


**PATIENT**

Oliver Hickey

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Male Neutered

**AGE**

15 years

**WEIGHT**

16.7lbs; 7.6kgs

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM, DACVIM  
 (Cardiology)

**IMAGING PERFORMED BY**

 Loetitia St-Jacques,  
 LVT/RVT

**HOSPITAL NAME**

 Mountain View  
 Animal Hospital

**REFERRING VET**

Dr. Kalivoda

**INVOICE**

30489

**DATE**

4/27/23

**PRESENTING CLINICAL SIGNS**

 History: Grade 2-3/6 heart murmur. Asymptomatic. Obese. BP: 181mmHg.  
 -Abnormal PE/Chem/CBC/UA Results: Chloride 113 (114-126) Albumin 4.0 (2.6 - 3.9) CK 457 (64-440) ProBNP 236 (0-100).

**RADIOGRAPHIC FINDINGS** \*NOTE: Images submitted for supplemental cardiac information only.  
 Normal cardiac silhouette. No obvious evidence of CHF.

**ELECTROCARDIOGRAPHIC FINDINGS**

A six lead ECG is available at 50mm/s; 10mm/mV. The average heart rate is 230bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is shifted left. No ectopic beats, pauses or dysrhythmias observed.

ECG diagnosis: Normal sinus tachycardia. Left axis deviation.

**ECHOCARDIOGRAM FINDINGS**

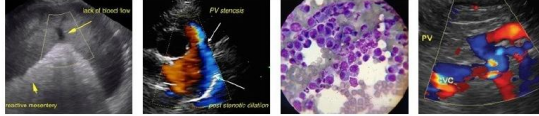
2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is moderately increased in dimension. There is a diffusely hyperechoic endocardium consistent with fibrosis. Mild symmetric papillary muscle hypertrophy and remodeling. The right ventricle is subjectively normal in size and morphology. There is no left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. Trace TR. Normal LVOT velocity. There is no obvious systolic anterior motion (SAM) of the mitral valve present. No MR. There is no pericardial effusion noted. No pleural effusion appreciated. No obvious cardiac tumors.

**CARDIAC CHART**

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) <small>(Moise, Pipers)</small>	LVIDd (cm) <small>(Moise, Pipers)</small>	LWVd (cm) <small>(Moise, Pipers)</small>	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	7.6	NM	0.75	1.0	0.71	44	80
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	1.2	1.25	1.2	1.1	NM	
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i> 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**

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. In this cat with an elevated blood pressure, both should be considered in this case as contributing factors. The degree of disease is mild, with moderate LVH and no LA dilation. This would indicate the risk for clinical issues is low at this time. No cause for



**PATIENT**

Oliver Hickey

the murmur is identified, making it likely physiologic in origin. No additional issues are identified. The ECG is unremarkable with a normal sinus tachycardia. A left axis deviation is a benign conduction abnormality common in older cats.

**SPECIES**

Feline

The reported blood pressure is elevated and should be assessed for persistence in light of the echo findings. 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 institution of amlodipine to effect. Additionally, if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushing's, PLN, adrenal tumor, etc.), as primary disease is relatively uncommon and a rule out diagnosis.

**BREED**

DSH

**SEX**

Male Neutered

No medications are indicated prior to significant atrial dilation. It is important to note that no medications have been shown to definitively alter long term outcome at this stage, particularly in the absence of SAM.

**AGE**

15 years

Monitor at home for any respiratory issues or signs of blood clot events (neurologic change, paralysis, etc.). Anesthetic risk is considered mild, however judicious fluid administration is advised if needed with careful RR/RE monitoring to screen for fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Risk for complication with steroid use typically follows LA dilation, which in this case is mildly elevated. If needed, monitoring of RR/RE is advised particularly in the initiation phase.

**WEIGHT**

16.7lbs; 7.6kgs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**PLAN**

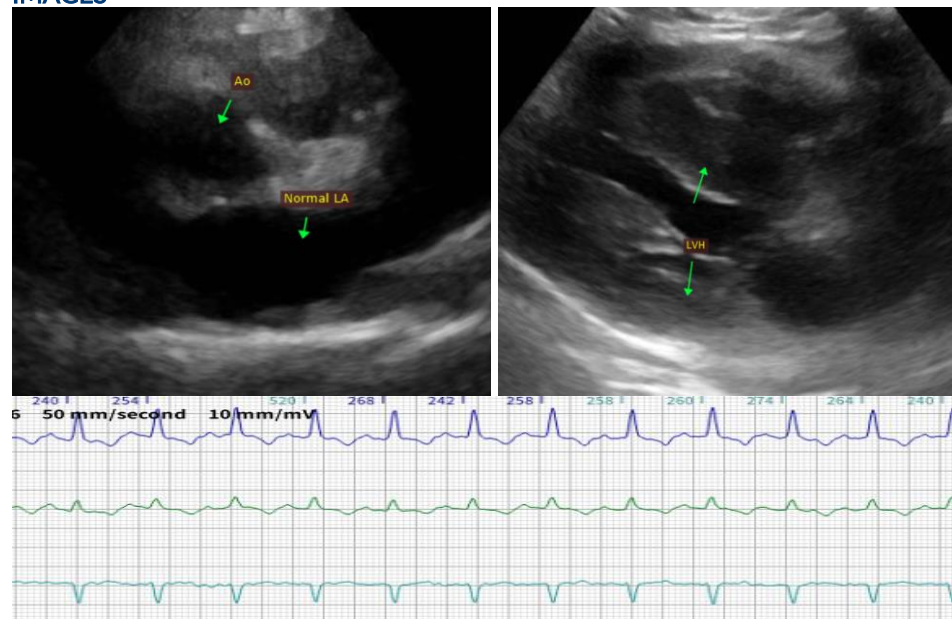
A screening blood pressure and T4 are recommended, then every 6 months lifelong.

A recheck echocardiogram is recommended in 6 months to assess for progression, sooner if any issues arise in the interim.

**IMAGING PERFORMED BY**

Loetitia St-Jacques,  
LVT/RVT

**IMAGES**



**HOSPITAL NAME**

Mountain View  
Animal Hospital

**REFERRING VET**

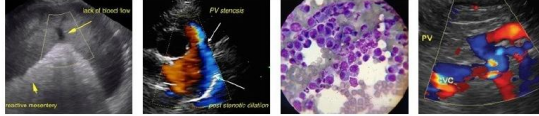
Dr. Kalivoda

**INVOICE**

30489

**DATE**

4/27/23



Portable Animal Western Sonography, Inc.

IMAGING PERFORMED BY

pawsonography@gmail.com 530-786-8340

#### PATIENT

Oliver Hickey

#### SPECIES

Feline

#### BREED

DSH

#### SEX

Male Neutered

#### AGE

15 years

#### WEIGHT

16.7lbs; 7.6kgs

#### INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

#### IMAGING PERFORMED BY

Loetitia St-Jacques,  
LVT/RVT

#### HOSPITAL NAME

Mountain View  
Animal Hospital

#### REFERRING VET

Dr. Kalivoda

#### INVOICE

30489

#### DATE

4/27/23

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