

**PATIENT**

Jasper Meader

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

2.12.15

WEIGHT

12.56lbs

INTERPRETED BYMaggie Machen Lamy,
DVM, DACVIM
(Cardiology)**HOSPITAL NAME**Everhart Veterinary
Hospital**REFERRING VET**

Dr. Betta

INVOICE

31622

DATE

6.29.23

PRESENTING CLINICAL SIGNS

History: History of grade 3/6 parasternal murmur August 2022. P non-clinical at that time and no cardiac work up was performed. P presented on 6/26/23 for increased respiration (mainly when p is sitting on owner, resp seems normal when sleeping). PE: BAR, mm pk/moist, <2 sec. No murmur on exam, HR >200. RR 60 (nervous in hospital), lungs clear. Pro BNP abnormal.

-Radiographs: Mild cardiomegaly.

-Current medications: None.

-Blood pressure: 150, 148, 154mmHg.

-Sedation used: Gabapentin PO, Torbugesic IM.

-Pertinent previous ultrasound results: No previous.

-STAT: Not requested

-Imaging performed by: Stephanie Warga RDCS, RVT.

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental information only.

Mild cardiomegaly. No obvious evidence of CHF.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is normal in dimension. There is a mildly hyperechoic endocardium consistent with age-related fibrosis. The endocardium also appears mildly remodeled. The papillary muscles appear mildly remodeled. The left atrium is normal in size. Blood flow through the LVOT appears normal with no evidence of obstruction. The right atrium is normal in size. The right ventricle appears normal. The tricuspid valve appears normal in structure and mobility. No tricuspid regurgitation. The mitral valve is normal in structure and mobility. Mild mitral regurgitation. Blood flow through the RVOT is mildly elevated in velocity based upon color flow (not captured on Spectral Doppler), likely secondary to tachycardia creating a benign outflow tract obstruction. No evidence of cardiac tumors or metastatic lesions on this scan.

CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) <small>(Moise, Pipers)</small>	LVIDd (cm) <small>(Moise, Pipers)</small>	LVWd (cm) <small>(Moise, Pipers)</small>	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	5.7	NM	0.52	1.3	0.46	50	85
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Swe) (Abbott)	LA 2D short axis Base view (cm) (Abbott)		LVOT VEL (m/s)	RVOT VEL (m/s)	E max (m/s)
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	NM	1.1	1.0		1.4	2.0	NM

Adapted from June Boon, Veterinary Echocardiography, 1998
Abbott J & 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.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The only cause of a murmur identified is a heart rate dependent flow obstruction through the right ventricle (DRVOTO), which is a physiologic finding (i.e., benign and of little clinical significance). This type of flow murmur will wax and wane secondary to tachycardia and volume changes. There is mild LV remodeling and fibrosis, which is likely a normal age-related finding. Regardless, the left atrial dimension is normal, and there is minimal risk for complication at this time. Mild MR is noted, which is of unknown significance. Follow up is recommended. No additional abnormalities are seen.

These findings would suggest respiratory changes are noncardiogenic in origin. Additionally, cardiomegaly on films is likely a normal variant. Fat in the pericardial space can contribute to this abnormality.

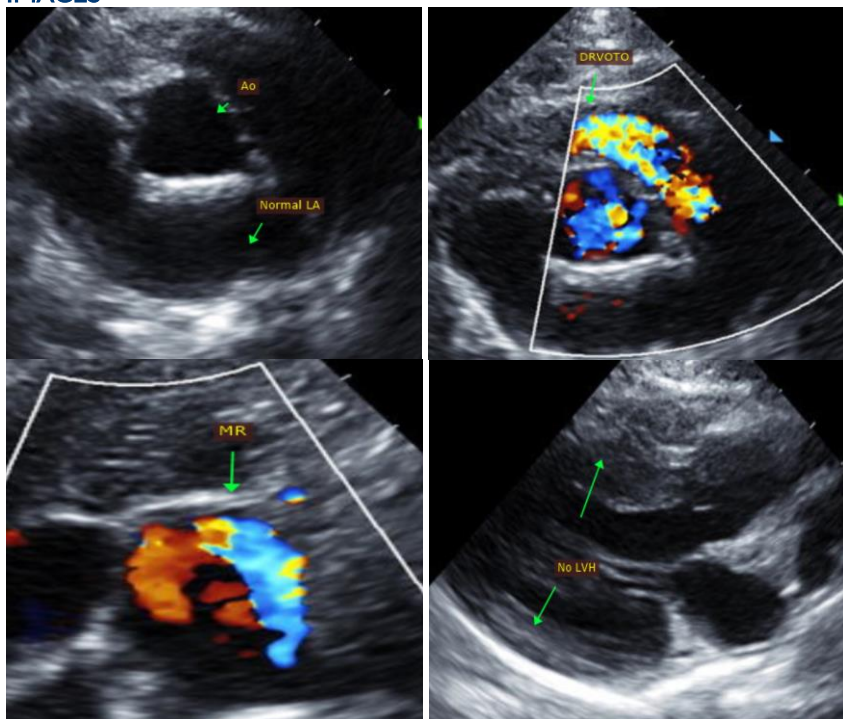
Given these findings, no medications are indicated at this time.

If needed, the risk for general anesthesia is low. Judicious IV fluid use is recommended in any older cat. Additionally, a screening blood pressure is recommended prior to general anesthesia.

Risk for complication with steroid use typically follows LA dilation, which in this case is low. That being said, any cat can experience unexpected signs of intolerance and monitoring of RR/RE is advised particularly in the initiation phase.

Recommend recheck echocardiogram in 1 year to assess for progression or development of disease the pre-existing murmur may mask.

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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