



PATIENT

Mookie Stein

SPECIES

Canine

BREED

American Staffordshire Terrier

SEX

Male Intact

AGE

6 years

WEIGHT

53.2lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan,
RDCS

HOSPITAL NAME

Mass Veterinary Services

REFERRING VET

Dr. Masloski

INVOICE

27120

DATE

10/26/22

PRESENTING CLINICAL SIGNS

History: Mookie was initially found as a stray in May in MS and was transported to GA. He was emaciated with heartworm disease, caval syndrome, pulmonary hypertension and ascites. He was started on pimobendan, Lasix and sildenafil. He was treated for heartworm in August and was adopted 1.5 weeks ago. He has some wheeze but has good activity level which is being restricted. Good appetite. On exam: NSR, no murmurs noted, PSS, lung fields clear. BP: 140 mmHg x 3. Current medications: 1) Pimobendan/vetmedin 5mg 1 tab twice a day 2) Lasix/furosemide 20mg 1.5 tabs twice a day 3) Sildenafil 20mg 2 tabs twice a day ---finished yesterday 4) Prednisone 20mg 1/2 tab daily *No sedation for study.

ECHOCARDIOGRAM FINDINGS

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

Left ventricle: The LV diameter is normal with adequate myocardial function. LV wall thicknesses are normal.

Left atrium: The left atrium is normal.

Mitral valve: The mitral valve is mildly thickened with no prolapse into the left atrial lumen. No mitral regurgitation.

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 enlargement with mild hypertrophy.

Right atrium: Mild RA enlargement.

Tricuspid valve: The tricuspid valve appears mildly thickened with no tricuspid regurgitation.

Pulmonary valve/Pulmonary artery: The pulmonic valve is normal in morphology and mobility. Mild pulmonic insufficiency. Normal RVOT velocity; laminar flow. Moderate MPA and branch dilation. No obvious worms seen in bifurcation or peripheral branches.

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

2-Dimensional Measurements

Ao diam (cm)	2.3
LA diam (cm)	2.5
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.9
LVID diastole (cm)	4.0
PW thickness (cm)	0.7
LVID systole (cm)	1.8
FS (%)	55

Doppler Measurements

PV Vmax (m/s)	1.4
AoV Vmax (m/s)	1.1
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

Findings are consistent with mild to moderate pulmonary hypertension. This is based upon mild right heart enlargement/hypertrophy and MPA dilation. No obvious adult worms are seen; however, ultrasound is largely insensitive for this finding particularly in the peripheral branches. Regardless, given that the treatment was only completed two months, these findings are not surprising. No additional issues are identified.

Given these findings, the wheeze is likely due to residual pulmonary damage/inflammation due to the prior infestation. Repeat chest radiographs may be beneficial to further evaluate for inflammatory changes and establish a baseline. Treatment of these cases



PATIENT
Mookie Stein

SPECIES
Canine

BREED
American Staffordshire Terrier

SEX
Male Intact

AGE
6 years

WEIGHT
53.2lbs

INTERPRETED BY
Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan,
RDCS

HOSPITAL NAME
Mass Veterinary Services

REFERRING VET
Dr. Masloski

INVOICE
27120

DATE
10/26/22

going forward is primarily dependent on management of respiratory symptoms. This includes Theophylline, anti-inflammatory Prednisone, intermittent antibiotic therapy for acute flare ups, Hydrocodone, etc. Reasonable to continue Pimobendan and Sildenafil going forward, given the history and only recent treatment. The patient was reportedly severe prior to therapy, which is somewhat surprising given what is seen here. No obvious indication to continue Lasix based upon these findings and this can be weaned and discontinued.

Reassess heartworm status 6-9 months after completion of Immiticide therapy. A recheck echo is recommended 6 months after heartworm negative status is achieved to reestablish a baseline.

Prognosis is guarded going forward as there is high risk for worsening pulmonary disease as the patient ages. This is suspected in this case and should be treated as clinically indicated going forward. If the cough is poorly controlled/progresses long term, this can certainly lead to worsening of PAH. Clinical signs of significant PAH include exertional dyspnea/collapse, which should be monitored for lifelong.

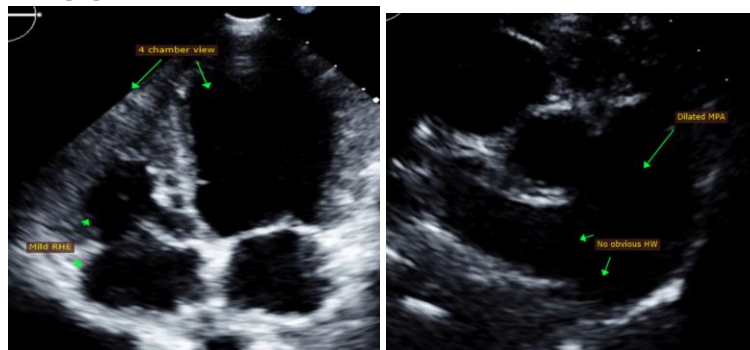
RECOMMENDATIONS

- Continue Pimobendan and Sildenafil as previously prescribed.
- Continue Prednisone as needed for respiratory signs.
- Recommend wean and discontinue Lasix over 1-2 weeks.
- Reassess heartworm status 6-9 months after completion of Immiticide therapy.
- Consider further respiratory evaluation/treatment including CXR, Theophylline, Hydrocodone, etc.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- No cardiac contraindication for general anesthesia. Pre-oxygenate for five minutes and recover in O2 if possible. Mild IV fluid restriction is advised.
- Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

PLAN

- Recommend conservative monitoring with a recheck echocardiogram 6 months after worm negative status is achieved, sooner if any syncope or any associated clinical signs arise.

IMAGES





Mass Veterinary
Services



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

PATIENT

Mookie Stein

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.

SPECIES

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.

BREED

American Staffordshire
Terrier

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

SEX

Male Intact

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

AGE

6 years

WEIGHT

53.2lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

**IMAGING
PERFORMED BY**

Pamela Harrigan,
RDCS

HOSPITAL NAME

Mass Veterinary
Services

REFERRING VET

Dr. Masloski

INVOICE

27120

DATE

10/26/22