



PATIENT

Ricky Caron

SPECIES

Canine

BREED

Chihuahua

SEX

Female Spayed

AGE

14 years

WEIGHT

4.81lbs

INTERPRETED BY

Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Mass Veterinary Services

REFERRING VET

Dr. Masloski

INVOICE

30212

DATE

4/12/23

PRESENTING CLINICAL SIGNS

History: Ricky is referred to evaluate a heart murmur. She has been coughing since she was a pup, but the cough appears to be getting worse. Has a collapsing trachea. She is eating well with a normal appetite. On exam: NSR, grade III/VI murmur with PMI left apical murmur, PSS, lung fields clear, mm pink, moist, CRT < 2. BP: 140 mmHg. No medications. *Sedated with propofol for study

ECHOCARDIOGRAM FINDINGS

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

Left ventricle: The LV diameter is decreased with adequate myocardial function. LV wall thicknesses are mild to moderately increased with a mottled appearance.

Left atrium: The left atrium is normal.

Mitral valve: The mitral valve is mildly thickened without prolapse into the left atrial lumen. Trace/mild eccentric 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 RV enlargement with moderate RV hypertrophy. Mildly modeled appearance is noted.

Right atrium: Mild RA enlargement.

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

Pulmonic valve/pulmonary artery: The pulmonic valve is normal in morphology and mobility. Severe MPA and branch enlargement. Trace pulmonic insufficiency. Normal RVOT velocity; laminar flow. A small, atypical jet of high velocity flow is seen on color flow imaging in the region of the PDA.

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

Heart rhythm: ECG reveals a sinus rhythm with an average HR of 200bpm.

2-Dimensional Measurements

Ao diam (cm)	1.0
LA diam (cm)	1.1
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.62
LVID diastole (cm)	1.3
PW thickness (cm)	0.68
LVID systole (cm)	0.44
FS (%)	66

Doppler Measurements

PV Vmax (m/s)	0.5
AoV Vmax (m/s)	0.8
MR Vmax (m/s)	NM
TR Vmax (m/s)	4.0
TR PG (mmHg)	64

INTERPRETATION OF THE FINDINGS

Chronic degenerative valve disease causing trace/mild mitral and tricuspid regurgitation is identified. Lack of significant left or right atrial enlargement indicates the current risk for complication is low. More importantly, significant LV hypertrophy is identified with a small internal dimension. The appearance of the myocardium is atypical with a mottled texture. Additionally, moderate pulmonary hypertension is noted with secondary right heart/MPA enlargement, which is likely secondary to a reported cough. Finally, a small atypical jet is seen in the region of a PDA. The relevance of this is low; however, a small PDA cannot be ruled out. No additional issues are noted in this study.



PATIENT
Ricky Caron

The LV appearance may be explained by issues such as volume depletion, chronic severe systemic hypertension, a primary myocardial/infiltrative disease, such as HCM or neoplasia or potentially a normal variant. The blood pressure is normal on exam, ruling out systemic hypertension. Lab work should be assessed if not recently performed, to screen for volume depletion as a contributing issue. If this is ruled out, primary myocardial disease warrants monitoring going forward. Consider systemic screening in search of any ancillary pathology such as neoplasia. Clinical relevance of this is unknown.

SPECIES
Canine

BREED
Chihuahua

The finding of significant pulmonary hypertension is likely a separate issue, due to a chronic cough. In the absence of exertional dyspnea or syncope, no indication for Sildenafil at this time; however, adequate cough control is strongly recommended. If the patient experiencing any exertional syncope in the future, Sildenafil can be added.

SEX
Female Spayed

No cardiac medications are indicated. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1).

AGE
14 years

RECOMMENDATIONS

- Baseline lab work/systemic screening is recommended.
- If any exertional dyspnea or syncope develops, institute Sildenafil 1-2mg/kg PO q12h.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Consider Hydrocodone and further respiratory evaluation/treatment.
- 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.

WEIGHT
4.81lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan,
RDCS

PLAN

- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

HOSPITAL NAME

Mass Veterinary Services

REFERRING VET

Dr. Masloski

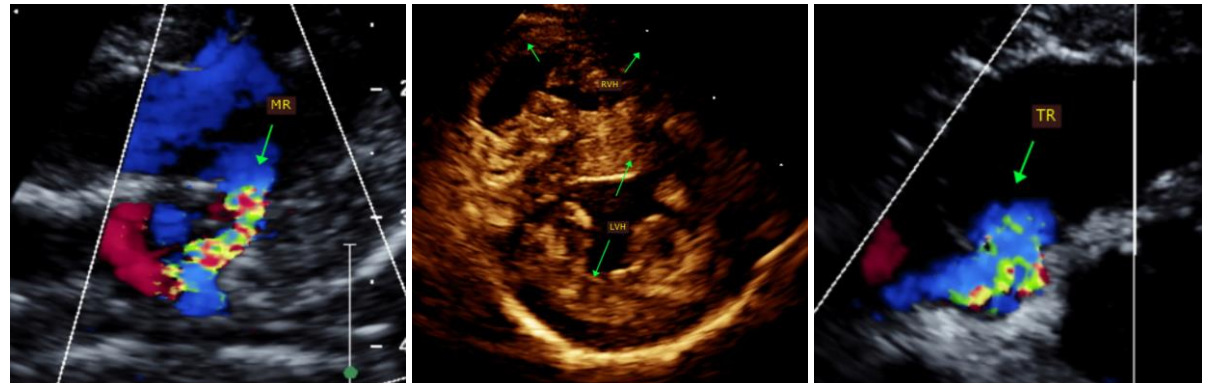
INVOICE

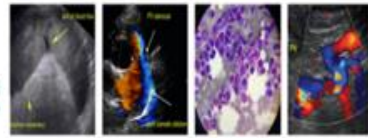
30212

DATE

4/12/23

IMAGES





PATIENT
Ricky Caron

SPECIES
Canine

BREED
Chihuahua

SEX
Female Spayed

AGE
14 years

WEIGHT
4.81lbs

INTERPRETED BY
Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

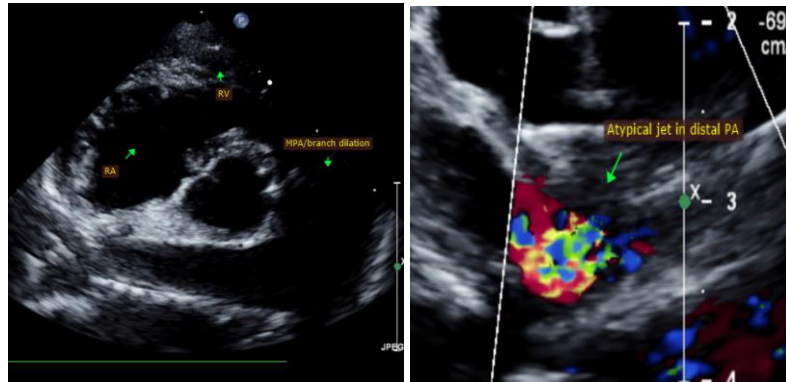
IMAGING PERFORMED BY
Pamela Harrigan,
RDCS

HOSPITAL NAME
Mass Veterinary
Services

REFERRING VET
Dr. Masloski

INVOICE
30212

DATE
4/12/23



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)