



## PATIENT PRESENTING CLINICAL SIGNS

**Tigger Akins**  
2/3/22: Presented for raspy breathing. - Harsh lung sounds bilaterally - Gr 3/6 L parasternal systolic heart murmur. - 3v chest x-rays (with consult): Elongated cardiac silhouette w/ increased sternal contact, enlarged pulmonary vessels. No evidence of CHF or HCM. Bronchointerstitial lung pattern. - Given Profender topical 2/4/2022

**Feline**  
Abnormal PE/Chem/CBC/UA Results: Current Medications Terbutaline 0.25mg PO q12h  
Radiographic Findings - 3v chest x-rays (with consult): Elongated cardiac silhouette w/ increased sternal contact, enlarged pulmonary vessels. No evidence of CHF or HCM. Bronchointerstitial lung pattern.

**DLH**  
Primary Question/Differential to Be Answered in This Exam Gr 3/6 L parasternal systolic murmur - r/o HCM, SAS, pulmonic stenosis, endocarditis, congenital

## SEX ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Spayed Female

### AGE

9 Months

### WEIGHT

8.1 Pounds

### INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

### IMAGING PERFORMED BY

Sara Hansen

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	0.51	1.2	0.5	50	90
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	1.4	1.4	1.4		1.17	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							

### Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate LA measurements. Mild **mitral** insufficiency noted in this patient, not clinically significant. 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.

### HOSPITAL NAME

Cascade Animal Clinic

### REFERRING VET

Dr. Armstrong

### INVOICE

35842

### DATE

3/2/22



**PATIENT**

Tigger Akins

**SPECIES**

Feline

**BREED**

DLH

**SEX**

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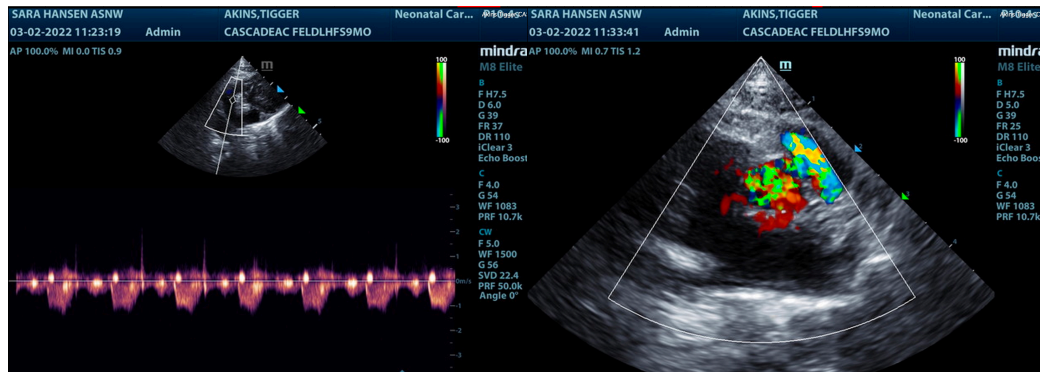
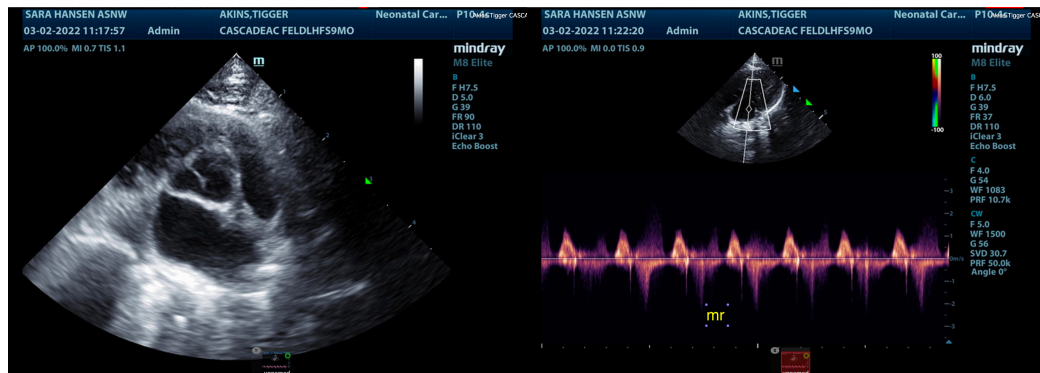
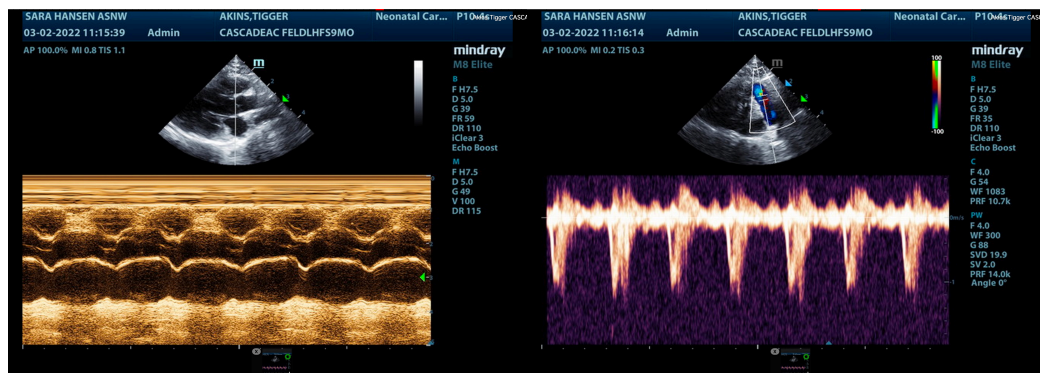
3/2/22

