



## PATIENT

Fritz Kapitan

## SPECIES

Feline

## BREED

DSH

## SEX

Male Neutered

## AGE

5.7 years

## WEIGHT

9.3lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Brian Barnes, DVM

## HOSPITAL NAME

Westview Veterinary  
Hospital

## REFERRING VET

Dr. Barnes

## INVOICE

27090

## DATE

10/25/22

## PRESENTING CLINICAL SIGNS

History: Recheck echo. Abnormal ProBNP. Sedated for exam Ace 0.5mg and Torb 1mg.  
-Pertinent previous echo findings (11/2021 KB): Diagnosed with papillary muscle hypertrophy/atypical HCM, AI, MR. Acute episode of respiratory distress at that time. No medications warranted and asthma suspected.

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension with mild endocardial fibrosis and remodeling. There is a diffusely hyperechoic endocardium. The papillary muscles are asymmetric with significant enlargement. Atypical banding is seen near the apex (see below), creating a mid-LV obstruction to flow. No hypertrophy is seen. The LV chamber is normal with adequate function. The left atrium is normal. The mitral valve is normal in structure and mobility. Mild MR. Normal velocity. The right atrium is normal. The right ventricle is normal. Mild TR. Normal velocity. Blood flow through both the LVOT and RVOT are normal in velocity. Mild aortic and no pulmonic insufficiency. No pleural or pericardial effusion seen. No obvious cardiac tumors.

## CARDIAC CHART

| FELINE CARDIAC PARAMETERS  | BODY WEIGHT (kg)               | HR (BPM)   | IVSd (cm)<br><small>(Moise, Pipers)</small>                         | LVIDd (cm)<br><small>(Moise, Pipers)</small> | LWVd (cm)<br><small>(Moise, Pipers)</small> | FS (%)                | EF (%)             |
|--|--------------------------------|--|---|--|---|-----------------------|--------------------|
| NORMAL PARAMETER   | -----                          | 150-240  | 0.35-0.55   | <2<br>(mean 1.5)                             | 3.5-0.55                                    | 35-67                 | 80-100             |
| PATIENT  | 4.2                            | NM   | 0.40  | 1.62   | 0.42  | 66                    | 95                 |
| FELINE CARDIAC PARAMETERS  | LA/AO<br><small>(Boon)</small> | LA/AO HEART BASE<br>(Swe)<br><small>(Abbott)</small> | LA<br>2D short axis<br>Base view<br>(cm)<br><small>(Abbott)</small> |  | LVOT VEL<br><br>(m/s)                       | RVOT VEL<br><br>(m/s) | E max<br><br>(m/s) |
| NORMAL   | <1.5                           | <1.3   | <1.2  |  | <1.6  | <1.3                  | <0.9               |
| PATIENT  | 1.3                            | 1.4  | 1.3   |  | 2.3   | 1.3                   | NM                 |
| <p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i><br/>Adapted from June Boon, Veterinary Echocardiography, 1998<br/>Abbott J &amp; MacLean H JVIM 2006;20: 111-119, Moise et al. Am J Vet Res 47:1476, 1986. Pipers et al. Am J Vet Res 40:882, 1979.</p> |                                |  |   |  |   |                       |                    |

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Several mild abnormalities are appreciated, that appear largely similar to the prior study. First is the papillary muscles are abnormal and asymmetrically enlarged with atypical banding. This is suspected to be causing a mid-LV obstruction to blood flow with an increase LVOT velocity. Additionally, mild MR, TR and aortic insufficiency are appreciated, and a baseline blood pressure is recommended. No obvious LV hypertrophy or other issues are identified. Despite these findings the LA is normal, indicating low risk for complication at this time; however, follow up is certainly advised.

No medications are indicated at this time. Monitor for any signs of progressive heart disease at home including change in breathing rate or effort, signs of a blood clot event and/or lethargy/syncope going forward.



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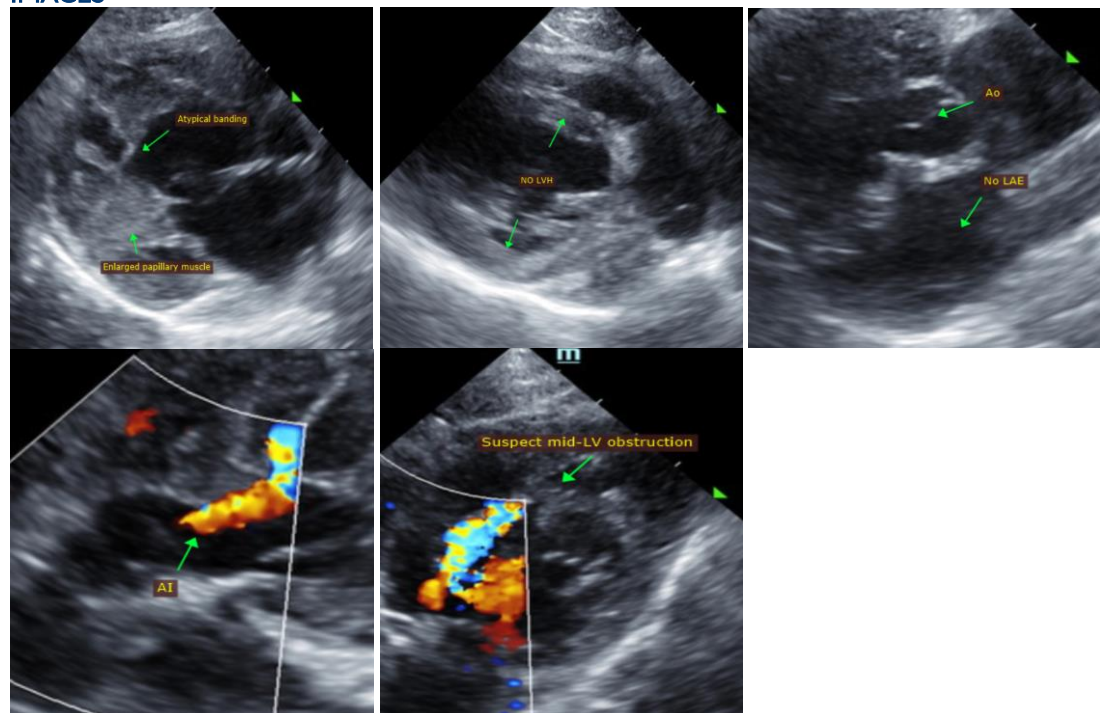
Anesthetic risk is considered mildly elevated, with risk for fluid overload, spontaneous CHF, hypotension, etc. Judicious IV fluid rates are advised to avoid fluid overload. Drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Avoid ketamine, telazol, acepromazine and Dexdomitor. A reasonable protocol would include opioid/benzodiazepine pre-medication, propofol induction, isoflurane gas. If fluid or steroid therapy is needed, close monitoring of breathing rates is advised as fluid intolerance is certainly a possibility.

**PLAN**

Baseline BP is recommended.

Recommend recheck echocardiogram in 6-12 months to screen for progression, sooner if clinical signs arise.

**IMAGES**



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. This report was generated using transcription software, and minor dictation errors may be present. 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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