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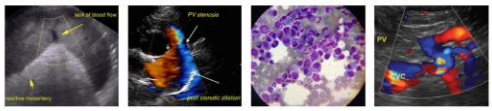

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Chewie Roberts

SPECIES
Canine

BREED
Chihuahua

SEX
Male Neutered

AGE
12 years

WEIGHT
12lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Anchor Animal Hospital

REFERRING VET
Dr. Levitt

INVOICE
24697

DATE
6/9/22

PRESENTING CLINICAL SIGNS

History: Presented for recheck AG infection 4/22. Coughing noted at that time, honking quality - present for 1 year. New grade I/VI murmur noted on exam. 2 view radiographs were unremarkable. VHS 10.5, pulmonary vessels not enlarged. BP: average of 5 - 204mmHg; average of 5 189mmHg; average of 5 178mmHg. (was sedated with gaba/traz - calm demeanor).

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. Mild 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. No aortic insufficiency.
Right ventricle: No significant RV enlargement.
Right atrium: Mild RA enlargement.
Tricuspid valve: The tricuspid valve appears mildly thickened with moderate tricuspid regurgitation; normal velocity.
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 160bpm.

2-Dimensional Measurements

Ao diam (cm)	1.3
LA diam (cm)	1.4
LA:Ao (Swe)	1.1
IVS thickness (cm)	0.8
LVID diastole (cm)	1.9
PW thickness (cm)	0.8
LVID systole (cm)	0.9
FS (%)	53

Doppler Measurements

PV Vmax (m/s)	0.8
AoV Vmax (m/s)	1.2
MR Vmax (m/s)	5.0
TR Vmax (m/s)	2.3
TR PG (mmHg)	23

INTERPRETATION OF THE FINDINGS

The cause of the murmur is chronic degenerative valve disease causing mild mitral and moderate tricuspid regurgitation. Lack of significant left atrial enlargement indicates the current risk for complication is low. The TR is quantitively greater than MR, which is unusual; however, no pulmonary hypertension is identified. No additional issues are noted in this study. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1).

The reported blood pressure is elevated and should be reassessed for accuracy particularly given no reported clinical signs of severe hypertension (retinal changes, etc.) or evidence of LVH on echo. Ideally obtain serial measurements in a controlled, low stress environment and continue until 3 consecutive readings plateau within 5mmHg of variability. If persistently >180mmHg despite a relatively calm demeanor, recommend

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institution of amlodipine to effect. Additionally, if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushings, PLN, adrenal tumor, etc.), as primary disease is relatively uncommon and a rule out diagnosis.

Given these findings, the cough is unlikely to be cardiac in origin and primary respiratory causes should be considered. Consider further respiratory work up/treatment (hydrocodone, taper course of steroids, Enrofloxacin, TTW/BAL, etc).

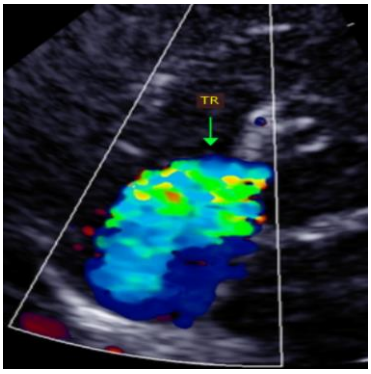
RECOMMENDATIONS

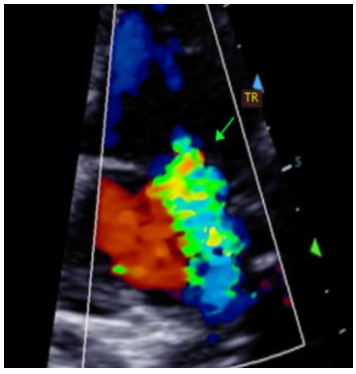
- No cardiac medications are clearly indicated.
- Reassess BP was discussed.
- Consider hydrocodone, etc for cough.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine 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.

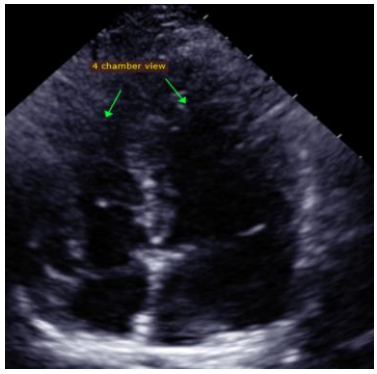
PLAN

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

IMAGES

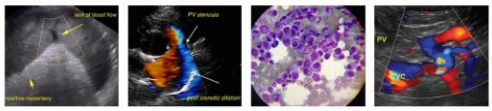






The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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



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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