**ULTRASONOGRAPHIC FINDINGS**

- Normal echocardiogram with minor mitral insufficiency, no evidence of volume overload

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The clinical signs are not cardiogenic at this time. This is largely a flow murmur and not clinically significant. Wall thicknesses and chamber sizes as well as function are all normal.





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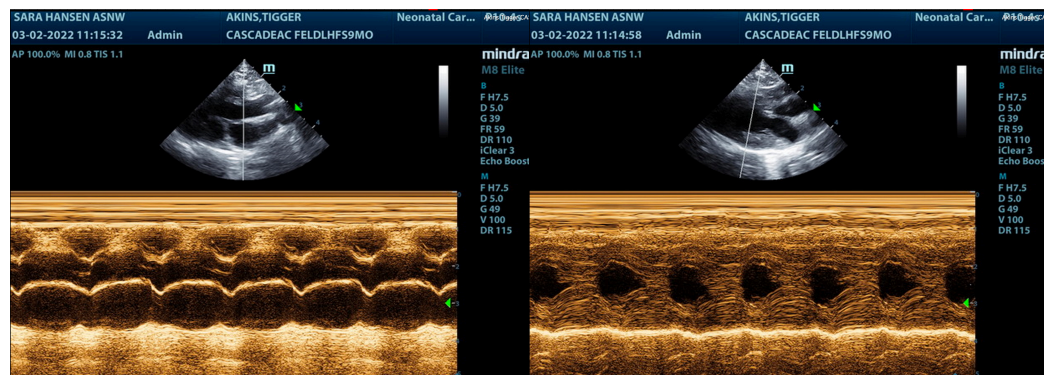
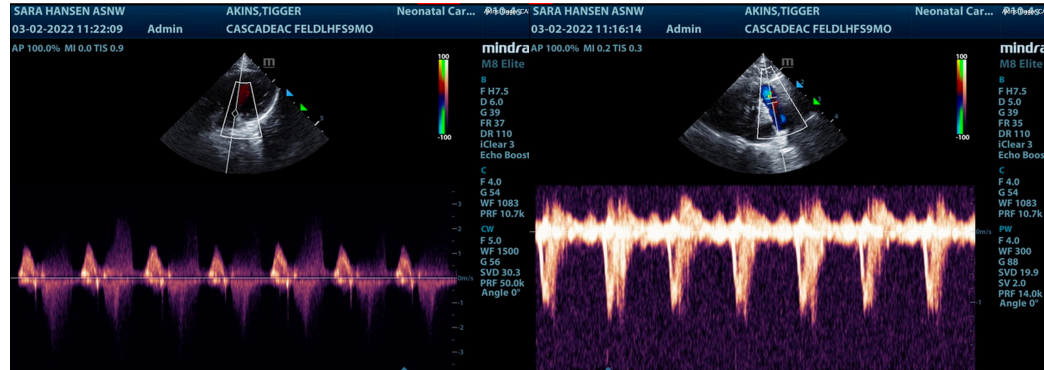
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**

info@SonoPath.com