
**PRESENTING CLINICAL SIGNS**

History: Distended abdomen, low energy. Radiographs consistent with peritoneal effusion, VHS 12.

**DATE**

2/16/23

**ECHOCARDIOGRAPHIC FINDINGS**

2D, M-mode, and Doppler study.

**PERFORMED BY:**

Tom McNeill

**INTERPRETED BY**

 Keith Blass, DVM,  
 MS, DACVIM  
 (Cardiology)

Left atrial size is normal. The mitral valve leaflets are mildly thickened, and a mild jet of mitral regurgitation is present. Left ventricular internal dimensions are normal. Left ventricular systolic function is normal. The aorta and aortic valve appear normal. There is moderate right atrial and right ventricular dilation. The tricuspid valve leaflets are mildly thickened, and a moderate jet of tricuspid regurgitation is present. TR velocity does not suggest the presence of pulmonary hypertension. The pulmonary artery and pulmonic valve appear normal, though trace pulmonic insufficiency is present. No shunting lesions are visualized. No pericardial effusion or cardiac masses are seen.

**PATIENT**

Moose Stang

LA - 41.2 mm  
 LVIDd - 41.6 mm  
 LVIDs - 30.2 mm  
 FS - 27.4%  
 RA - 48.8 mm  
 RVIDd - 48.0 mm  
 LVOT - 1.70 m/s  
 RVOT - 0.57 m/s  
 TR - 1.76 m/s

**SPECIES**

Canine

**ELECTROCARDIOGRAPHIC FINDINGS**

A single lead ECG is submitted for review.

**BREED**

Labrador Retriever

HR: 190 bpm  
 Rhythm: Atrial fibrillation with VPCs

The underlying rhythm is rapid and irregular. There are no discernible P waves, consistent with atrial fibrillation. All supraventricular complex amplitudes and intervals are within normal limits. Intermittent VPCs are present.

**SEX**

MN

**RADIOGRAPHIC FINDINGS**

A lateral thoracic radiograph is submitted for review.

**AGE**

11 y

There is moderate generalized enlargement of the cardiac silhouette. The pulmonary vessels are within normal limits. The pulmonary parenchyma and pleural space are within normal limits. The trachea is normal. The remainder of the thorax is unremarkable. There is a loss of serosal detail in the abdomen.

**WEIGHT**

81 lb

**ASSESSMENT/RECOMMENDATIONS**

Degenerative mitral and tricuspid valve disease  
 Atrial fibrillation  
 Ventricular premature complexes (VPCs)

**HOSPITAL NAME**

SVS Imaging CT

Moose's echocardiogram demonstrates regurgitation of blood across his mitral and tricuspid valves resulting from degenerative valve disease. His mitral valve disease is mild and appears to be well-compensated at this time. Moose's tricuspid valve disease is more advanced, as he has moderate tricuspid regurgitation present, with moderate secondary dilation of both his right atrium and right ventricle. In addition, Moose's right atrial dilation has resulted in the

**REFERRING VET**

Dr. Watters



development of atrial fibrillation, while his right ventricular dilation has resulted in the development of VPCs. Given these findings, it's very likely that Moose's peritoneal effusion is due to the development of right-sided congestive heart failure, and his atrial fibrillation is likely the cause of his low energy.

DATE

2/16/23

Abdominocentesis is recommended to remove Moose's peritoneal effusion. Recommended medical therapy for Moose's tricuspid valve disease/CHF includes furosemide (80 mg BID), enalapril (17.5 mg BID), pimobendan (10 mg BID), and spironolactone (37.5 mg BID). Recommended initial therapy for Moose's atrial fibrillation is diltiazem (45 mg TID), with the goal of therapy being a reduction of his in-hospital heart rate to less than ~145 bpm, while consideration can be given to starting him on an omega-3 supplement to help with his ventricular arrhythmia.

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Tom McNeill

INTERPRETED BY

Keith Blass, DVM,  
MS, DACVIM  
(Cardiology)

A recheck physical exam, renal/electrolyte profile, and ECG are recommended in 1-2 weeks. A recheck echocardiogram is recommended in ~6 months.

PATIENT

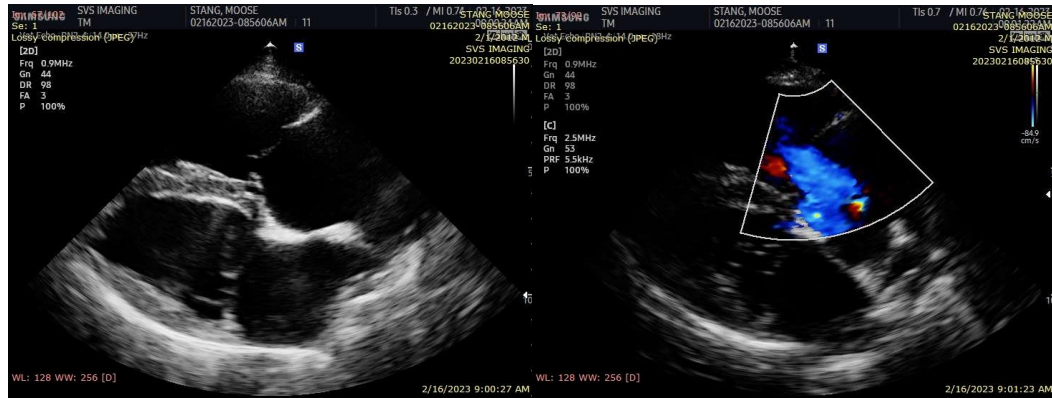
Moose Stang

SPECIES

Canine

BREED

Labrador Retriever



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.

SEX

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.

MN

AGE

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11 y

WEIGHT

81 lb

HOSPITAL NAME

SVS Imaging CT

REFERRING VET

Dr. Watters