



## PATIENT

Sam Lanark Animal Welfare Society

## SPECIES

Feline

## BREED

DSH

## SEX

Male Neutered

## AGE

12 years

## WEIGHT

12.1lbs

## INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

## IMAGING PERFORMED BY

Mark van Campen, DVM

## HOSPITAL NAME

Mississippi Mills Animal Hospital

## REFERRING VET

Dr. van Campen

## INVOICE

29885

## DATE

3/28/23

## PRESENTING CLINICAL SIGNS

History: Newly surrendered to rescue. Grade III/VI heart murmur. No clinical signs. BP: 153mmHg. Assess prior to dental.

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is mildly 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. LVOT velocity is normal; however, an intermittent LVOTO is suspected on 2D imaging. 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) (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                   | 5.5              | NM                              | 0.65                                     | 1.2                        | 0.66                      | 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               | 1.2                             | 1.1                                      |                            | 1.3                       | 0.7            | 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

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. In this normotensive cat, a thyroid level should be considered. 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 murmur appears to be due to an intermittent LVOTO, which does not warrant therapy at this time.

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.

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).



**PATIENT**

Sam Lanark Animal Welfare Society

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.

**SPECIES**

Feline

**PLAN**

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

**BREED**

DSH

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

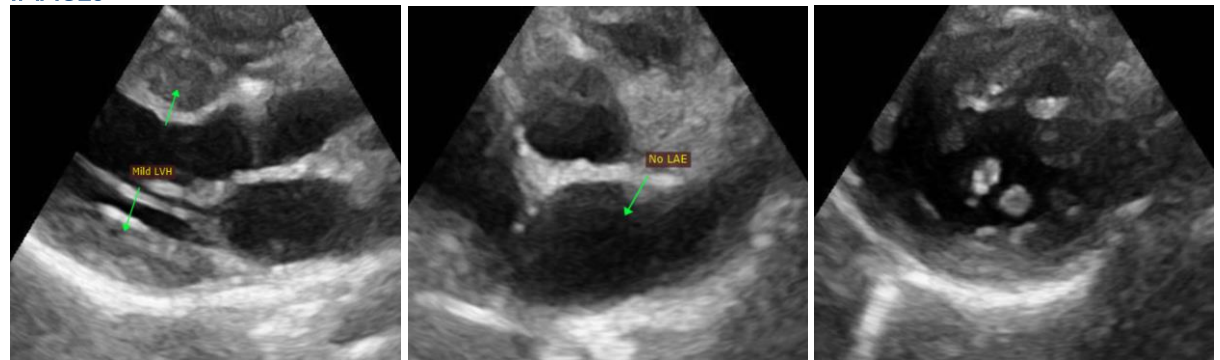
**SEX**

Male Neutered

**IMAGES**

**AGE**

12 years



**WEIGHT**

12.1lbs

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.

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

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.

**IMAGING PERFORMED BY**

Mark van Campen, DVM

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

**HOSPITAL NAME**

Mississippi Mills Animal Hospital

**REFERRING VET**

Dr. van Campen

**INVOICE**

29885

**DATE**

3/28/23