



**PATIENT PRESENTING CLINICAL SIGNS**

Duncan Fowler

History of grade 1-2/6 heart murmur over last few years, no real change. Overweight, history of OA, chronic pancreatitis. Current meds Gabapentin, has had Metacam in past. Dental disease. Recently had very adverse reaction to very low dose of premed with Dexdom at 1/4 his dose. Heart rate very low (as low as 30) and sometimes unreadable on Capnograph. Reversal given and ultrasound recommended.

**SPECIES**

Canine

**BREED**

Schnauzer

**SEX**

Neutered male

**AGE**

12 years

**WEIGHT**

9 kg

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. Trivial **mitral** valve insufficiency is noted in this patient. This is not clinically significant. 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 outflow velocity was slightly elevated. 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. Bradyarrhythmia is suspected in this patient.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Grand River VH

**REFERRING VET**

Dr. Hornak

**INVOICE**

95747

**DATE**

1/20/22

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			1.2	1.3	49	82	0.29
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				
PATIENT	55	2.26	1.29	9 kg	3.1	2.57	



**PATIENT                      ULTRASONOGRAPHIC FINDINGS**

Duncan Fowler                      Largely normal echocardiogram with trivial mitral insufficiency, not clinically significant. Normal interval volumes.

**SPECIES**                      Bradyarrhythmia.

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**BREED**                      EKG or Holter monitor is indicated at this time.

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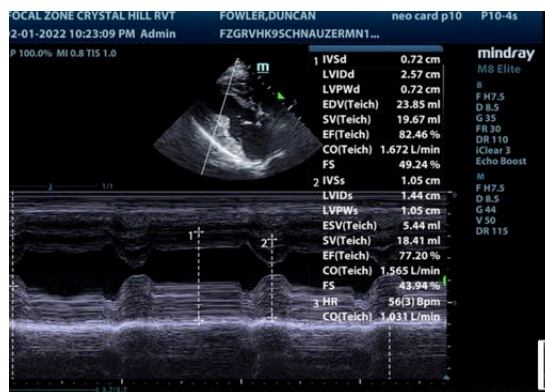
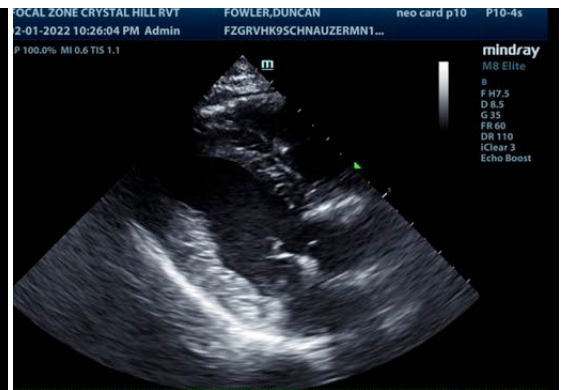
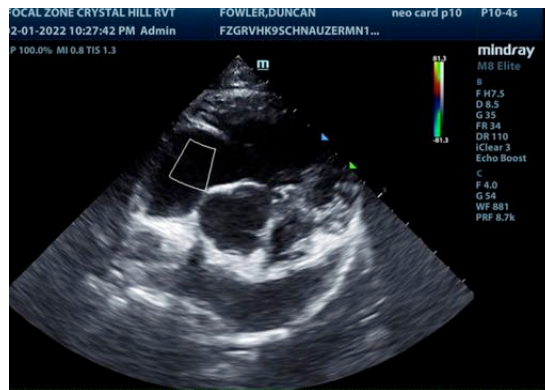
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**PATIENT**

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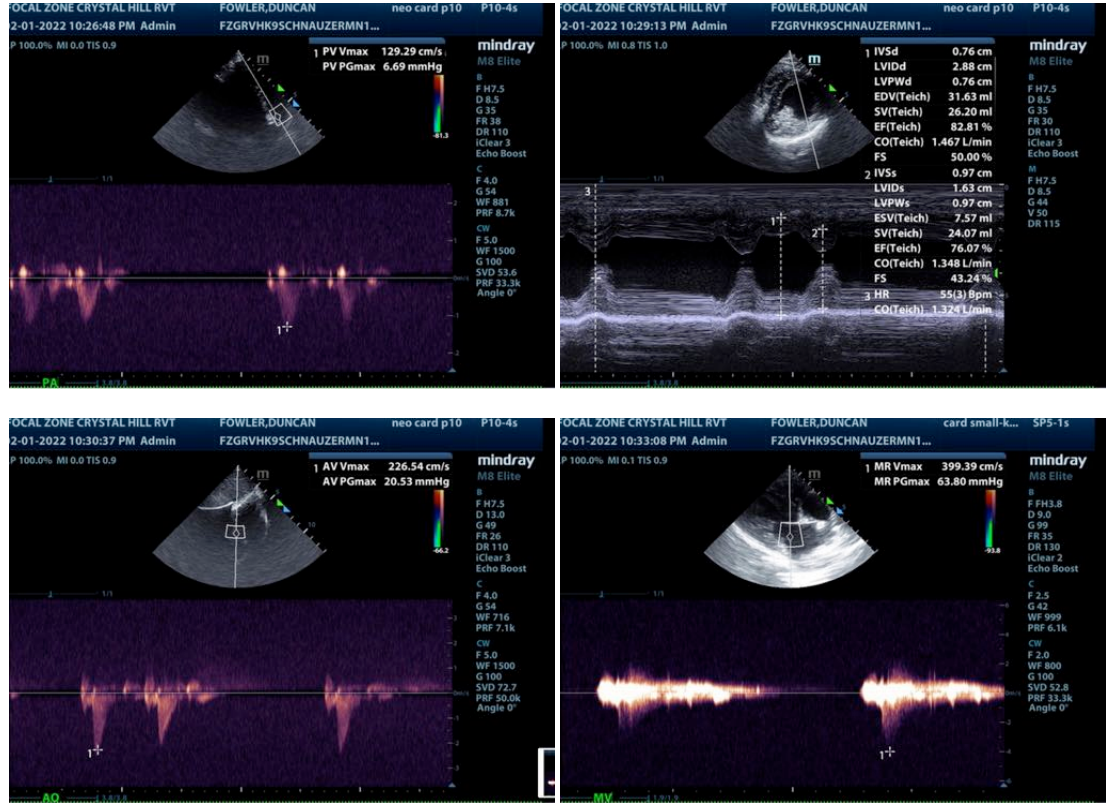
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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