


**PRESENTING CLINICAL SIGNS**

History: Progressive abdominal distension over the past 7-10 days. PE – difficult to auscult heart, absent lung sounds ventrally on both sides, tachypnea with increased expiratory effort. HW positive.

**DATE**

9/26/22

**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 to moderate jet of mitral regurgitation is present. Left ventricular dimensions are normal. Left ventricular systolic function is normal. The aorta and aortic valve are normal. Right atrial and right ventricular dimensions are normal. The tricuspid valve leaflets are mildly thickened, and a mild jet of tricuspid regurgitation is present. The pulmonary artery and pulmonic valve appear normal. No shunting lesions are visualized. No pericardial effusion or cardiac masses are seen. No heartworms are visualized. Pleural effusion is present.

**PATIENT**

Lucy Campbell

LA – 38.1 mm  
 LVIDd – 33.6 mm  
 LVIDs – 24.2 mm  
 FS – 28%  
 RA – 30.9 mm  
 LVOT – 0.67 m/s  
 RVOT – 0.84 m/s

**SPECIES**

Canine

**ASSESSMENT/RECOMMENDATIONS**

Degenerative mitral and tricuspid valve disease

**BREED**

Labrador Retriever

This examination demonstrates regurgitation of blood across Lucy's mitral and tricuspid valves resulting from degenerative valve disease. The hemodynamic effects of each of the regurgitations appear to be mild, as Lucy does not have secondary dilation of any of her cardiac chambers. As such, Lucy's valvular diseases appear to be well-compensated, and it appears unlikely that they are contributing to her pleural effusion or abdominal distension.

**SEX**

FS

There was a weak spectral Doppler signal evaluating Lucy's tricuspid regurgitation, therefore, a quantitative assessment of her pulmonary artery pressure could not be made. As such, the presence of a heartworm-associated pulmonary hypertension cannot be ruled out as a possible cause of Lucy's effusions, though no changes to her right heart or main pulmonary artery that would be consistent with the presence of hemodynamically relevant pulmonary hypertension were appreciated in this exam.

**AGE**

10 y

Therapeutic thoracocentesis is recommended if only a small sample of effusion was removed prior to Lucy's echocardiogram. Samples of effusion should be submitted for analysis and cytology +/- culture. Additional diagnostics, such as thoracic radiographs and/or CT, may be warranted based on the results of fluid analysis.

**WEIGHT**

28.5 kg

No therapy is recommended at this stage of Lucy's valvular diseases, though diuretic therapy could potentially be indicated based on the underlying cause of her effusion. No contraindication to heartworm adulticide therapy following a four-week course of doxycycline (10 mg/kg BID) is appreciated in the image set. Strict exercise restriction is recommended throughout the course of therapy.

**HOSPITAL NAME**

SVS Imaging CT

**REFERRING VET**

Dr. Maller

A recheck echocardiogram is recommended in 6 months to monitor for progression of Lucy's valvular diseases.



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PATIENT

Lucy Campbell

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

BREED

Labrador Retriever

Keith Blass, DVM, MS, DACVIM (Cardiology)  
KeithBlass@gmail.com  
631-804-5754

SEX

FS

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10 y

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