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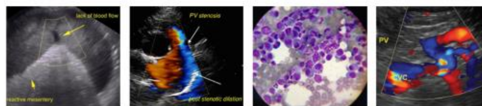


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT
Hope Conway

SPECIES
Feline

BREED
DSH

SEX
Female Spayed

AGE
21 years

WEIGHT
8.8lbs

INTERPRETED BY
Maggie Machen Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Falmouth Animal Hospital

REFERRING VET
Dr. Hauser

INVOICE
23452

DATE
4/5/22

PRESENTING CLINICAL SIGNS

History: Grade III/VI systolic murmur. Decreased appetite; muscle loss. ProBNP 1,500. CBC/Chem/T4/UA all WNL. BP: 140mmHg x 3. Sedated with butorphanol/alfaxalone 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. The LV wall thicknesses are moderate to severely increased, with regions of irregularity. False tendon. There is a diffusely hyperechoic endocardium consistent with fibrosis. The papillary muscles are mildly hypertrophied and hyperechoic. The endocardium appears mildly remodeled.
Left atrium: The left atrium is normal in dimension. No smoke or thrombi seen.
Mitral valve: The anterior leaflet of the mitral valve appears normal in morphology. Systolic anterior motion is seen with a severely elevated LVOT velocity. Mild MR.
Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Increased aortic outflow velocity with a dynamic profile. No aortic insufficiency.
Right ventricle: Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.
Right atrium: The right atrium is normal in dimension.
Tricuspid valve: The tricuspid valve appears normal with no tricuspid regurgitation.
Pulmonary valve/Pulmonary artery: A dynamic RVOT obstruction is seen on 2D and color flow imaging; Spectral is normal. 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 150bpm.

2-Dimensional Measurements

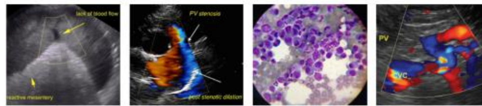
Ao diam (cm)	1.0
LA diam (cm)	1.2
LA:Ao (Swe)	1.2
IVS thickness (cm)	0.7
LVID diastole (cm)	1.5
PW thickness (cm)	0.64
LVID systole (cm)	0.64
FS (%)	57

Doppler Measurements

PV Vmax (m/s)	1.5
AoV Vmax (m/s)	4.8
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

The diagnosis and cause of the murmur is hypertrophic obstructive cardiomyopathy. This indicates some degree of LV thickening (moderate to severe in this case) with a dynamic LVOT obstruction (SAM). There is no left atrial dilation, indicating the risk of spontaneous CHF and/or a thrombotic event is currently low. A dynamic RVOT obstruction is also identified, which is a benign finding that may contribute to murmur intensity. No additional issues are identified.



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While no medications have been shown to definitively alter long term outcome at this stage of disease, atenolol is often initiated to decrease the outflow obstruction. Given the advanced age of the patient and lack of left atrial enlargement, it is also reasonable to simply monitor going forward. Discussion with the owner is advised. Prognosis is guarded given a normal LA and highly variable nature of subclinical feline disease.

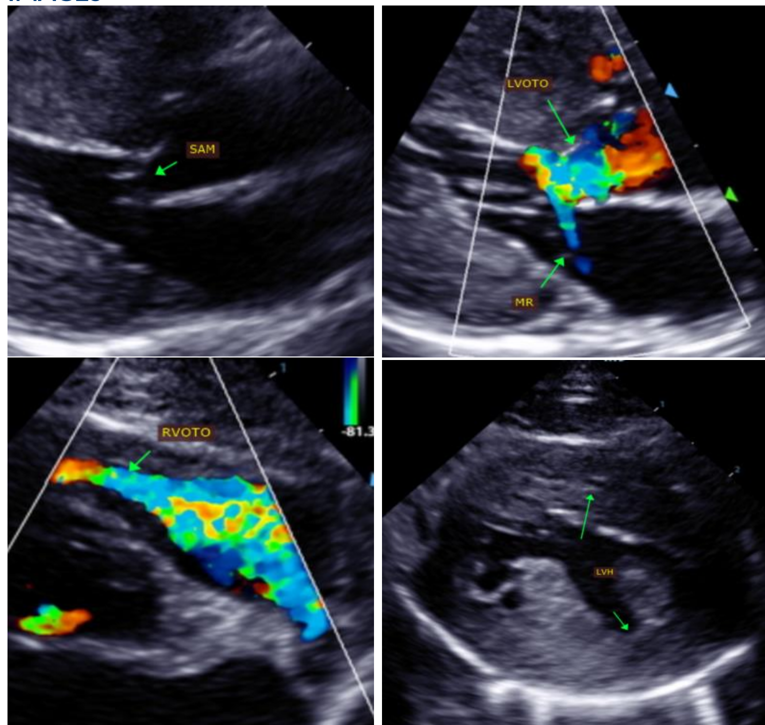
RECOMMENDATIONS

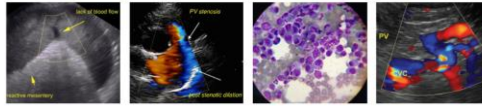
- If elected, administer titrating dose of atenolol: 25mg tablets; Give ¼ tab once daily. Recheck heart rate in 1-2 weeks with target stressed rate of 140-160bpm 12-24 hours post-administration. Increase as needed until target reached.
- Screening T4 if not recently performed.
- Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine).
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).

PLAN

- Recommend recheck echocardiogram in 6 months to assess rate of progression, sooner if any issues arise in the interim.

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