



**PATIENT**

Grey SV Animal Shelter

**PRESENTING CLINICAL SIGNS**

History: Heart murmur heard during shelter wellness exam

**SPECIES**

Canine

**BREED**

Pit Bull

**SEX**

Neutered male

**AGE**

1 year

**WEIGHT**

60 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier Animal  
Medical Center

**REFERRING VET**

Dr. Gunther

**INVOICE**

32189

**DATE**

8/4/22

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. The **left ventricle** presented 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 of the myocardium. The **aortic** valve was structurally unremarkable; however, the outflow velocity was slightly excessive. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. Minor **tricuspid** insufficiency was noted. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** 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. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.3	1.3	35	65	0.43
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LA (2D short axis Base view) (cm)	LVIDd (Avg; 2D and m-mode short axis) (cm)	LVIDs (Avg; 2D and m-mode short axis) (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
PATIENT		3.0	1.5	60 lbs	3.36 max	3.68	



**PATIENT**

Grey SV Animal Shelter

**SPECIES**

Canine

**BREED**

Pit Bull

**SEX**

Neutered male

**AGE**

1 year

**WEIGHT**

60 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier Animal  
Medical Center

**REFERRING VET**

Dr. Gunther

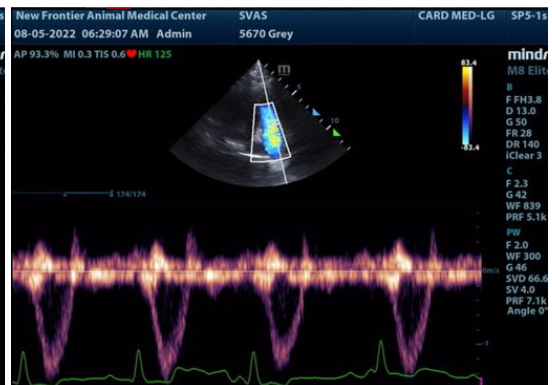
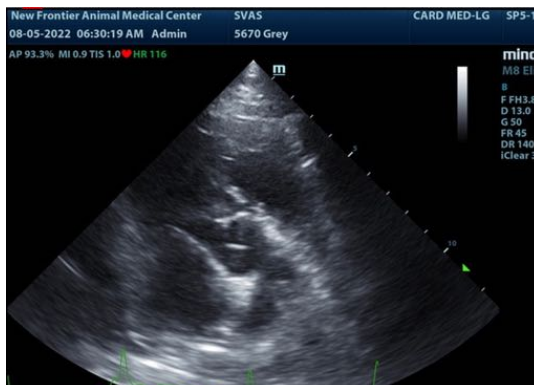
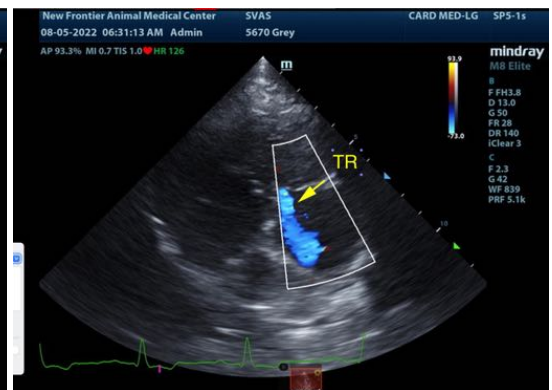
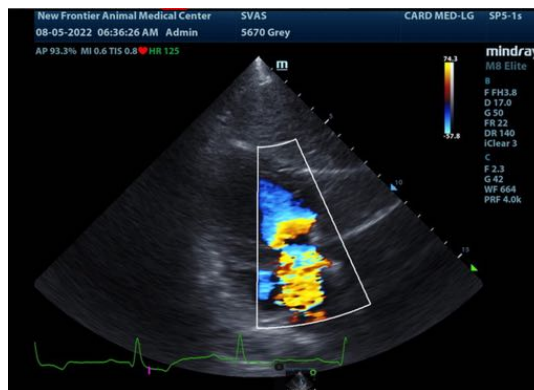
**ULTRASONOGRAPHIC FINDINGS**

Mildly increased left ventricular outflow velocity. Possible minor form of subaortic stenosis without structural changes.

