ECHOCARDIOGRAM FINDINGS**

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

**Left ventricle:** No LV dilation with adequate myocardial function.

**Left atrium:** The left atrium is severely dilated.

**Mitral valve:** Diffuse thickening of mitral valve leaflets with prolapse into the left atrial lumen. Severe eccentric mitral regurgitation with a normal velocity.

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

**Right ventricle:** No RV dilation.

**Right atrium:** No right atrial enlargement.

**Tricuspid valve:** The tricuspid valve appears thickened, with trace tricuspid regurgitation. No velocity.

**Pulmonic valve/Pulmonary artery:** The pulmonic valve is normal in morphology and mobility. The MPA appears mildly dilated. Normal pulmonic outflow velocities with laminar flow. No PI.

**Pericardium/other:** No pericardial or pleural effusion noted. No obvious cardiac masses.  
**Heart rhythm:** ECG reveals a sinus rhythm with an average HR of 80bpm.

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**2-Dimensional Measurements**

Ao diam (cm)	1.4
LA diam (cm)	3.4
LA:Ao (Swe)	2.3
IVS thickness (cm)	1.1
LVID diastole (cm)	3.2
PW thickness (cm)	1.1
LVID systole (cm)	1.5
FS (%)	53

**Doppler Measurements**

PV Vmax (m/s)	1.1
AoV Vmax (m/s)	2.0
MR Vmax (m/s)	5.8
TR Vmax (m/s)	2.7
TR PG (mmHg)	30

**IMAGING**

**PERFORMED BY**

Pamela Harrigan,  
RDCS

**INTERPRETATION OF THE FINDINGS**

The cause of the murmur is chronic degenerative valve disease causing severe mitral and trace tricuspid regurgitation. Severe left atrial enlargement indicates the risk for spontaneous congestive heart failure is elevated. What is unexpected is the LV is normal in dimension, which is difficult to explain in light of severe MR. No additional issues are identified.

**HOSPITAL NAME**

Wignall Animal  
Hospital

**REFERRING VET**

Dr. Cringan

**INVOICE**

25315

**DATE**

7/14/22

In light of the clinical signs, reported chest radiograph finding and severity of disease on echocardiogram, the diagnosis of congestive heart failure is supported, and continued medications are warranted lifelong as below. If the patient did not respond adequately to Lasix therapy, repeat chest radiographs with a Radiologist review are strongly recommended, given the somewhat unusual findings.



**PATIENT**

Brady Caliendo

The average survival time of canine patients with active pulmonary edema is 8-9 months on medications, however they generally are able to maintain a good quality of life for that period. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

**SPECIES**

Canine

The reported blood pressure is elevated and should be reassessed for accuracy particularly given no reported clinical signs of severe hypertension (retinal changes, etc.) or evidence of LVH on echo. Ideally obtain serial measurements in a controlled, low stress environment and continue until 3 consecutive readings plateau within 5mmHg of variability. If persistently >180mmHg despite a relatively calm demeanor, recommend institution of amlodipine to effect. Additionally, if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushings, PLN, adrenal tumor, etc.), as primary disease is relatively uncommon and a rule out diagnosis.

**BREED**

Shetland Sheepdog

**SEX**

Male Neutered

**RECOMMENDATIONS**

**AGE**

13 years

- Continue Lasix, Pimobendan and Enalapril as prescribed.
- Reassess BP as discussed.
- Institute Spironolactone 1-2 mg/kg PO q 12h.
- Cough suppression to improve QOL can also be considered (hydrocodone, 0.2-0.4mg/kg up to q4-6h PRN). If respiratory signs persists despite therapy, repeat CXR is strongly recommended.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.
- Monitoring of sleeping respiratory rates will be paramount to screen for congestive heart failure at home.
- Elective anesthesia is not advised.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.

**WEIGHT**

27.8lbs

**INTERPRETED BY**

Maggie Machen  
 Lamy, DVM  
 DACVIM (Cardiology)

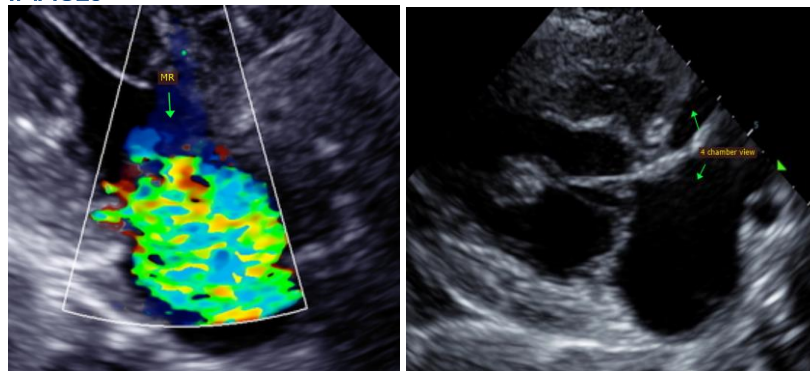
**PLAN**

- Monitor renal values and BP every 3-4 months lifelong.
- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

**IMAGING PERFORMED BY**

Pamela Harrigan,  
 RDCS

**IMAGES**



**HOSPITAL NAME**

Wignall Animal  
 Hospital

**REFERRING VET**

Dr. Cringan

**INVOICE**

25315

**DATE**

7/14/22



**PATIENT**

Brady Caliendo

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**

Shetland Sheepdog

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

**SEX**

Male Neutered

**AGE**

13 years

**WEIGHT**

27.8lbs

**INTERPRETED BY**

Maggie Machen  
Lamy, DVM  
DACVIM (Cardiology)

**IMAGING  
PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

Wignall Animal  
Hospital

**REFERRING VET**

Dr. Cringan

**INVOICE**

25315

**DATE**

7/14/22