



**PATIENT PRESENTING CLINICAL SIGNS**

Straley Hudson

**SPECIES**

Feline

**BREED**

Domestic Shorthair

History: Straley presented 2 weeks ago for inability to close his mouth due to a mobile mandibular canine tooth causing temporary malocclusion. During his exam, in addition to severe periodontal disease, a grade 2/6 cardiac murmur was found. Full baseline lab work revealed a mildly elevated SDMA, normal T4, and abnormal fBNP screening test. The mobile tooth was able to be removed without anesthesia, a Convenia injection was given and cardiac diagnostics were scheduled. For cardiac ultrasound on 6/28/22, 1.3mg butorphanol was given IV for light sedation. Straley's blood pressure was normal, ranging from 100 to 130 mmHg systolic using the doppler unit. Anesthesia and a dental procedure will be scheduled based upon cardiac diagnostic findings. His murmur was not audible day of cardiac u/s exam.  
 Abnormal PE/Chem/CBC/UA Results: Mildly elevated SDMA of 20ug/dl and ABNORMAL fBNP 6/13/22

**SEX**

Neutered male

**AGE**

14 years

**WEIGHT**

14.3 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. 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 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. McFeely

**HOSPITAL NAME**

Straley VA

**REFERRING VET**

Dr. McFeely

**INVOICE**

31338

**DATE**

6/29/22

FELINE CARDIAC PARAMETERS	BODY WEIGHT	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	14.3	NM	0.45	1.7	0.5	40	
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	1.3	1.4	1.4	NM	0.7	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**

Straley Hudson

**ULTRASONOGRAPHIC FINDINGS**

Normal echocardiogram.

**SPECIES**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is no evidence of clinical cardiac disease. This is likely flow murmur. There is no overt contraindication to anesthetic procedure if necessary. Torbutrol premed, Propofol induction, and Isoflurane maintenance or equivalent protocol is recommended.

**BREED**

Domestic Shorthair

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**

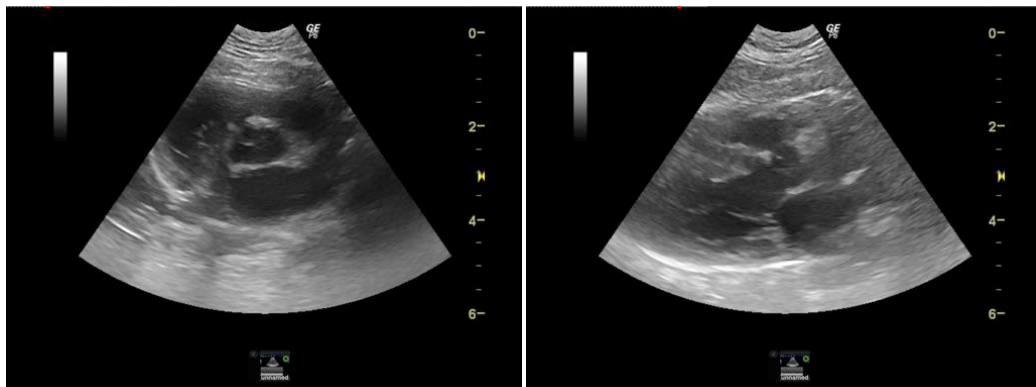
Neutered male

**AGE**

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**WEIGHT**

14.3 lbs

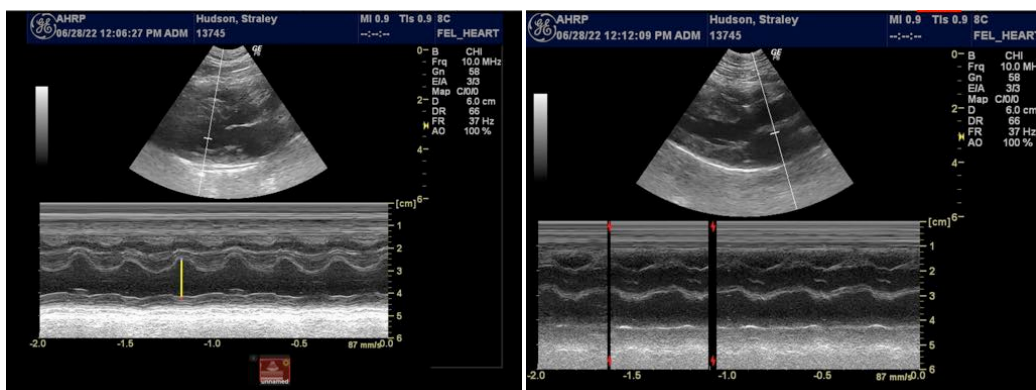


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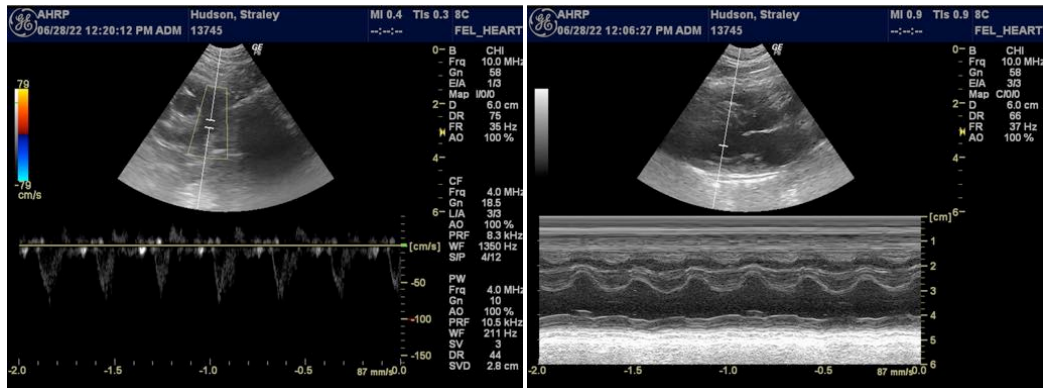
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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