



PATIENT

Ruth Watkins

SPECIES

Feline

BREED

DLH

SEX

Female Spayed

AGE

2 years

WEIGHT

10lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Youngren

INVOICE

29812

DATE

3/23/23

PRESENTING CLINICAL SIGNS

History: Intermittent heart murmur. Assess prior to dental.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall thickness is moderately increased overall with a decreased chamber dimension. There is a diffusely hyperechoic endocardium consistent with fibrosis and ventricular remodeling. Mild papillary muscle remodeling. The right ventricle is subjectively normal in size and morphology. There no left atrial enlargement present. No right atrial enlargement present. Mildly elevated RVOT velocity. Mild systolic anterior motion (SAM) of the mitral valve present, with a significantly elevated dynamic LVOT velocity. There is moderate eccentric mitral regurgitation present secondary to SAM. No other significant valvular regurgitation is present. 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)	LWVd (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	4.5	220	0.72	0.84	0.73	60	94
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	1.3	1.2	1.1		4.5	2.1	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

The diagnosis is hypertrophic obstructive cardiomyopathy (HOCM). This indicates LV thickening (moderate in this case) with a dynamic LVOT obstruction (SAM) and secondary mitral regurgitation as the cause of the heart murmur. The hypertrophy and obstruction are both mild. There is no left atrial enlargement present, indicating the risk of spontaneous CHF and/or a thrombotic event is currently low. There is also a dynamic RVOT obstruction, which is a benign flow abnormality that is likely contributing to murmur intensity. No additional issues are identified.

While no medications have been shown to definitively alter long term outcome at this stage of disease, atenolol is often initiated to decrease the outflow obstruction. If the patient is easily medicated, it is reasonable to initiate at this time as below. If there is difficulty medicating at home, an alternative approach would be closely monitoring progression in the next 6-12 months. Discussion with the owner is advised. No additional medications are indicated prior to significant atrial dilation.

IMAGING PERFORMED BY

svsmobileimaging.com 309 - 737 - 3070



Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Ruth Watkins

Monitor at home for any respiratory signs or blood clot events (neurologic change, paralysis, etc.). Anesthetic risk is considered mild, however judicious IV fluid rates are advised to avoid fluid overload. Additionally drugs that stimulate heart rate should be avoided unless clinically necessary (ketamine, glycopyrrolate, atropine).

SPECIES

Feline

PLAN

If elected, administer titrating dose of atenolol: 25mg tablets; Give ¼ tab once daily. Recheck heart rate in 1-2 weeks with target stressed rate of 140-160bpm 12-24 hours post-administration. Increase as needed until target reached. Screening blood pressure and T4 are recommended every 6 months.

BREED

DLH

Recommend recheck echocardiogram in 6 months to assess for progression, sooner if clinical issues arise.

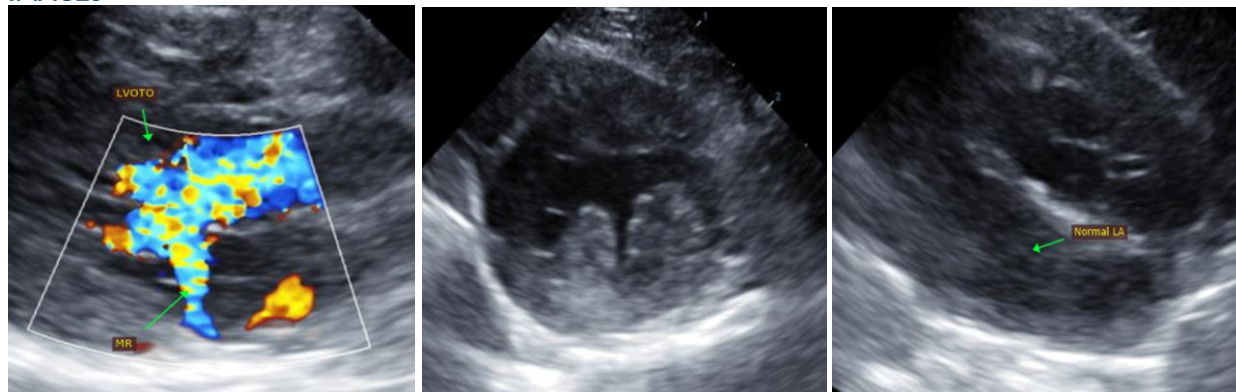
SEX

Female Spayed

IMAGES

AGE

2 years



WEIGHT

10lbs

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. 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

Sarah Pender, CVT

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

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Youngren

INVOICE

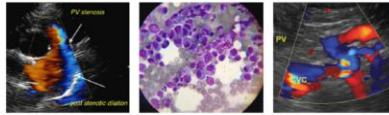
29812

DATE

3/23/23

IMAGING PERFORMED BY

svsmobileimaging.com 309 - 737 - 3070



Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Ruth Watkins

SPECIES

Feline

BREED

DLH

SEX

Female Spayed

AGE

2 years

WEIGHT

10lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Youngren

INVOICE

29812

DATE

3/23/23