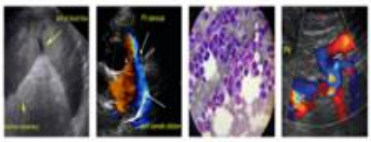
Mass Veterinary Services



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Barkley Kowal

SPECIES
Canine

BREED
Maltese Mix

SEX
Male Neutered

AGE
10 years

WEIGHT
15.3lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
32211

DATE
8/8/23

PRESENTING CLINICAL SIGNS

History: Barkley is referred to evaluate a heart murmur. Coughing x one year. Chest films were unremarkable, so he was started on doxycycline with no improvement in the cough. The cough has progressed and is now present when resting. Good appetite and his activity level has remained normal. 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: 110mmHg x 5. Currently, no medications. *No sedation for study.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: Significant LV dilation with increased sphericity and mildly decreased myocardial function. LV wall thicknesses are normal.
Left atrium: The left atrium and auricle are severely dilated.
Mitral valve: Diffuse thickening of mitral valve leaflets with mild prolapse into the left atrial lumen. Severe eccentric mitral regurgitation with a normal velocity.
Aortic valve/Aorta: The aortic valve is thickened with normal mobility. Mildly elevated aortic outflow velocity; laminar flow. Mild AI.
Right ventricle: No RV dilation.
Right atrium: No right atrial dilation.
Tricuspid valve: The tricuspid valve appears normal with trivial tricuspid regurgitation.
Pulmonic valve/Pulmonary artery: The pulmonic valve is normal with normal pulmonic outflow velocity. No pulmonic insufficiency.
Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.
Heart rhythm: ECG reveals a sinus rhythm with an average HR of 150bpm.

2-Dimensional Measurements

Ao diam (cm)	1.2
LA diam (cm)	3.0
LA:Ao (Swe)	2.5
IVS thickness (cm)	0.6
LVID diastole (cm)	3.7
PW thickness (cm)	0.6
LVID systole (cm)	1.8
FS (%)	51

Doppler Measurements

PV Vmax (m/s)	0.7
AoV Vmax (m/s)	1.7
MR Vmax (m/s)	5.7
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

Chronic degenerative valve disease causing severe mitral regurgitation. Severe left atrial enlargement indicates the risk for spontaneous congestive heart failure is elevated. A small aortic valve is noted; however, the reported BP is low. No additional issues are identified.

Given a reported cough and severity of disease seen here, there is concern for early congestive heart failure in the near future. This breed is highly predisposed to primary respiratory disease as well, which is likely contributing to the cough. Baseline CXR are recommended, in addition to full lifelong cardiac support including low dose Lasix therapy. This is based upon an exceedingly high risk for decompensation. Hydrocodone can be used if needed for quality of life if a mechanical cough persists despite normal sleeping breathing rates. Close monitoring of breathing rates is recommended to determine a mechanical cough from recurrent pulmonary edema.

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The average survival of canine patients once pulmonary edema is diagnosed s 8-9 months on medications; however, they generally are able to maintain a good quality of life for that period. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future. Monitoring of renal values is recommended lifelong.

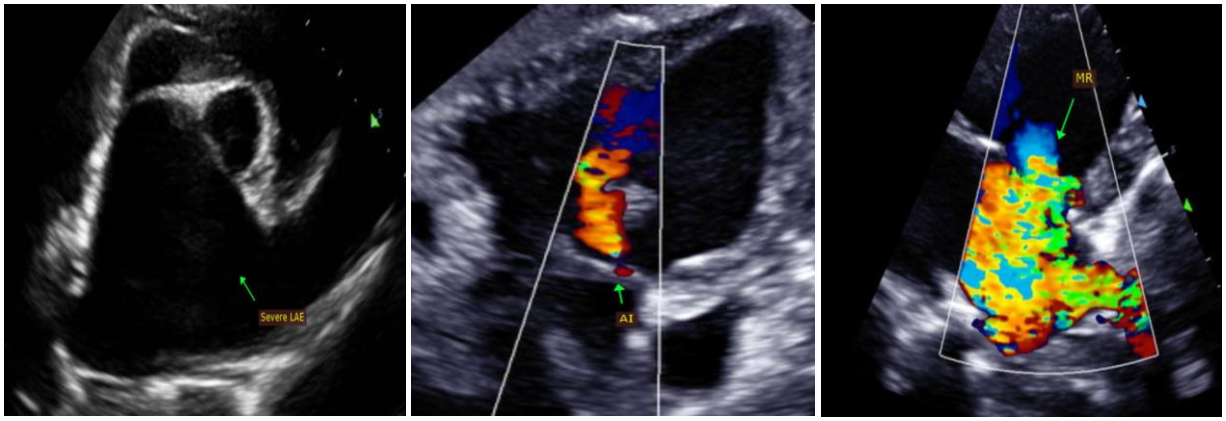
RECOMMENDATIONS

- Institute Spironolactone, 1-2mg/kg PO q12h.
- Institute Furosemide 1mg/kg PO q12h.
- Institute Pimobendan 0.3mg/kg PO q12h.
- Baseline CXR as discussed.
- If needed, institute Hydrocodone if needed, 0.2 – 0.4 mg/kg PO up to q4-6 hours PRN for cough (available in 5/1.5mg tablets or 5mg/5ml solution).
- Elective anesthesia is not advised.
- Monitor for development of a cough, collapse episodes, significant lethargy in the future. Monitoring of sleeping breathing rates is recommended best way to screen for CHF in the future.

PLAN

- Monitor renal values and BP in 1-2 weeks and then every 3-4 months on medications.
- A recheck echocardiogram is recommended in 6 months to screen for progression, sooner if clinical signs arise in the interim.

IMAGES



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. 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.

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

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