



PATIENT
Samantha McIntosh

SPECIES
Canine

BREED
Cavalier

SEX
Female Spayed

AGE
10 years

WEIGHT
18.7lbs

INTERPRETED BY
Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan,
RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
32054

DATE
8/1/23

PRESENTING CLINICAL SIGNS

History: Recheck echo. History chronic valvular disease - early advanced disease, diagnosed on prior echocardiogram 9/1/22 at another facility. Recently, Samantha has had a collapse episode x 2 when running in hot, humid weather. She does agility work and goes for long walks with the family. She presently has a Holter pending. She is eating well. On exam: NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear, mm pink, moist, CRT<2. BP: 140 mmHg x 3. Current medications: 1) Pimobendan/vetmedin 2.5mg 1 tab twice a day 2) Enalapril 2.5mg 1.5 tabs twice a day 3) Dasaquin every other day 4) Fish oil daily 5) Probiotic daily *Sedated with propofol for study.

-Pertinent previous echo findings: LA 3.03 cm; LA:Ao 1.84, LV 3.86 cm; moderate-severe LAE, severe LVE, 3+ MR, 1.5 + TR (2.94 m/s; 35mmHg, mild pulmonary hypertension.

ECHOCARDIOGRAM FINDINGS

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

Left ventricle: The LV diameter is significantly increased with hyperdynamic myocardial function. LV wall thicknesses are normal.

Left atrium: The left atrium is markedly dilated. Pulmonary veins appear dilated as they enter the lumen.

Mitral valve: The mitral valve is diffusely thickened with mild prolapse into the left atrial lumen. Marked eccentric mitral regurgitation with 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 right ventricular dilation. No obvious hypertrophy.

Right atrium: Mild RA dilation.

Tricuspid valve: The tricuspid valve appears mildly thickened with moderate to severe tricuspid regurgitation. Velocity consistent with early pulmonary hypertension.

Pulmonary valve/Pulmonary artery: The pulmonic valve is normal in morphology and mobility. Trivial pulmonic insufficiency. Normal RVOT velocity; laminar flow.

Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.

Heart rhythm: ECG reveals a sinus rhythm with an average HR of 166bpm.

2-Dimensional Measurements

Ao diam (cm)	1.7
LA diam (cm)	4.3
LA:Ao (Swe)	2.5
IVS thickness (cm)	0.7
LVID diastole (cm)	4.8
PW thickness (cm)	0.8
LVID systole (cm)	2.1
FS (%)	56

Doppler Measurements

PV Vmax (m/s)	0.6
AoV Vmax (m/s)	1.4
MR Vmax (m/s)	4.9
TR Vmax (m/s)	3.4
TR PG (mmHg)	45

INTERPRETATION OF THE FINDINGS

Chronic degenerative valve disease persists with evidence of progression. Marked mitral and moderate to severe tricuspid regurgitation persists with marked progressive left heart enlargement. The pulmonary veins appear dilated, suggesting early decompensation may be present. Mild pulmonary hypertension is unchanged, and no additional issues are identified.



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Syncope in this patient is most likely cardiogenic in origin. Possible causes include poor forward blood flow leading to hypoxia with excitement, early CHF (suspected), severe pulmonary hypertension (mild seen), an arrhythmia, and/or blood pressure swings/vasovagal event. Given the severity of the findings, highly recommend full cardiac support in this case as below, with monitoring at home for persistent issues. The holter monitor is pending and may warrant further therapy.

Long term prognosis is poor; however, most dogs are able to maintain a good QOL on medications for an average of 8-12 months from diagnosis of CHF.

Mild to moderate activity restriction is advised in this case due to severity of disease.

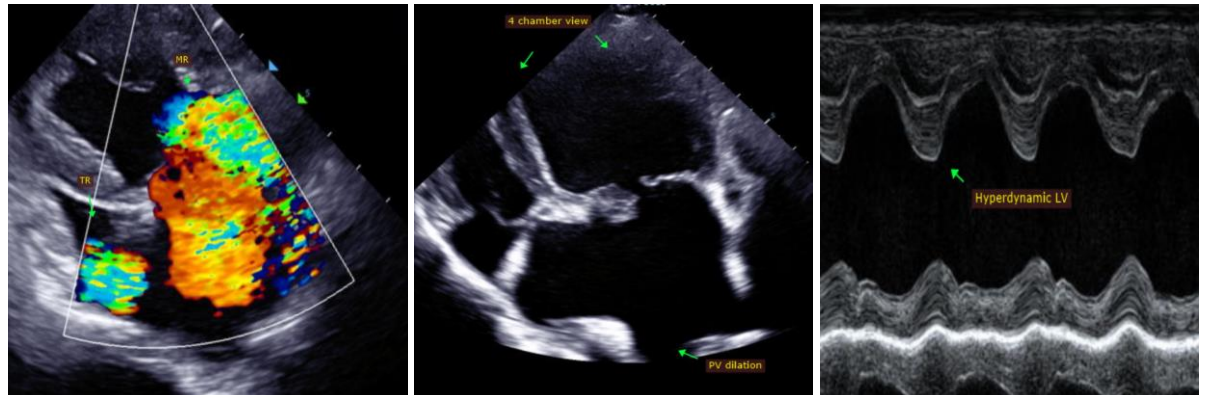
RECOMMENDATIONS

- Institute Lasix 1mg/kg PO q12h.
- Continue Pimobendan 0.25-0.3mg/kg PO q12h.
- Continue ACE-I as prescribed.
- Institute Spironolactone 1-2mg/kg PO q12h (available in 25 and 50mg tablets).
- Further treatment may be warranted pending holter results.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Mild to moderate activity restriction is advised. Reconsider agility in this patient.
- Elective anesthesia is not advised.
- 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.

PLAN

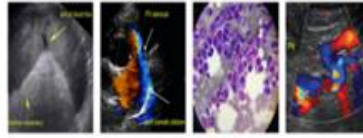
- Monitor renal values and BP in 1-2 weeks, then every 3-4 months lifelong.
- Recommend conservative monitoring with a recheck echocardiogram in 4-6 months, sooner if any development of clinical signs.

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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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.

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Cavalier

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

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Echocardiogram performed by: Pamela Harrigan, RDCS
Pet Animal Ultrasound Service (4paus.com)

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