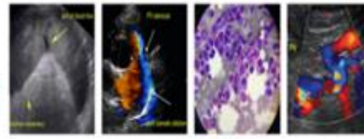
Mass Veterinary Services



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

PATIENT
Onyx Jewell

SPECIES
Canine

BREED
Chihuahua

SEX
Male Intact

AGE
12 years

WEIGHT
3.94lbs

INTERPRETED BY
Maggie Machen Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
31426

DATE
6/19/23

PRESENTING CLINICAL SIGNS

History: Recheck echo. History chronic valvular disease - Stage B2. Presently, Onyx is doing well at home with a normal appetite and activity level. He does cough when excited. On exam: NSR, grade IV/VI murmur with PMI left apical area radiating to right, PSS, lung fields clear, mm pink, moist, CRT<2. Current medications: 1) Pimobendan/vetmedin 1.25mg 1/2 tab twice a day 2) Lasix/furosemide 12.5mg 1/4 tab in am with 1/2 tab pm 3) Hycodan 1mg/ml 0.4mls twice a day ---not taking 4) Enalapril *Sedated with propofol for study.
-Pertinent previous echo findings (10/18/22 MML): LA 1.8 cm; LA:Ao 1.6; LV 24. moderate LAE, moderate MR, trace TR, no effusions noted.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: The LV diameter is moderately increased with a mild decline in myocardial function. LV wall thicknesses are normal.
Left atrium: The left atrium is moderately dilated.
Mitral valve: The mitral valve is diffusely thickened with mild prolapse into the left atrial lumen. Moderate 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. Mild to moderate aortic insufficiency.
Right ventricle: Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.
Right atrium: Normal RA dimension.
Tricuspid valve: The tricuspid valve appears normal with trace tricuspid regurgitation.
Pulmonic valve/Pulmonary artery: The pulmonic valve is normal in morphology and mobility. No 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 90bpm.

2-Dimensional Measurements

Measurement	Value
Ao diam (cm)	1.2
LA diam (cm)	2.2
LA:Ao (Swe)	1.8
IVS thickness (cm)	0.4
LVID diastole (cm)	2.6
PW thickness (cm)	0.4
LVID systole (cm)	1.4
FS (%)	46

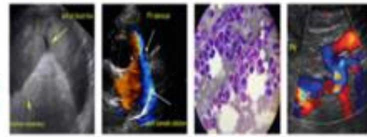
Doppler Measurements

Measurement	Value
PV Vmax (m/s)	1.1
AoV Vmax (m/s)	1.5
MR Vmax (m/s)	5.5
TR Vmax (m/s)	NM
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

Chronic degenerative valve disease persists with evidence of mild progression. Moderate mitral and trace tricuspid regurgitation are unchanged; however, both the LA and LV dimensions are increased. The systolic function is also mildly declined, which should be monitored going forward. Finally, the aortic insufficiency is stable; however, lifelong blood pressure monitoring is advised. No additional issues are identified.

Given these findings, continuing Pimobendan and an ACE-I are recommended, pending BP assessment. As discussed previously, it is unclear if Lasix is warranted in this case. Continued assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).



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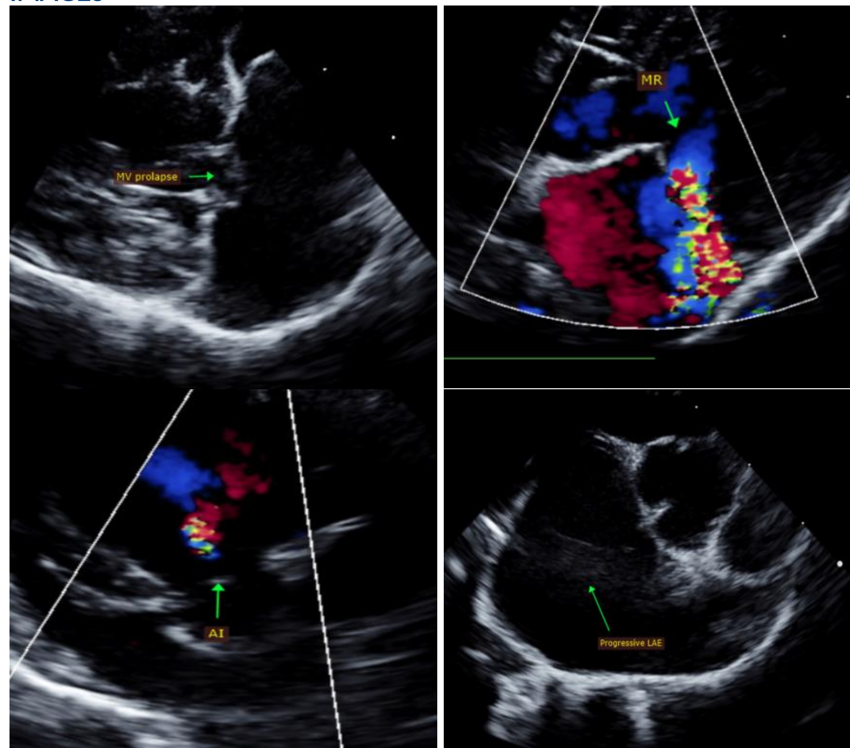
RECOMMENDATIONS

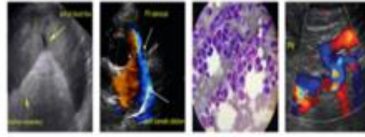
- Continue Pimobendan 0.3mg/kg PO q12h.
- Continue ACE-I 0.5mg/kg PO q12h, pending BP >130mmHg.
- Lasix could be debated as discussed previously.
- Consider Hydrocodone as needed.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

PLAN

- Recommend conservative monitoring with a recheck echocardiogram in 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.

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)