



**PATIENT PRESENTING CLINICAL SIGNS**

Maverick Crass

History: Maverick has a history of seizure like activity over the last 2 months. He was presented to another clinic who found a grade 2 murmur and a gallop rhythm. They were concerned about possible syncopal episodes.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: On examination today he was bright alert and very skittish with a grade 1 murmur. He was given butorphanol to aid in restraint and the heart rate dropped dramatically. CBC, Chem, lytes wnl at rDVM

**BREED**

Australian Cattle Dog

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**SEX**

Male

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 **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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. 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. Arrhythmogenic activity appeared to be present.

**AGE**

4 years

**WEIGHT**

39.9 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. McGee

**HOSPITAL NAME**

Bridgeport AH

**REFERRING VET**

Dr. McGee

**INVOICE**

43206

**DATE**

3/8/23

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base;)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.0	1.2	35	66	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	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	Approx 60			39.9 lbs	3.4	2.86	



**PATIENT**

Maverick Crass

**ULTRASONOGRAPHIC FINDINGS**

Bradycardia.

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

EKG is recommended to assess for bradyarrhythmia. Holter monitor would be ideal in this patient and can be obtained from our office with cardiologist review. Screening for Addison's is warranted with baseline cortisol or ACTH stimulation. There was no evidence of structural disease. When normal rhythm is present contractility is adequate.

**BREED**

Australian Cattle Dog

**SEX**

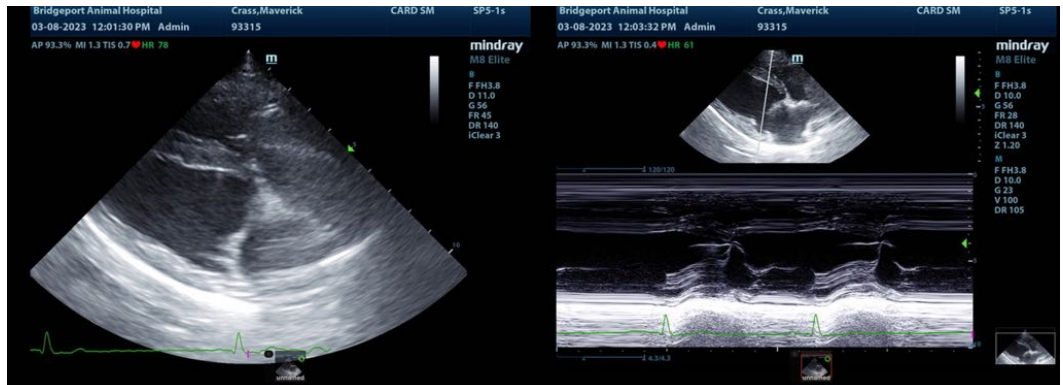
Male

**AGE**

4 years

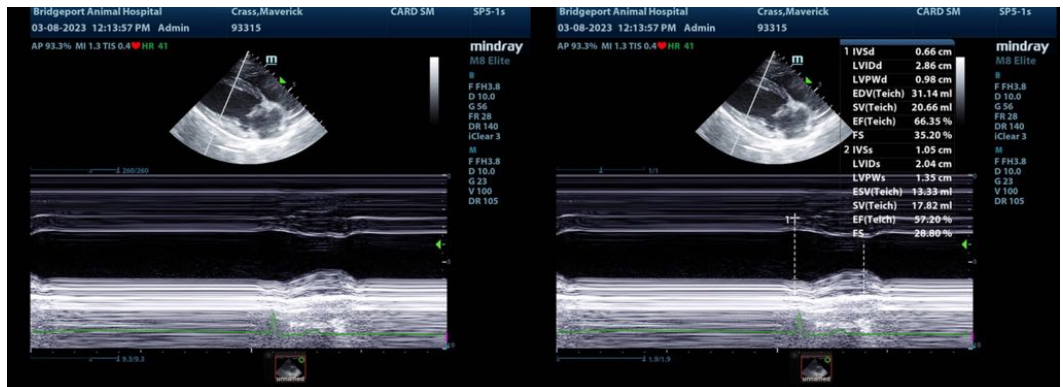
**WEIGHT**

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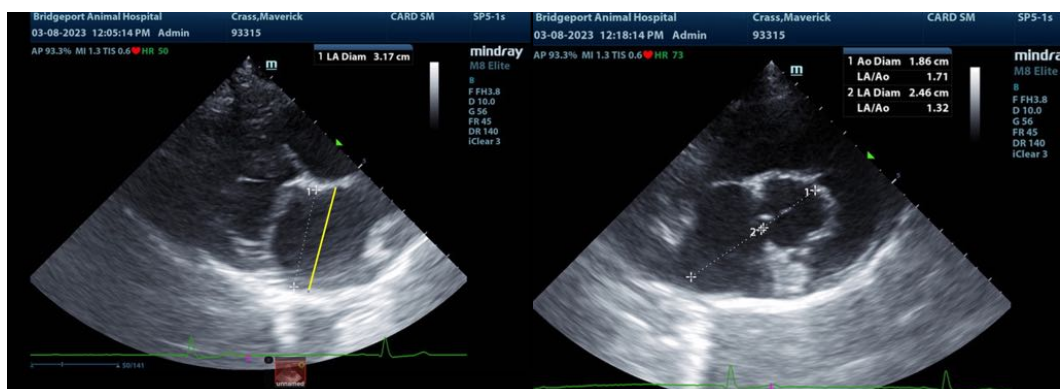


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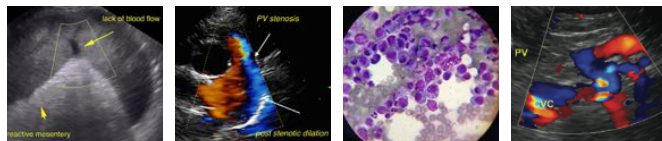
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**PATIENT**

Maverick Crass

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**

Canine

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.

**BREED**

Australian Cattle Dog

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

**SEX**

Male

**AGE**

4 years

**WEIGHT**

39.9 lbs

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