



PATIENT

Kitty Moshier

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

17 years

WEIGHT

9.1 lbs.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Kim Liedberg

HOSPITAL NAME

SVS Imaging WI

REFERRING VET

Dr Miller, Creature
Comfort Veterinary
Services

INVOICE

13130

DATE

12/20/21

PRESENTING CLINICAL SIGNS

Dx with hyperthyroidism in the spring. Put on Methimazole but had an allergic reaction. Discontinued meds and started pulling out hair. Put on dermal methimazole. Started straining to urinate with blood clots. Would like to know if blood clots could be heart related

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT		202	0.63	1.34	0.59	58.2	92.5
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
PATIENT	1.4	1.4	1.56	1.0	0.8	NM	
Adapted from June Boon, Veterinary Echocardiography, 1998							
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705							

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size and structure with no evidence of "smoke" or thrombi. The cranial and caudal **mitral** valve leaflets appeared mildly thickened with some insufficiency noted on Doppler. The **left ventricle** presented borderline excessive free wall and mild excessive septal thicknesses with mild hypertrophic tendency compared to normal for this species. Prominent papillary muscles were present in the left ventricle lumen. The **myocardium** presented mild myocardial remodeling yet normal overall myocardial echogenicity without overt signs of fibrotic or ischemic disease. **Contractility** of the ventricular walls was considered excessive for this patient evidenced by the elevated fractional shortening measurement. The **left ventricular outflow** tract demonstrated turbulent laminar flow. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated linear morphology. The **right ventricle** was of normal size with normal chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter. No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The **mediastinum** was free of masses in the visible window.

ULTRASONOGRAPHIC FINDINGS



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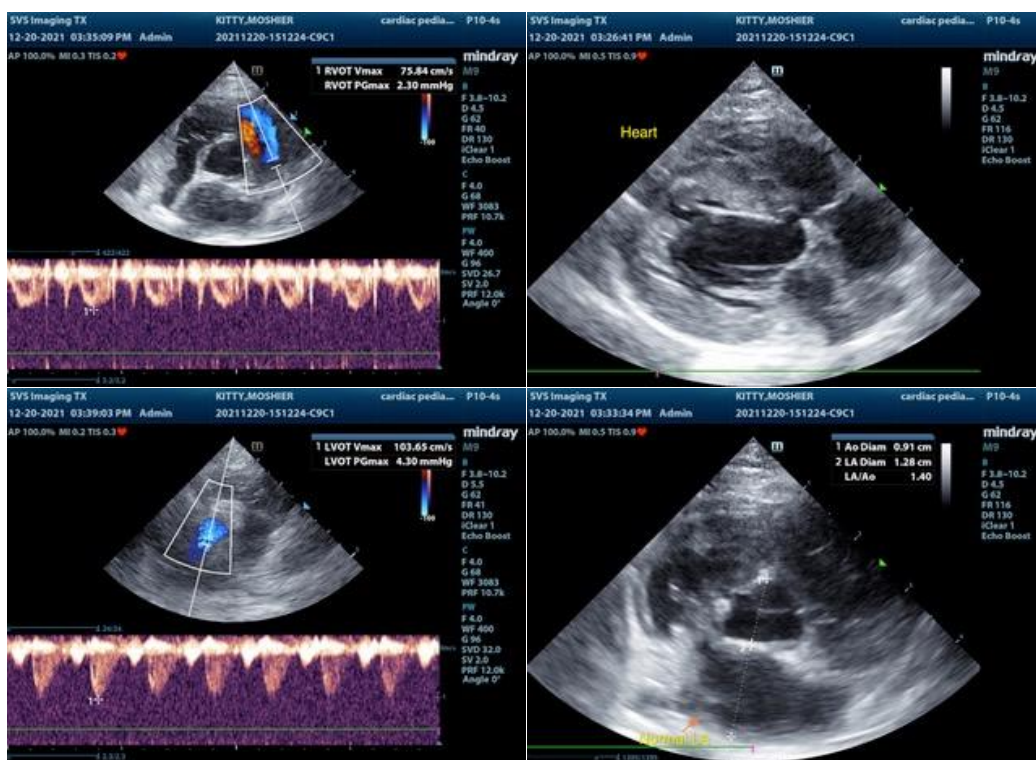
Primary Findings

- Mild HCM with myocardial remodeling
- Normal left atrium - no evidence of spontaneous contrast / thrombi

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

HCM is a rule-out diagnosis once the patient is deemed euthyroid and normotensive, which in this case, the borderline to mild LV hypertrophy may be owing to hyperthyroidism if elevated T4 levels.

The overall heart appears to be compensated with normal left atrium size at this time, indicating that the risk of future complication is low. Likewise, the lack of left or right atrium enlargement was not consistent with thrombus formation. No overt indication for cardiac medications at this stage. Recheck echocardiogram suggested in 6 months or sooner if clinical signs consistent with heart disease are noted.



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. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.



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info@SonoPath.com

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