



## PATIENT

William Brougher

## SPECIES

Feline

## BREED

DSH

## SEX

Male Neutered

## AGE

7 years

## WEIGHT

17lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Jennifer Todd, DVM

## HOSPITAL NAME

Lambs Gap Animal  
Hospital

## REFERRING VET

Dr. Todd

## INVOICE

21605

## DATE

10/19/21

## PRESENTING CLINICAL SIGNS

History: History of chronic grade II/VI heart murmur. In the past, wellness bloodwork has shown normal cardiac ProBNP. Recently, William's heart murmur has progressed to grade III/VI and his cardiac ProBNP: 770. Assess prior to dental. Blood pressure today was 165/104, 141/102, 138/102mmHg.

**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 214bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. No ectopic beats, pauses or other dysrhythmias observed.

ECG diagnosis: Normal sinus tachycardia.

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall thickness is mildly increased yet irregular. 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. Blood flow through the LVOT and RVOT is normal in velocity; however, color flow suggests a dynamic RVOTO. Trace TR. 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>	LVWd (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	7.7	NM	0.68	1.25	0.62	58	94
FELINE CARDIAC PARAMETERS	LA/AO <small>(Boon)</small>	LA/AO HEART BASE (Swe) <small>(Abbott)</small>	LA 2D short axis Base view (cm) <small>(Abbott)</small>	LVOT VEL <small>(m/s)</small>	RVOT VEL <small>(m/s)</small>	E max <small>(m/s)</small>	
NORMAL	<1.5	<1.3	<1.2	<1.6	<1.3	<0.9	
PATIENT	1.0	1.1	1.0	1.2	1.4	NM	
<p><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 &amp; 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.</p>							

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. In this reportedly normotensive cat, a baseline T4 is recommended. Regardless, the degree of disease is mild, with only mild LVH and no LA dilation. This would indicate the risk for clinical issues is low at this time. No additional issues are identified. The



**PATIENT**  
William Brougher

murmur is suspected to be benign in origin due to a dynamic RVOTO. No additional issues are identified. The ECG is unremarkable with a normal sinus tachycardia.

**SPECIES**  
Feline

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.

**BREED**  
DSH

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.

**SEX**  
Male Neutered

**AGE**

**PLAN**

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

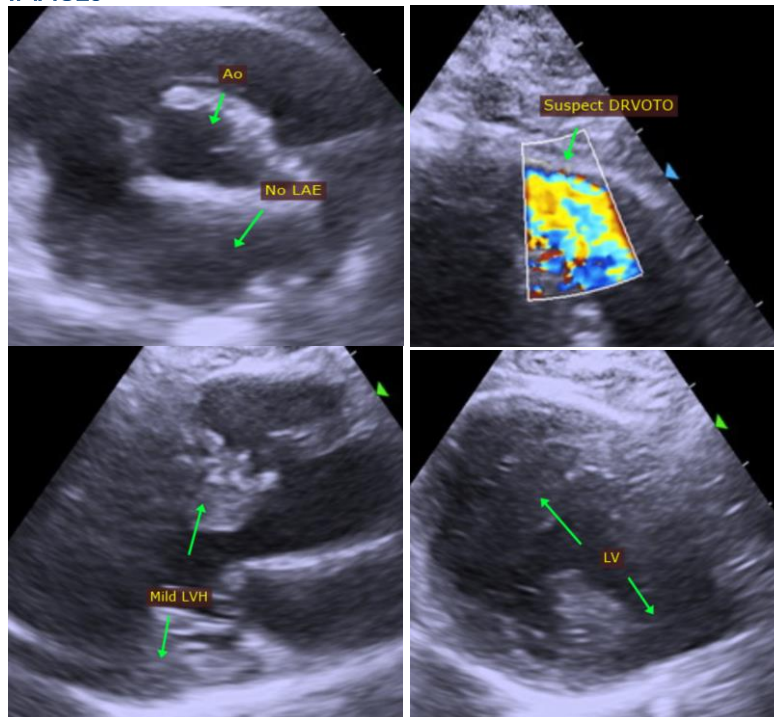
7 years

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

**WEIGHT**  
17lbs

**IMAGES**

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



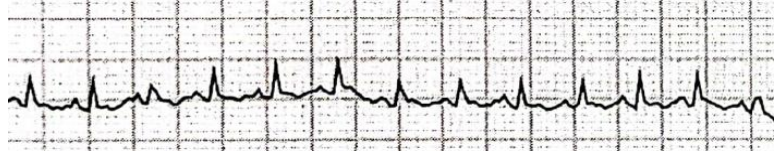
**IMAGING PERFORMED BY**  
Jennifer Todd, DVM

**HOSPITAL NAME**  
Lambs Gap Animal  
Hospital

**REFERRING VET**  
Dr. Todd

**INVOICE**  
21605

**DATE**  
10/19/21





**PATIENT**

William Brougher

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.

**SPECIES**

Feline

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.

**BREED**

DSH

**Maggie Machen Lamy, DVM**  
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)  
info@sonopath.com

**SEX**

Male Neutered

**AGE**

7 years

**WEIGHT**

17lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING  
PERFORMED BY**

Jennifer Todd, DVM

**HOSPITAL NAME**

Lambs Gap Animal  
Hospital

**REFERRING VET**

Dr. Todd

**INVOICE**

21605

**DATE**

10/19/21