



PATIENT

Ki Murphy

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Male Neutered

AGE

10 years

WEIGHT

8lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan,
RDMS

HOSPITAL NAME

Falmouth Animal
Hospital

REFERRING VET

Dr. Switzer

INVOICE

25397

DATE

7/18/22

PRESENTING CLINICAL SIGNS

History: Presented last week for senior exam. Grade IV/VI systolic murmur noted. Started Pimobendan 0.17 mg/kg BID. Presented the next day with a wet cough and difficulty "settling". Radiographs = cardiomegaly and pulmonary edema. Started Lasix 2.5 mg/kg BID. History pancreatitis - currently no symptoms. Abdominal radiographs show mineralization within liver/gall bladder. In PU/PD for past year. Recent lab work - elevated SDMA (16), otherwise WNL. UA pending. BP: 108, 110, 112mmHg. Having bi-cavity ultrasound exams. *Sedated with butorphanol/alfaxalone

ECHOCARDIOGRAM FINDINGS

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

Left ventricle: Significant LV dilation with hyperdynamic myocardial function.

Left atrium: The left atrium is markedly 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: Mild RV dilation.

Right atrium: Mild right atrial dilation.

Tricuspid valve: The tricuspid valve appears thickened, with mild to moderate tricuspid regurgitation. Normal 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 90bpm.

2-Dimensional Measurements

Ao diam (cm)	1.0
LA diam (cm)	2.5
LA:Ao (Swe)	2.5
IVS thickness (cm)	0.5
LVID diastole (cm)	2.8
PW thickness (cm)	0.5
LVID systole (cm)	1.3
FS (%)	53

Doppler Measurements

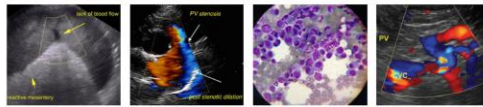
PV Vmax (m/s)	0.5
AoV Vmax (m/s)	0.84
MR Vmax (m/s)	4.8
TR Vmax (m/s)	2.0
TR PG (mmHg)	16

INTERPRETATION OF THE FINDINGS

The cause of the murmur is chronic degenerative valve disease causing severe mitral and mild to moderate tricuspid regurgitation. Marked left atrial enlargement indicates the risk for spontaneous congestive heart failure is elevated. No significant pulmonary hypertension is noted; however, the right heart is mildly enlarged. No additional issues are identified.

In light of the clinical signs, chest radiographs and severity of disease on echocardiogram, the diagnosis is congestive heart failure and continued medications are warranted lifelong as below. Note medication changes below.

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



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period. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

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RECOMMENDATIONS

- Administer Lasix/furosemide 1-2mg/kg PO q12h.
- Institute Spironolactone 1-2 mg/kg PO q 12h.
- Administer Pimobendan 0.25-0.3 mg/kg PO q12h.
- Cough suppression to improve QOL can also be considered (hydrocodone, 0.2-0.4mg/kg up to q4-6h PRN) for any residual mechanical cough in the face of normal sleeping respiratory rates.
- 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.

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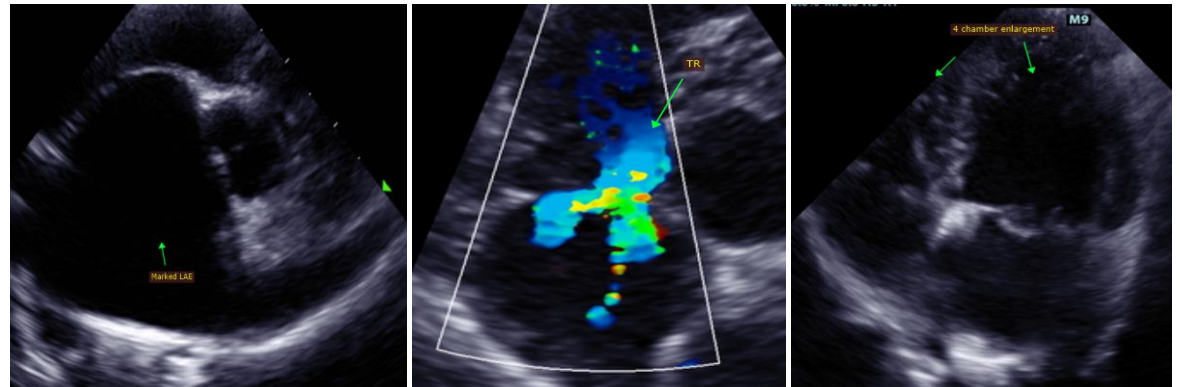
PLAN

- Monitor renal values and BP in 1-2 weeks, then every 3-4 months lifelong. If doing well and BP >130mmHg, institute ACEI 0.5mg/kg PO q12h.
- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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IMAGES



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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.

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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.

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