



**PATIENT PRESENTING CLINICAL SIGNS**

Maxx Vitt

History: Maxx is a sixteen year old, MN, Manx cat with a history of grade II/VI systolic murmur and gallop rhythm. He has had a previous echo read by Dr. Lamy on 10/13/2020. Maxx was presented on 11/30/21 for abnormal gait, vocalizing and found splayed /struggling to move when owners came home. He has muscle atrophy of both hind limbs and grade II/VI systolic murmur. Bloodwork showed normal CBC, Chem, fPL, T4. Cardiac proBNP was increased at 1359. Blood pressure today was 206/147, 196/147, and 191/167. ECG showed regular rhythm and HR of 185.

**SPECIES**

Feline

**BREED**

Manx

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

9.1 lbs

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

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. Slight, **left ventricular** septal hypertrophy was noted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** was adequate with a flow murmur. 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 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.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Todd

**HOSPITAL NAME**

Lambs Gap AH

**REFERRING VET**

Dr. Campbell

**INVOICE**

94525

**DATE**

12/13/21

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	0.7	1.3	0.54	50	98
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	1.36	1.45	1.2 max		1.1	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							



**PATIENT**                      **ULTRASONOGRAPHIC FINDINGS**

Maxx Vitt                      Minor LVOT, likely effector organ. Compensatory hypertrophy owing to systemic hypertension given the patient's history.

**SPECIES**

Feline

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Amlodopine therapy is recommended reach systolic pressure less than 1.060. No cardiac medications are recommended.

**BREED**

Manx

Benign flow murmurs are common in cats. This may be owing to volume shifts, tachycardia, benign (DRVOTO) right ventricular outflow changes, trivial turbulence in any of the valvular apparatuses, or possibly excessive stethoscope pressure against the chest according to a recent study These are physiologically benign and unrelated to specific pathology.

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

9.1 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Todd

**HOSPITAL NAME**

Lambs Gap AH

**REFERRING VET**

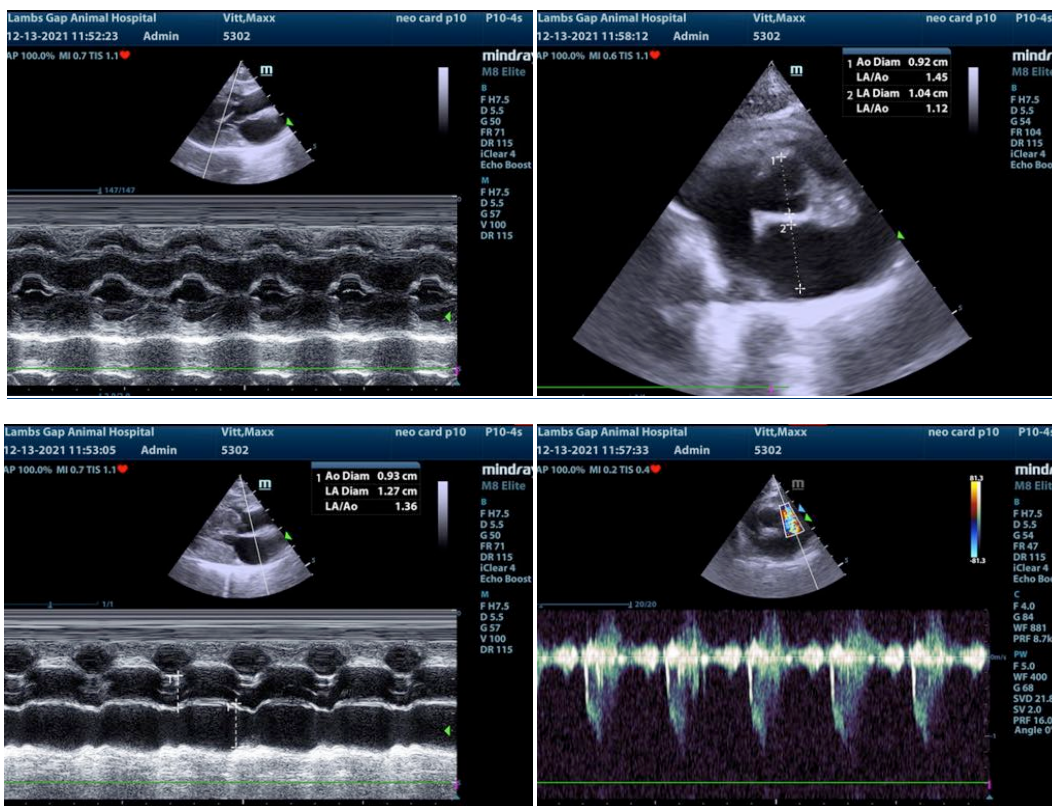
Dr. Campbell

**INVOICE**

94525

**DATE**

12/13/21





**PATIENT**

Maxx Vitt

**SPECIES**

Feline

**BREED**

Manx

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

9.1 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Todd

**HOSPITAL NAME**

Lambs Gap AH

**REFERRING VET**

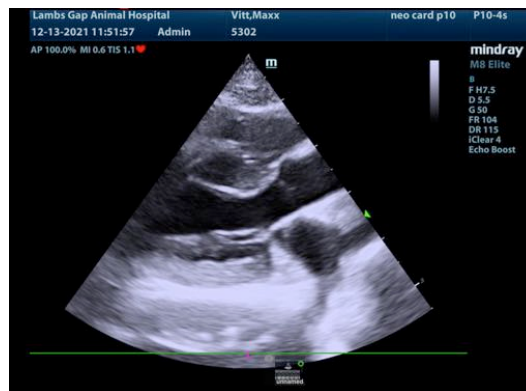
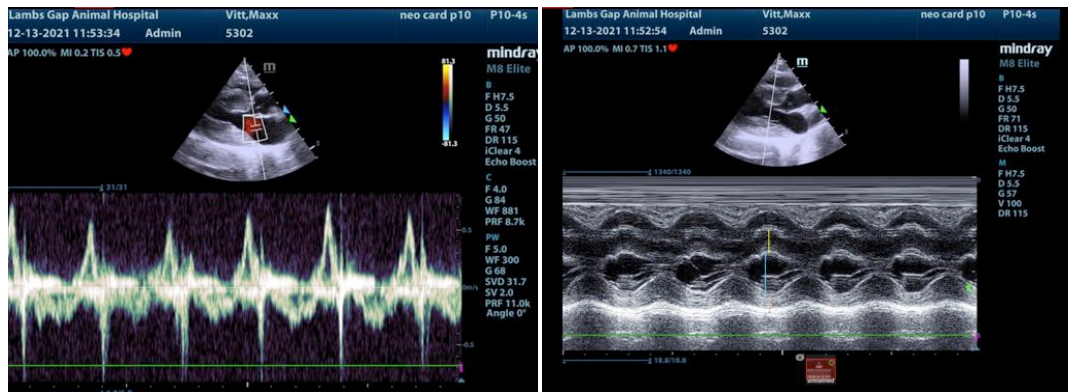
Dr. Campbell

**INVOICE**

94525

**DATE**

12/13/21



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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
info@SonoPath.com