



## PATIENT

Mia Neuwirth

## PRESENTING CLINICAL SIGNS

History: Suspected FIP, labored breathing. has elevated proBNP, looking to rule out chf as well

## SPECIES

Feline

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

## BREED

Maine Coon

## SEX

Female

## AGE

1 Year

## WEIGHT

4.9 kg

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
<b>NORMAL PARAMETER</b>	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
<b>PATIENT</b>	--	169	0.56	1.55	0.55	54	86
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/)	
<b>NORMAL PARAMETER</b>	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
<b>PATIENT</b>	1.4	1.35	1.45	1.0	1.0	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. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics. No overt MR on doppler. 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. Normal measured LVOT velocity. 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. No overt TR on doppler. 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). Normal measured RVOT velocity. No visible pericardial fluid was noted. Subjective mild echogenic pleural effusion was present. The possibility of a pericardial thoracic mass lesion is thought less likely.

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

## IMAGING PERFORMED BY

Dr. Gromalak

## HOSPITAL NAME

SVS Imaging

## REFERRING VET

Dr. Greer

## INVOICE

20404

## DATE

1/6/23

## ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function
- Subjective mild volume echogenic pleural effusion- noncardiogenic

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



## PATIENT

Mia Neuwirth

No evidence of structural or functional cardiomyopathy as a definitive or contributing cause of the patients subjective echogenic pleural effusion. No indication for cardiac medications. Effusion analysis cytology +/- culture and sensitivity, if evidence of inflammatory cells, is suggested (if not done). FIP titers on the fluid could also be considered, if clinically indicated.

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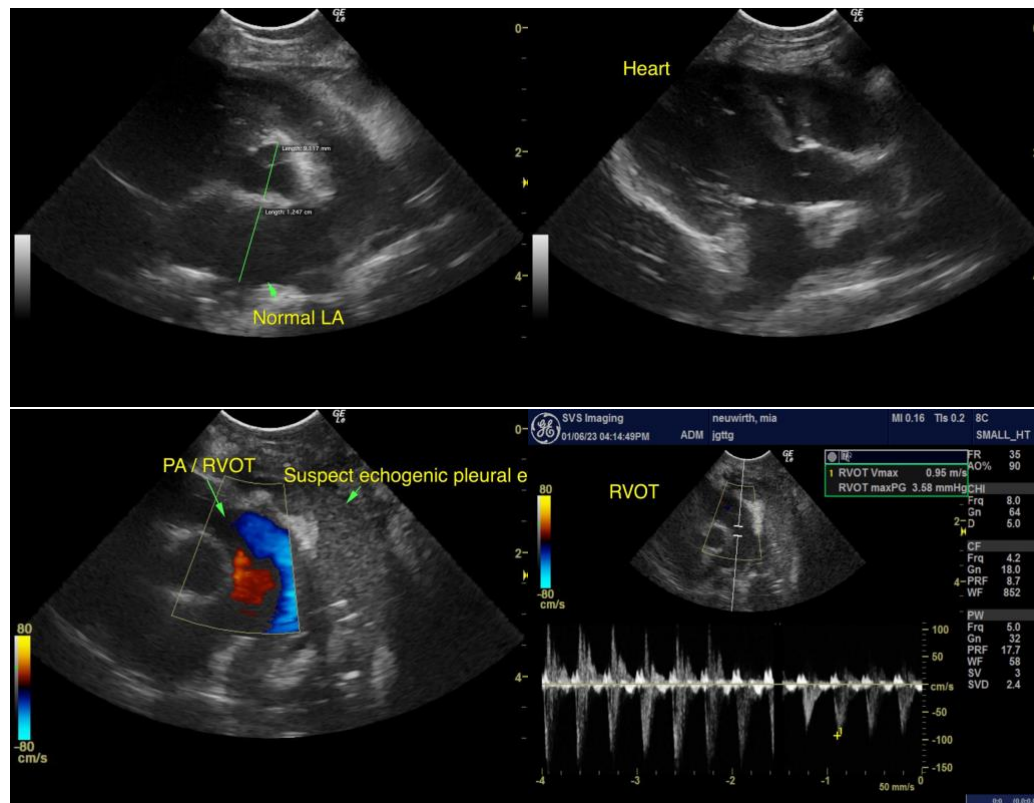
Dr. Greer

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The information and recommendations provided are based on the images presented by the referring veterinarian. 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)**  
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