Mild tricuspid insufficiency, compensated.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The murmur can be derived from either increased LVOT velocity or the tricuspid insufficiency. Assessment of the character of the audible murmur is recommended to decide which is the source or it may be a combined source of the murmur. I would expect an ejection type audible murmur with the increased aortic outflow velocity with a soft diastolic murmur with the tricuspid insufficiency. This is idiopathic and may represent a minor form of subaortic stenosis. There is no contraindication to anesthetic procedure. Prophylactic antibiotics are recommended 5 days prior to any surgical procedure and 5 days after. Recheck is recommended in a year. Not likely a clinical issue.



**INVOICE**

32189

**DATE**

8/4/22



**PATIENT**

Grey SV Animal Shelter

**SPECIES**

Canine

**BREED**

Pit Bull

**SEX**

Neutered male

**AGE**

1 year

**WEIGHT**

60 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier Animal  
Medical Center

**REFERRING VET**

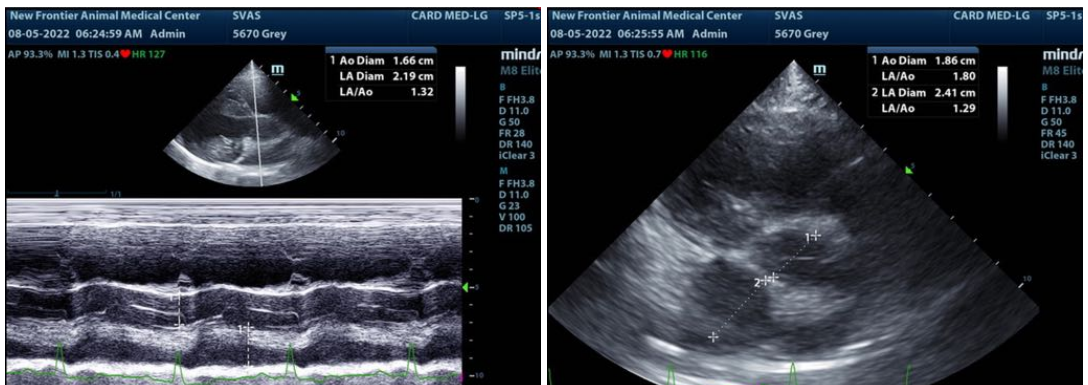
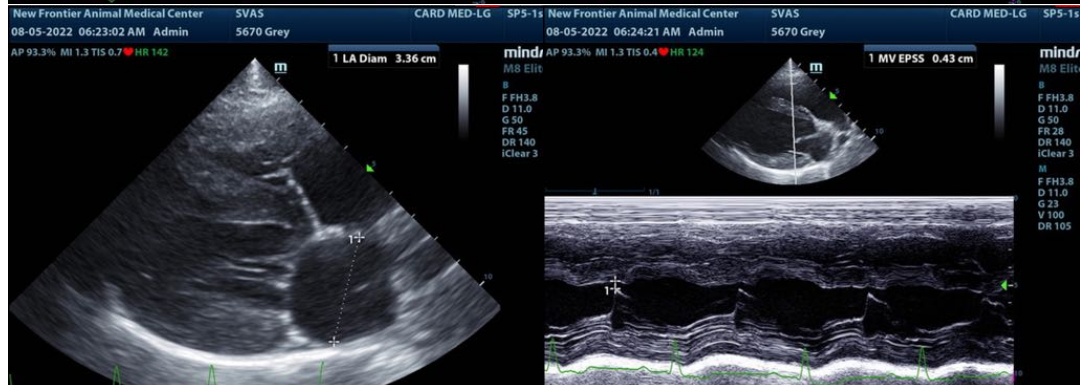
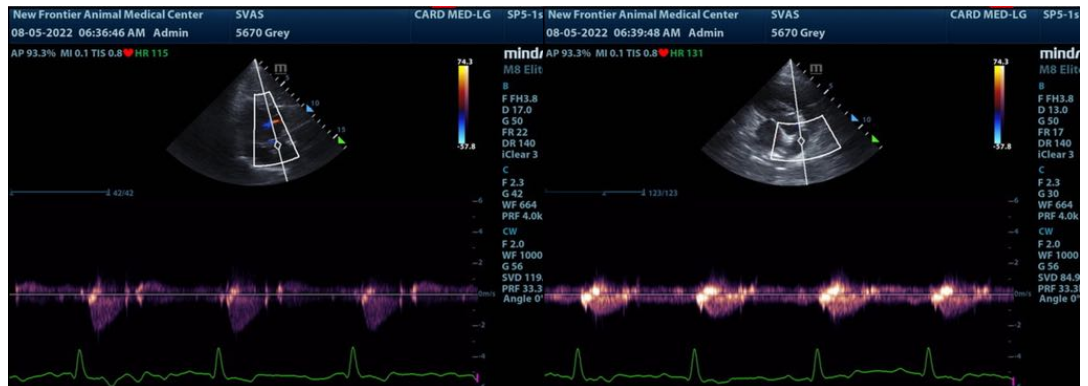
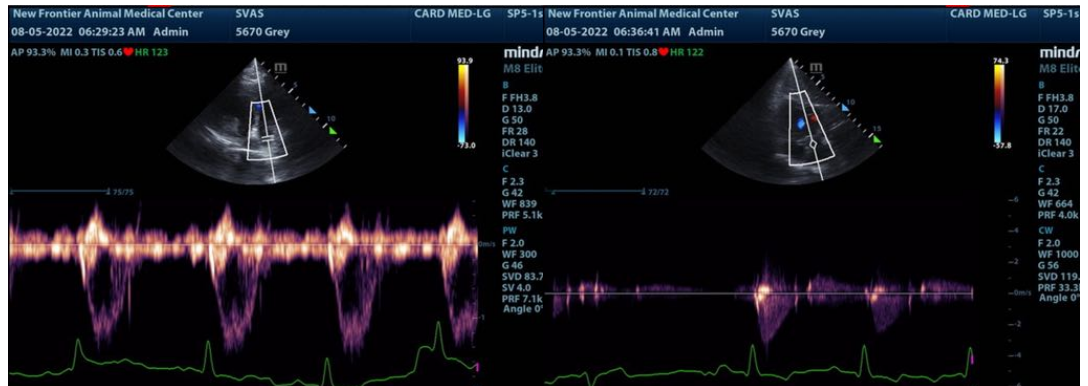
Dr. Gunther

