

PATIENT

Ernie Jones

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

6 years

WEIGHT

13.1lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Jack Reese

HOSPITAL NAME

Willow Run Veterinary
Clinic

REFERRING VET

Dr. Arnold

INVOICE

46484

DATE

1/18/26

PRESENTING CLINICAL SIGNS

History: Irregular heart rhythm. Grade 2/6 systolic heart murmur noted. Assess prior to dental.

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; 50mm/s, 40mm/mV. The average heart rate is 200bpm with an underlying sinus rhythm. P for every QRS complex and vice versa. The P and QRS morphologies are positive. VPCs are noted, singles only. A second ventricular focus is firing during brief sinus pause following some of the VPCs. No APCs other dysrhythmias observed.

ECG diagnosis: Normal sinus tachycardia with isolated VPCs. Occasional escape beats.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. There is a mildly hyperechoic endocardium consistent with mild fibrosis. The endocardium also appears mildly remodeled. The papillary muscles are normal in size and hyperechoic. The left atrium is normal in size. The right atrium is normal in size. The right ventricle appears normal. The mitral valve is normal in structure and mobility. Trace TR. Blood flow through both the LVOT and RVOT is normal in velocity. No pleural or pericardial effusion seen. No obvious cardiac tumors.

CARDIAC CHART

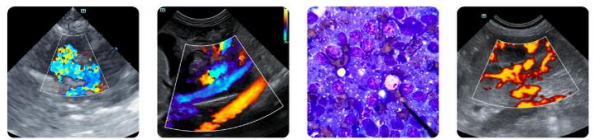
FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	5.9	NM	0.48	1.45	0.49	48	90
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	1.3	1.3		1.5	1.3	NM

*Note: All measurements based upon multi-modal images and methods. An average value is reported.
Adapted from June Boon, Veterinary Echocardiography, 1998
Abbott J & MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overtly normal cardiac structure and function is seen in this study. No LV hypertrophy has developed, and the LA is normal. Flow through the great vessels appears normal, and no significant valve regurgitation is seen. No cause for the murmur is identified, suggesting a physiologic origin is likely.

The ECG does show frequent VPCs. VPCs can develop secondary to significant cardiac disease or fibrosis, or be extra-cardiac in origin (i.e., due to stress, pain, inflammation, systemic issues, etc.). Given what is seen here, structural causes are unlikely, and systemic evaluation may be warranted. Regardless, no therapy is typically warranted for arrhythmic cats with the exception of sustained tachyarrhythmias and simple follow up is recommended. Monitor for any signs of



PATIENT

Ernie Jones

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

6 years

WEIGHT

13.1lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Jack Reese

HOSPITAL NAME

Willow Run Veterinary
Clinic

REFERRING VET

Dr. Arnold

INVOICE

46484

DATE

1/18/26

progressive arrhythmia, including significant lethargy or collapse/syncope. It is worth noting that there are also suspect escape beats present, which are somewhat unusual to see in cats without bradycardia. An alternative explanation may be possible; however, a six-lead tracing would be necessary for differentiation.

Prognosis is open prior to assessing for progression.

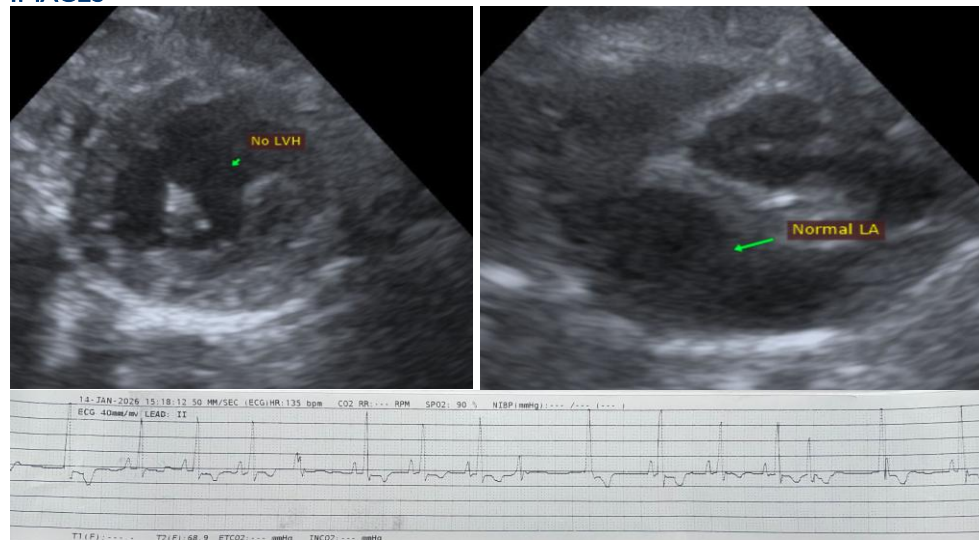
Anesthetic risk is considered moderate with ventricular arrhythmias, and drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Avoid ketamine, telazol, alpha 2 agonists. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance. Monitor ECG intra and post-operatively, with careful intervention if ventricular arrhythmias are sustained (i.e., sustained VT) and lead to hemodynamic compromise.

PLAN

Consider systemic screening if elected. Consider a six-lead tracing as discussed.

If declined, recommend recheck echocardiogram and ECG in 6-12 months to assess for progression.

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 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