


**PATIENT PRESENTING CLINICAL SIGNS**

Blue Urko  
 History: Heart murmur 2/6. Pre dental screening.  
 Abnormal PE/Chem/CBC/UA Results: All normal

**SPECIES**

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**
**BREED**

Siamese X

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

10.2 pounds

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	0.49	1.22	0.53	52.5	87.4
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	NM	1.2	1.2	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							

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**  
 Michelle Bartus

**HOSPITAL NAME**

Valley Veterinary  
 Service

**REFERRING VET**

Dr. Michelle Bartus

**INVOICE**

10205ag

**DATE**

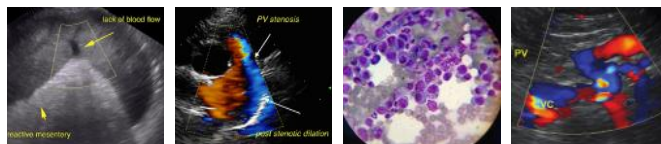
03/21/2022

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal left atrial size based on 3 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. The left ventricle presented normal thicknesses with linear contour and was not dilated nor restricted. The myocardium presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. Contractility of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions and angles of the myocardium. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural integrity. The right atrium and auricle revealed normal size, structure and 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 overtly normal valve structure, mild subjective dynamic to turbulent systolic flow, and normal diameter (approx. 1:1 pa/ao ratio). Borderline elevated RVOT was noted. 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**

- Overtly normal cardiac structure and function.
- Subjective borderline to mild elevated RVOT velocity.



## PATIENT

Blue Urko

## SPECIES

Feline

## BREED

Siamese X

## SEX

Neutered male

## AGE

16 years

## WEIGHT

10.2 pounds

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Michelle Bartus

## HOSPITAL NAME

Valley Veterinary  
Service

## REFERRING VET

Dr. Michelle Bartus

## INVOICE

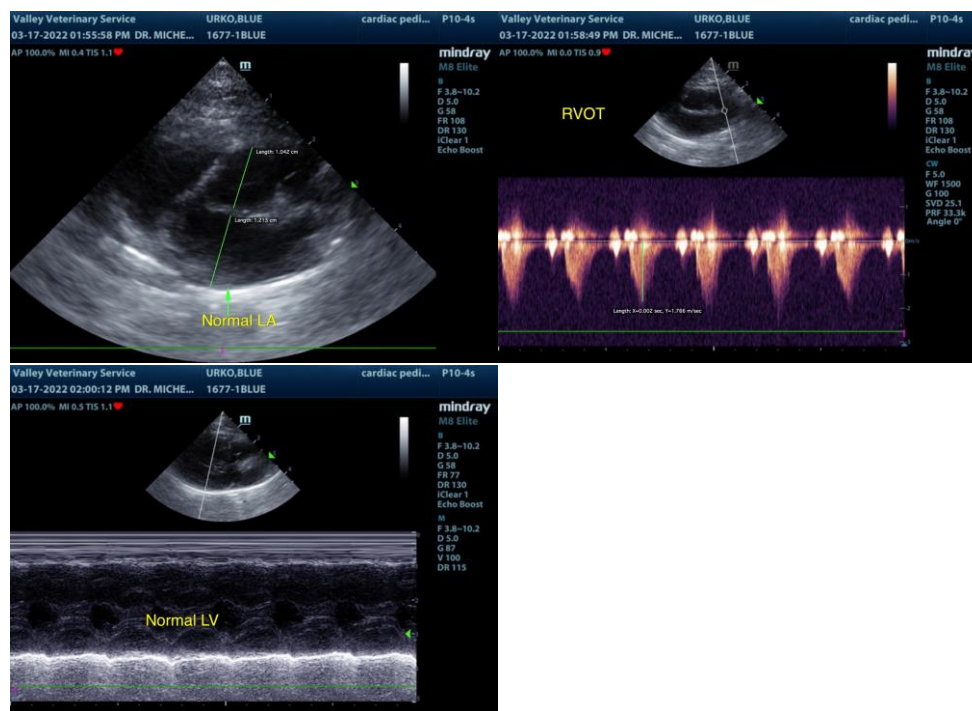
10205ag

## DATE

03/21/2022

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of significant structural or functional cardiomyopathy including no overt evidence of HCM, LV systolic dysfunction, significant valvular insufficiencies, stenotic disease or clinical pulmonary hypertension. An obvious source of the murmur was not definitively evident. If no evidence of volume change such as dehydration or anemia, a physiologic flow murmur or small flow abnormality not visualized is possible. The source of the murmur may be related to borderline to mild elevated RVOT velocity which may suggest mild dynamic right ventricular outflow tract obstruction which is generally benign and primarily considered a flow murmur. Regardless, the lack of structural cardiomyopathy indicates that the hemodynamic effects secondary to the murmur are low and that complications secondary to the murmur are likewise low. No indication for cardiac medication. No overt anesthetic contraindications assuming normal BP. Conservative monitoring at this stage would be appropriate with a recheck echocardiogram suggested in 6-12 months pending clinical assessment and sooner if clinical signs consistent with heart disease arise or if murmur intensity progresses.



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.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com



**PATIENT**

Blue Urko

**SPECIES**

Feline

**BREED**

Siamese X

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

10.2 pounds

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Michelle Bartus

**HOSPITAL NAME**

Valley Veterinary  
Service

**REFERRING VET**

Dr. Michelle Bartus

**INVOICE**

10205ag

**DATE**

03/21/2022