**INVOICE**

32189

**DATE**

8/4/22





**PATIENT**

Grey SV Animal Shelter

**SPECIES**

Canine

**BREED**

Pit Bull

**SEX**

Neutered male

**AGE**

1 year

**WEIGHT**

60 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Gunther

**HOSPITAL NAME**

New Frontier Animal  
Medical Center

**REFERRING VET**

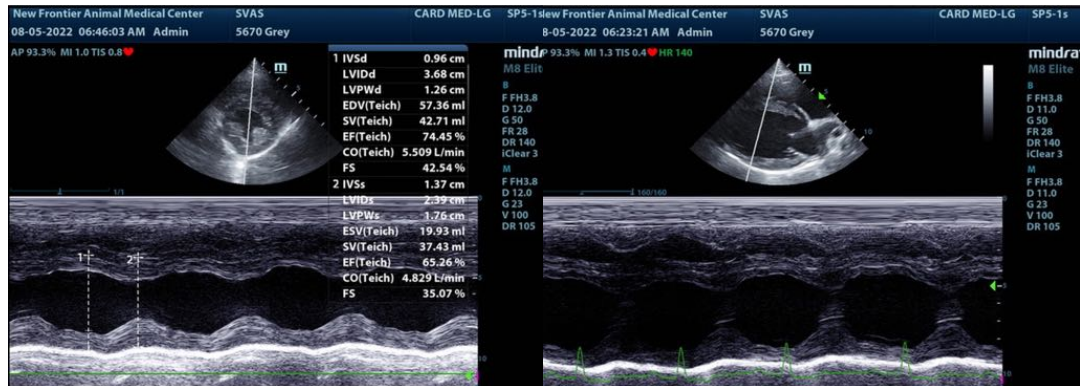
Dr. Gunther

**INVOICE**

32189

**DATE**

8/4/22



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.

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