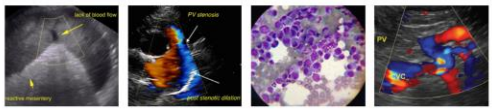
PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



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

PATIENT
Savannah LaFlamme

SPECIES
Feline

BREED
DLH

SEX
Female Spayed

AGE
11 years

WEIGHT
17.6lbs

INTERPRETED BY
Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY
Pamela Harrigan, RDCS

HOSPITAL NAME
Foster Veterinary Clinic

REFERRING VET
Dr. Hattan

INVOICE
20700

DATE
8/23/21

PRESENTING CLINICAL SIGNS

History: Lethargic, decreased appetite, wants to be alone. Arrhythmia noted on exam, no murmur. Cardiopet BNP: 140.

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 25mm/s, 10mm/mV. The average heart rate is 188bpm. Most going on here The underlying rhythm is sinus in origin, with a p for every QRS complex and vice versa. P and QRS morphologies are positive. The bases are noted throughout, primarily firing in a bigeminal rhythm. Suspect occasional fusion beats with occasional ventricular couplets. No supraventricular ectopic beats, pauses or other dysrhythmias observed.
ECG diagnosis: Sinus rhythm with frequent VPCs; bigeminy and couplets noted.

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 largely normal. There is a diffusely hyperechoic endocardium consistent with mild fibrosis. The endocardium appears mildly remodeled. The papillary muscles are mildly remodeled and hyperechoic.
Left atrium: The left atrium is mildly dilated. No obvious spontaneous contrast or thrombi seen.
Mitral valve: The mitral valve is normal in structure and mobility. No obvious systolic anterior motion is seen.
Aortic valve/aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. 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.
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 bpm.

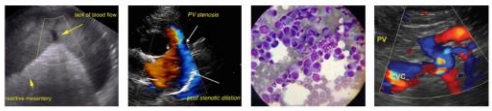
2-Dimensional Measurements

Ao diam (cm)	1.1
LA diam (cm)	1.48
LA:Ao (Swe)	1.3
IVS thickness (cm)	0.43
LVID diastole (cm)	1.68
PW thickness (cm)	0.45
LVID systole (cm)	0.86
FS (%)	49

Doppler Measurements

PV Vmax (m/s)	0.7
AoV Vmax (m/s)	0.86
MR Vmax (m/s)	NA
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



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

PATIENT

Savannah LaFlamme

SPECIES

Feline

BREED

DLH

SEX

Female Spayed

AGE

11 years

WEIGHT

17.6lbs

INTERPRETED BY

Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Foster Veterinary Clinic

REFERRING VET

Dr. Hattan

INVOICE

20700

DATE

8/23/21

INTERPRETATION OF THE FINDINGS

Essentially normal cardiac structure and function. The LV wall thickness is normal and without significant pathology. There is mild remodeling and fibrosis of the left ventricular wall, which is considered normal. Of note the LA is slightly dilated; however, this may be secondary to the arrhythmia. Follow up is advised. No additional issues are identified.

The ECG does confirm frequent ventricular premature contractions (VPCs) as the cause of the arrhythmia. VPCs can certainly be cardiac in origin with significant structural disease; however, that is not identified here. Primary arrhythmic disease is possible, although quite rare in cats. Extra-cardiac causes should be considered, including systemic disease, neoplasia, etc. Full systemic work-up is advised if not recently performed.

We must also consider if anti-arrhythmic therapy is indicated in this patient. The frequency of VPCs in this patient is highly concerning with occasional couplets and a bigeminal rhythm; however, use of anti-arrhythmics must be approached cautiously in cats. **Given that the patient is showing non-specific clinical malaise without obvious cause, I would err on the side of caution and utilize low dose sotalol in this patient. It must be stressed that systemic evaluation remains indicated, as it is equally possible that some separate brewing issue is the cause of the clinical signs of the VPCs are simply secondary**. Close monitoring for any worsening clinical signs including collapse or significant lethargy is advised with immediate re-evaluation in these instances. Prognosis is guarded, as in any arrhythmic patient sudden death is certainly a possibility even on medications.

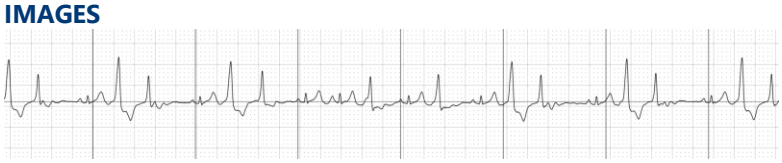
RECOMMENDATIONS

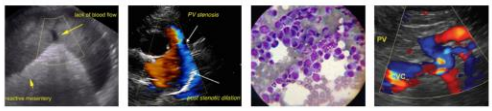
- Recommend cautious use of compounded sotalol (liquid is ideal for dose titration); 0.05mg/kg PO q12h.
- Reassess ECG in 1-2 weeks, sooner if any further decline.
- Full systemic evaluation is advised
- Elective anesthesia is not advised at this time.
- Risk for complication with steroid use typically follows LA dilation, which in this case is low. That being said, any cat can experience unexpected signs of intolerance and monitoring of RR/RE is advised particularly in the initiation phase.
- Monitor for any clinical evidence of cardiac compromise, including respiratory changes and/or signs of a blood clot event (paralysis, neurologic changes, etc.).

PLAN

- Once stabilized, recheck ECG is recommended in 6 mo.
- Recommend recheck echocardiogram in 6-12 months to screen for any changes.

IMAGES





PATIENT

Savannah LaFlamme

SPECIES

Feline

BREED

DLH

SEX

Female Spayed

AGE

11 years

WEIGHT

17.6lbs

INTERPRETED BY

Maggie Machen Lamy, DVM DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Foster Veterinary Clinic

REFERRING VET

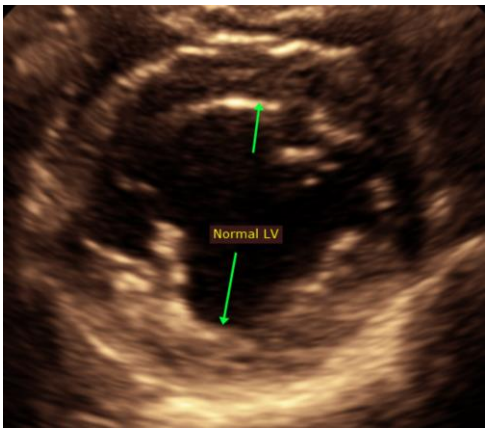
Dr. Hattan

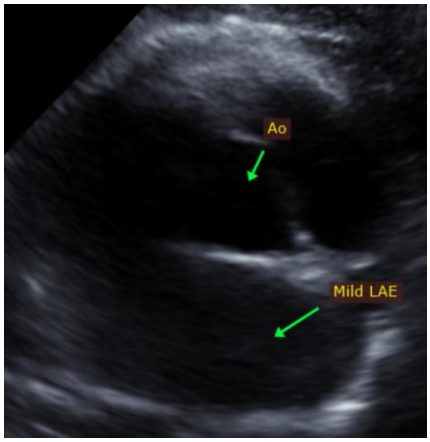
INVOICE

20700

DATE

8/23/21





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