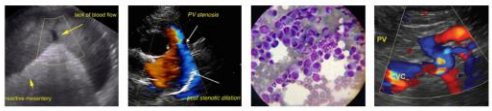
PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



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

**PATIENT**
Tony Holden

**SPECIES**
Feline

**BREED**
DSH

**SEX**
Male Neutered

**AGE**
13 years

**WEIGHT**
11.3lbs

**INTERPRETED BY**
Maggie Machen Lamy, DVM DACVIM (Cardiology)

**IMAGING PERFORMED BY**
Pamela Harrigan, RDCS

**HOSPITAL NAME**
Falmouth Animal Hospital

**REFERRING VET**
Dr. Fallon

**INVOICE**
21093

**DATE**
9/19/21

## PRESENTING CLINICAL SIGNS

History: New arrhythmia first noted in July, 2021. On July 3rd visit he was on prednisolone for allergic dermatitis flare. Arrhythmia still present. Submitted ECG showed sinus rhythm with isolated VPCs. ProBNP was normal. BP in July was elevated at 200 systolic - started on 0.625mg amlodipine. BP now 130mmHg. Echocardiogram/ECG after treatment with amlodipine. *Sedated with torb/alfaxan.

## 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, 20mm/mV. The average heart rate is 150bpm with a regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The QRS is inverted. No ectopic beats, pauses or dysrhythmias observed.
ECG diagnosis: Normal sinus rhythm.

## 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 with regions of asymmetry. There is a diffusely hyperechoic endocardium consistent with mild fibrosis. The papillary muscles appear hyperechoic. The endocardium is irregular.
**Left atrium:** The left atrium is normal in dimension.
**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 trace 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.

**2-Dimensional Measurements**

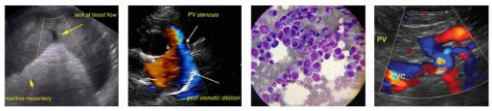
| | |
|---|---|
| Ao diam (cm) | 1.9 |
| LA diam (cm) | 1.1 |
| LA:Ao (Swe) | 1.3 |
| IVS thickness (cm) | 0.47 |
| LVID diastole (cm) | 1.4 |
| PW thickness (cm) | 0.40 |
| LVID systole (cm) | 0.8 |
| FS (%) | 44 |

**Doppler Measurements**

| | |
|---|---|
| PV Vmax (m/s) | 0.53 |
| AoV Vmax (m/s) | 0.95 |
| MR Vmax (m/s) | NA |
| TR Vmax (m/s) | 1.9 |
| TR PG (mmHg) | 15 |

## INTERPRETATION OF THE FINDINGS

Overtly normal geriatric structure and function are documented in this study. The LV wall thickness is normal and there is no evidence of elevated left atrial pressure. There is remodeling and fibrosis of the left ventricular wall, which is likely a normal variant in this senior cat.





**PATIENT**
Tony Holden

**SPECIES**
Feline

**BREED**
DSH

**SEX**
Male Neutered

**AGE**
13 years

**WEIGHT**
11.3lbs

**INTERPRETED BY**
Maggie Machen Lamy, DVM DACVIM (Cardiology)

**IMAGING PERFORMED BY**
Pamela Harrigan, RDCS

**HOSPITAL NAME**
Falmouth Animal Hospital

**REFERRING VET**
Dr. Fallon

**INVOICE**
21093

**DATE**
9/19/21

The ECG is normal, with no dysrhythmias observed. That being said, the prior ECG reportedly showed VPCs. Apparent improvement in ectopy may be due to blood pressure control, sedation, or simply be a normal variation. Follow up is advised should the arrythmia be ausculted again in the future. Regardless, there is certainly no structural cause for VPCs seen here and full systemic evaluation is advised to screen of underlying causes. Electing to treat VPCs in cats is rare and if the patient appears symptomatic without sustained arrhythmias this is likely unnecessary. Prognosis is guarded, as in any arrhythmic patient sudden death is certainly a possibility even on medications.

