



## PATIENT PRESENTING CLINICAL SIGNS

Piper Ferguson

History: Persistently elevated liver enzymes since 3/2022. Losing weight, ++increased appetite. Current meds: Denamarin 90mg q24h, Metro 50mg q12h, amoxi 50mg q12h. Note: P presented with increased respiratory effort and fast echo scan was performed to assess. BP post scan (tail) 118/98(99)

## SPECIES

Feline

Abnormal PE/Chem/CBC/UA Results: 9/29-ALT 510, ALP 329, BILI 1.4, Leukocytosis w/neutrophilia and monocytosis.

## BREED ULTRASONOGRAPHIC EXAMINATION OF THE HEART

DSH

## SEX

Neutered Male

## AGE

16 Years

## WEIGHT

6 Pounds 9 Ounces

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	0.55	1.2	0.5	35	--
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	0.8	--	--	--	--	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

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## 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. 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 left heart was unremarkable. The aorta in this patient was dilated with a splitting cranial wall and echogenic debris, consistent with aortic dissection. This is severe consequence to systemic hypertension or underlying disease process. Prognosis is poor. Septal and free wall thickness were unremarkable. The aortic valve was mildly thickened. 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. Periodic arrhythmia was present. No volume overload was noted.

## IMAGING PERFORMED BY

Shari Reffi, CVT

## HOSPITAL NAME

Andover AH

## REFERRING VET

Dr. Binlear

## INVOICE

17552

## DATE

10/3/22

## ULTRASONOGRAPHIC FINDINGS

- Aortic dissection



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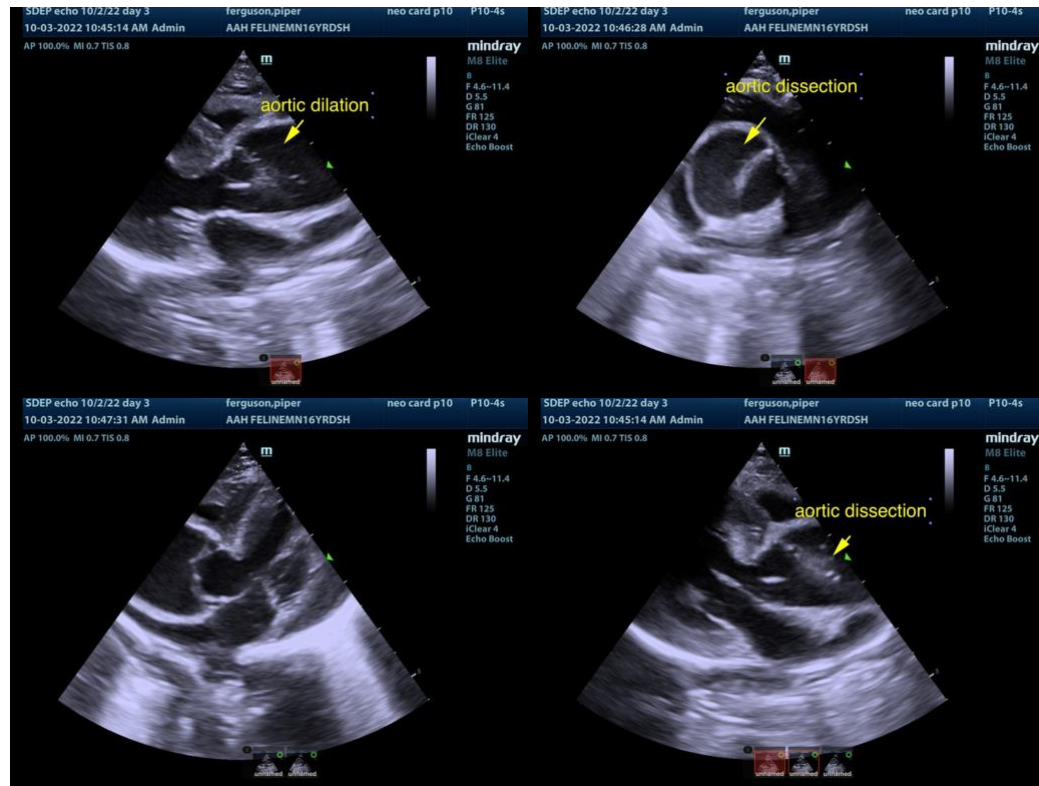
17552

**DATE**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The causes of abdominal evaluation for cause of underlying disease is indicated with search for causes of hypertension. However, prognosis is poor, and this patient is at high risk for sudden death. Thromboembolic episodes may also be playing a role given the increased respiratory effort. EKG is indicated to assess periodic arrhythmia yet was paroxysmal during the exam.



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.

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