



## PATIENT

Thor West

## SPECIES

Feline

## BREED

Domestic Shorthair

## SEX

Neutered male

## AGE

14 years

## WEIGHT

11.11 lbs

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Heather

## HOSPITAL NAME

Animal Care Center of  
Flanders

## REFERRING VET

Dr. Hallihan

## INVOICE

73623

## DATE

3/19/26

## PRESENTING CLINICAL SIGNS

- Elevated proBNP, irregular heart rate upon exam
- Bun - 37 BP - 100

## 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** insufficiency was noted. 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. Occasional arrhythmia was noted.

| 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  | 11.11 lbs      | 200                       | 0.53                 | 1.38       | 0.57            | 45              | 90        |
| FELINE CARDIAC PARAMETERS  | LA/AO (M-mode) | LA/AO HEART BASE (Sisson) | LAD LA MAX 4 Chamber |            | LVOT VEL. (m/s) | RVOT VEL. (m/s) | IVRT (m/) |
| NORMAL PARAMETER   | <1.5           | 1.6                       | 0.7-1.7              |            | <1.6            | <1.3            | 40-60     |
| PATIENT  | 1.1            | 1.1                       | 1.4                  |            | 1.2             | 0.8             | NM        |
| Adapted from June Boon, Veterinary Echocardiography, 1998<br>Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705 |                |                           |                      |            |                 |                 |           |

## ULTRASONOGRAPHIC FINDINGS

Structurally unremarkable heart.

Minor tricuspid insufficiency.

Occasional arrhythmia.



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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There was no evidence of structural or functional disease. Management should be based on EKG results. Underlying infectious causes of myocardial irritation should be considered.

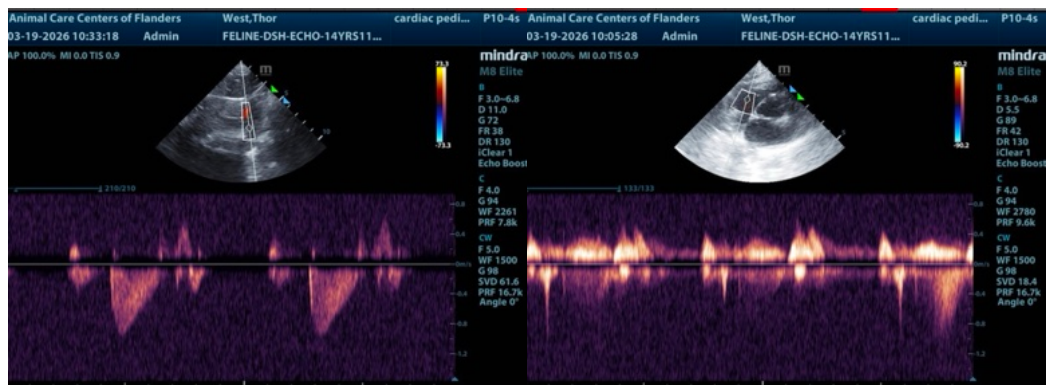
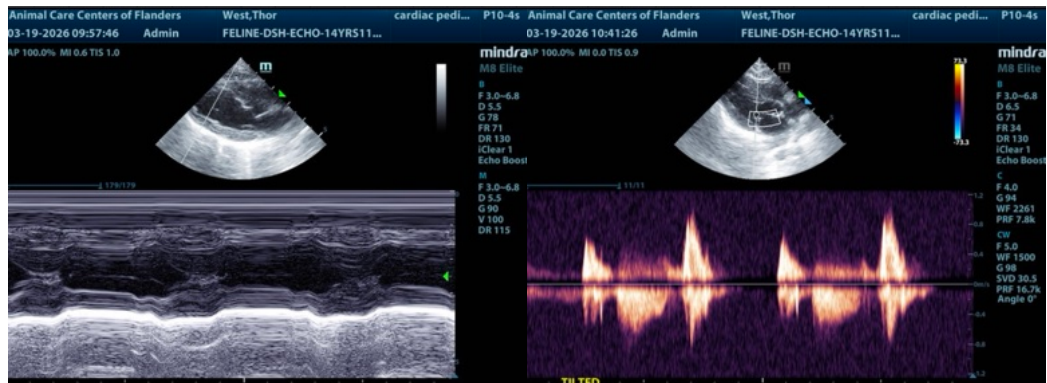
Bio markers such as NT-proBNP are screening tests for myocardial stress. A positive test (>100 pmol/liter) does not mean that cardiac disease is necessarily present.

BNP false +can occur in hyperthyroid, renal insufficiency, severe airway disease, systemic hypertension and potentially other systemic influences.

A negative result largely rules out clinically relevant myocardial disease but does not rule out occult cardiomyopathy.

In cases of pleural effusion, diluting the fluid 1:1 and testing BNP on the fluid is useful to assess if the pleural effusion is cardiogenic in nature.

Ultrasound, however, is the gold standard as far as evaluating clinically significant and occult heart disease.





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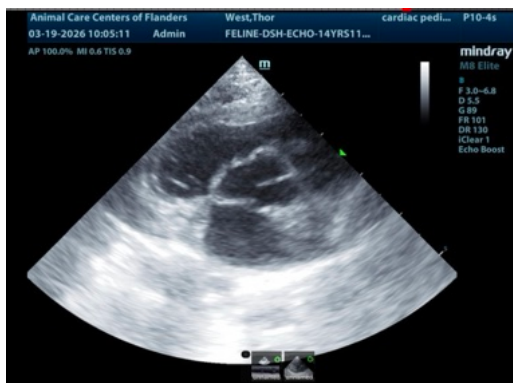
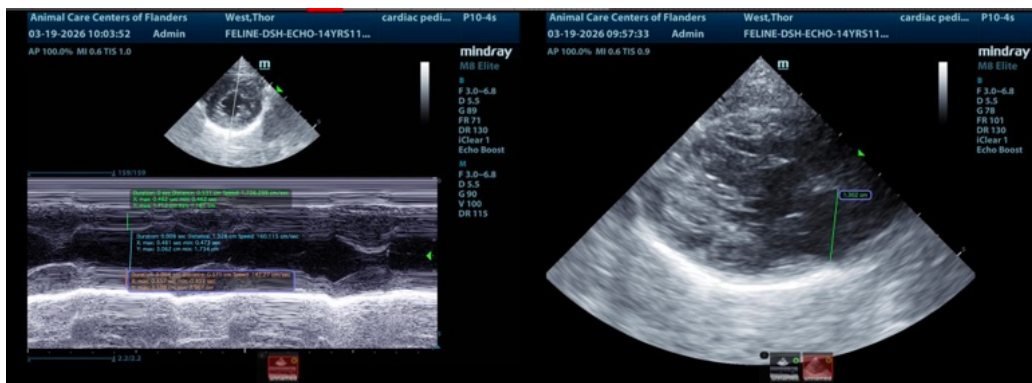
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP (CFM), Cert. IVUSS, CEO of SonoPath.com

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