


PRESENTING CLINICAL SIGNS
DATE

2/22/22

History: Grade IV/VI murmur. Breathing fast, coughing. Initial diagnosis (radiologist) CHF, put on furosemide 50 mg BID, pimobendan 2.5 mg BID. Seen ~7 days later - increased pimo to 3.75 mg BID, added spironolactone 12.5 mg BID; rad report came back as focal pneumonia, so I took spiro to SID and started enrofloxacin and clavamox. Cough improved, but SRR has not 10 days later (now) - SRR still high; was 100 at home. Had been 50/60 and improved to 30/40 when on antibiotics. Cough is still better. Appetite is nil. This has all taken place over the last ~3 weeks

PERFORMED BY:

Sarah Pender, CVT

ECHOCARDIOGRAPHIC FINDINGS

2D, M-mode, and Doppler study.

INTERPRETED BY

 Keith Blass, DVM,
 MS, DACVIM
 (Cardiology)

There is mild left atrial dilation. There is an ~4.26 cm x 3.52 cm mass-like structure at the heart base that appears to be located within the left atrial lumen in some views and may have some attachment to the mitral valve leaflets. The mitral valve leaflets are thickened, and there is Doppler evidence of mitral regurgitation present. Left ventricular dimensions are normal. Left ventricular systolic function is hyperdynamic. The aorta and aortic valve appear normal, though there trace aortic insufficiency is present. Right atrial and right ventricular dimensions are normal. The tricuspid valve leaflets are mildly thickened, and there is Doppler evidence of tricuspid regurgitation present. TR velocity is consistent with the presence of moderate pulmonary hypertension (PG 54 mmHg). The pulmonary artery and pulmonic valve are normal. No shunting lesions are visualized. s. No pericardial effusion is seen.

PATIENT

Brenna Lingle

SPECIES

Canine

LA - 37.8 mm
 LVIDd - 25.7 mm
 LVIDs - 13.2 mm
 FS - 48.6%
 LVOT - 1.21 m/s
 RVOT - 0.67 m/s
 TR - 3.67 m/s

BREED

Beagle

ASSESSMENT/RECOMMENDATIONS
SEX

MN

AGE

12 y

WEIGHT

30 lb

This examination demonstrates a number of abnormalities, as Brenna has degenerative mitral and tricuspid valve disease, pulmonary hypertension, and a mass, which is likely neoplastic, that appears to be located within his left atrium. Brenna's tricuspid valve disease is mild, and appears to be well-compensated. His mitral valve disease is a bit more advanced, as Brenna has mild secondary dilation of his left atrium. As only mild left atrial dilation is present, it's difficult to say whether Brenna's mitral valve disease alone could result in the development of left-sided congestive heart failure, however, if his mass is obstructing pulmonary venous return to the left atrium, this could result in an increase in pulmonary venous pressure with subsequent pulmonary edema formation. Therefore, it's possible that Brenna's continued increased respiratory rate could be cardiogenic in origin, though pneumonia should also be considered as a possibility based on his radiograph report and some improvement in his clinical signs, as should pulmonary thromboembolism, given the likely presence of a malignant neoplasm. As for Brenna's inappetence, if pneumonia is present, this could be the cause, however, it's possible that the mass in his heart could be the cause as well.

HOSPITAL NAME

As for Brenna's pulmonary hypertension, it's unclear whether his mitral valve disease alone could be the cause, and consideration should be given to pneumonia as a possible cause, as well as Brenna's mass, should it be obstructing pulmonary venous return.

SVS Imaging QC

REFERRING VET

Dr. Garro

Cardiac CT/angiography and/or angiography in the absence of a CT may be warranted to determine the extent of Brenna's mass and to determine its effects on blood flow. An abdominal ultrasound may be warranted to evaluate for metastatic disease.



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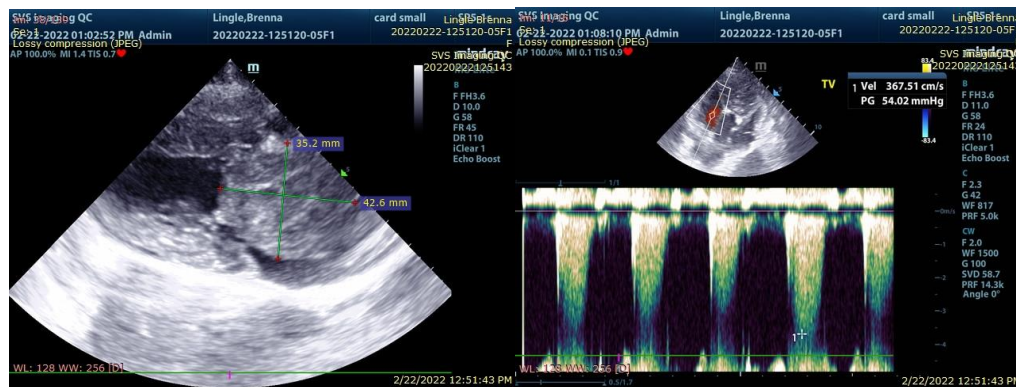
WEIGHT
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Dr. Garro

Recommended therapy for Brenna’s pulmonary hypertension is sildenafil (20 mg am, 10 mg pm). Continued use of his cardiac medications is warranted. If obstruction to flow by the mass is causing left-sided congestive heart failure to develop, a higher furosemide dose can be considered, however, the only therapy that is likely to be effective is relieving the obstruction. Whether a surgical procedure can be performed to debulk/excise the mass cannot be determined based on Brenna’s echocardiogram alone (CT would be more helpful), and whether an open heart approach would be required is something that will need to be discussed with a surgeon. Given the size and location of the mass, chemotherapy and/or radiation therapy is unlikely to be beneficial, however, consultation with an oncologist can be considered.

A recheck renal/electrolyte profile is recommended in 2 weeks if Brenna’s furosemide dose is increased. A recheck echocardiogram is recommended in 3 months.



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

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