



## PATIENT

Bod Duddy

## SPECIES

Feline

## BREED

Russian Blue

## SEX

MN

## AGE

9 years

## WEIGHT

11.5 lbs

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Dr. Sorbo

## HOSPITAL NAME

Mill Brook Animal  
Clinic - VBF

## REFERRING VET

Dr. Jeffers

## INVOICE

16665

## DATE

4/20/23

## PRESENTING CLINICAL SIGNS

Heart murmur. Stable wt. Stable activity and interaction. R/O cardiac cause for murmur.

Abnormal PE/Chem/CBC/UA Results: No labs yet. 1/25/2023 - Gallop +grade 1/6 murmur 3/8/23 - Gallop +grade 2/6 murmur.

## 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		NM	0.42	1.57	0.36	50	82
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	1.3	1.0	1.2	1.0		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 enlarged **left atrial** size based on 3 separate LA measurements. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics. No overt MR was noted on Doppler. The **left ventricular** septum and free wall revealed normal thicknesses, reduced contractility and mildly reduced left ventricular volume with subjective reduced diastolic filling, yet some mild echogenic remodeling of the septum and free wall was noted. This is suggestive of some level of mild myocardial fibrosis, which is essential age-related change. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed increased size and normal content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinetics. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted or extra cardiac pathology in the visible planes. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

## ULTRASONOGRAPHIC FINDINGS

- Normal cardiac structure and function with mild LV myocardial remodeling



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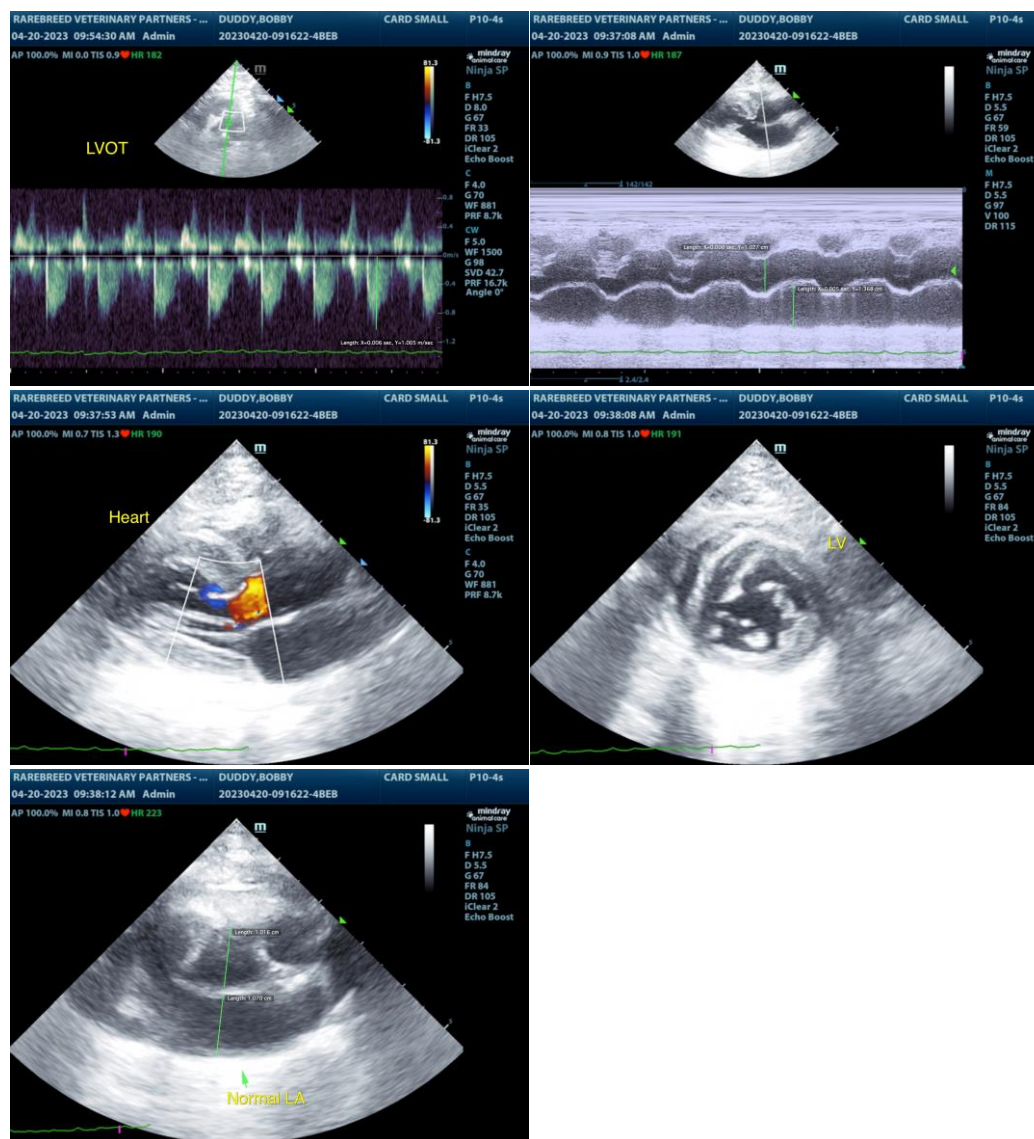
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No evidence of significant structural or functional cardiomyopathy. A definitive cause of the low-grade murmur was not evident. Assuming no volume changes such as dehydration or anemia, a benign physiologic / flow murmur is likely. Regardless, the hemodynamic effects of the murmur appear to be minimal, given the lack of left or right heart chamber enlargement and normal LV function. There is no indication for cardiac medications for structural / functional cardiomyopathy. ECG is suggested if not already done, given the reported gallop rhythm. Conservative monitoring of the murmur is recommended with recheck echocardiogram suggested in 6 months, sooner if murmur intensity increases or if clinical signs arise.





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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

**SPECIES**

Feline

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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Russian Blue

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**info@SonoPath.com**

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