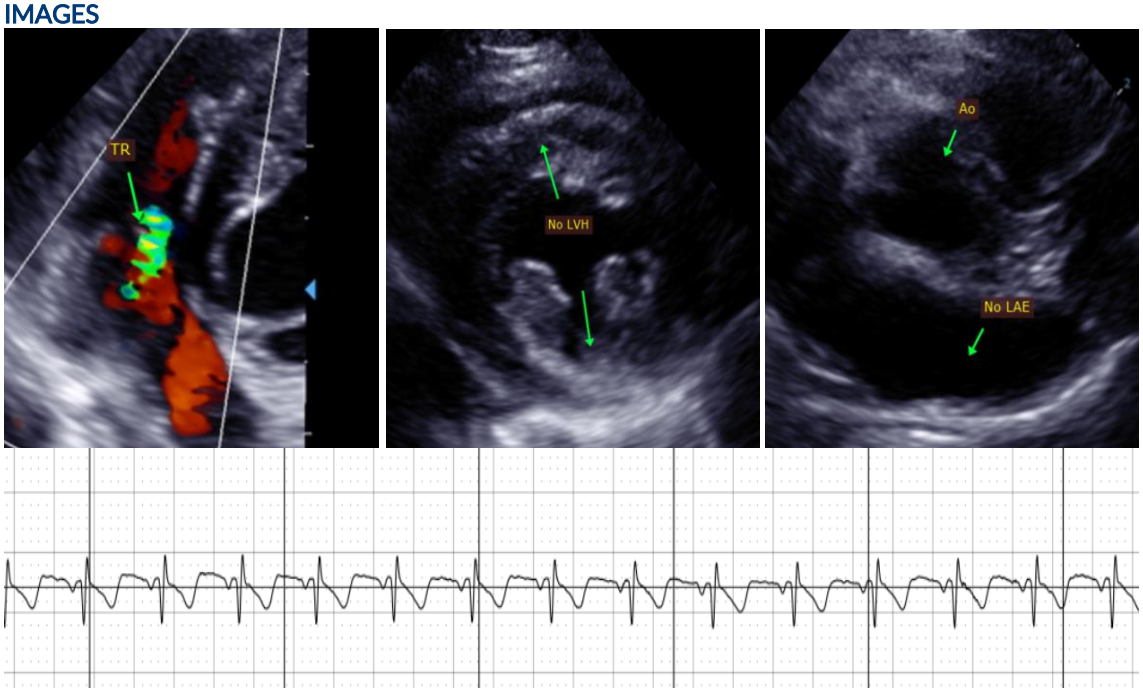
## RECOMMENDATIONS

- Given these findings, no medications are indicated.
- If the arrythmia is ausculted again in the future, consider a repeat ECG.
- Full systemic screening is advised.
- Elective anesthesia is not advised prior to further evaluation and monitoring.
- Monitor for any signs of sustained arrhythmias including collapse or significant lethargy.
- Monitor for any change in breathing rate or effort, or signs of a blood clot event.

## PLAN

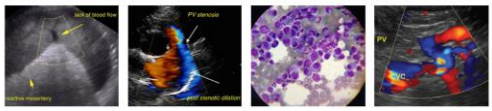
- Recheck echocardiogram is recommended in 6-12 months to ensure no abnormalities are identified.

## 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





**PATIENT**
Tony Holden

**SPECIES**
Feline

**BREED**
DSH

**SEX**
Male Neutered

**AGE**
13 years

**WEIGHT**
11.3lbs

**INTERPRETED BY**
Maggie Machen Lamy, DVM DACVIM (Cardiology)

**IMAGING PERFORMED BY**
Pamela Harrigan, RDCS

**HOSPITAL NAME**
Falmouth Animal Hospital

**REFERRING VET**
Dr. Fallon

**INVOICE**
21093

**DATE**
9/19/21

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