



PATIENT

Fizz Barron

SPECIES

Feline

BREED

DLH

SEX

Male Neutered

AGE

8 years

WEIGHT

12lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Schneck, DVM

HOSPITAL NAME

Willamette Veterinary
Hospital

REFERRING VET

Dr. Jimmerson

INVOICE

27039

DATE

10/21/22

PRESENTING CLINICAL SIGNS

History: (10/16) arrived with history of tachypnea, weakness in the hindlimbs, vocalizing. On exam had grade 4/6 heart murmur, harsh lung sounds and Blines.

-Abnormal PE/Chem/CBC/UA Results: UA = USG 1.042, RBCs 24/hpf, WBCs <1/hpf, no bacteria, no crystals, no casts CBC = nsf. HCT 37%, mild neutrophilia 12.8k, stress shift chem10 = gluc 191, all other wnl. Crea 1.6, BUN 22 lytes = wnl. K 3.7 vCheck BNP = <50 pmol/L

-Radiograph report: Cardiac silhouette is mildly enlarged with an elongated and widened contour. The longitudinal axis of the cardiac silhouette is rotated so that it is parallel to the sternum. The pulmonary vasculature is normal. The bronchi are diffusely moderately increased in conspicuity. The lungs are mildly hypoinflated with reduced pulmonary contrast and contains no apparent nodules and/or masses. At the level of the heart base, the esophagus contains a small amount of gas. The trachea is within normal limits. Within the included cranial abdominal region, there is adequate conspicuity of the serosal margins. The visualized gastrointestinal structures and margins of the liver, spleen and kidneys are unremarkable. No abnormalities identified within the musculoskeletal structures.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is largely normal in dimension with regions of irregularity. There is a diffusely hyperechoic endocardium consistent with fibrosis and remodeling. The endocardium also appears remodeled. The MV appears normal. A mildly elevated LVOT velocity is noted on color flow and Spectral doppler. Trace MR. The left atrium is normal in size. The right atrium is normal. The right ventricle appears normal. Blood flow through the RVOT is normal in velocity. Prominent aortic root. No obvious TR. There is no pleural or pericardial effusion seen. There are no obvious cardiac tumors.

CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LWVd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	5.4	NM	0.42	1.37	0.41	50	90
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	1.2	1.2		3.1	1.3	NM

**Note: All measurements based upon multi-modal images and methods. An average value is reported.*
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

Overtly normal geriatric cardiac structure and function. The murmur is due to an intermittent LVOT obstruction, secondary to abnormal valve movement at elevated heart rates. There are also irregular LV wall dimensions, in addition to mild remodeling and fibrosis of the left ventricular wall. These changes may be indicative of early cardiac disease (HOCM) or may simply represent a normal variant. Serial echocardiography will be necessary to determine progression and clinical



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relevance of both findings. Additionally, the aortic root is prominent, and a baseline blood pressure is recommended. No additional issues are identified.

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These findings would suggest radiographic abnormalities and current clinical respiratory signs are noncardiogenic. Consider primary respiratory disease as a more likely diagnosis.

BREED

DLH

In patients with persistent LVOT obstruction and an elevated pressure gradient, a beta blocker is often prescribed to lower heart rate and decrease the gradient. In this patient with a mild obstruction and borderline normal LA/LV dimensions, no medications are clearly indicated.

SEX

Male Neutered

From a structural standpoint, anesthetic risk is currently low. Avoid heart rate stimulating drugs (atropine, glycopyrrolate) unless clinically necessary. Avoid vasodilators such as acepromazine as this can worsen obstruction. Judicious IV fluid rates are recommended to avoid fluid overload in this patient with diastolic dysfunction.

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A recheck echocardiogram is recommended in 1 year, sooner if any clinical signs arise.

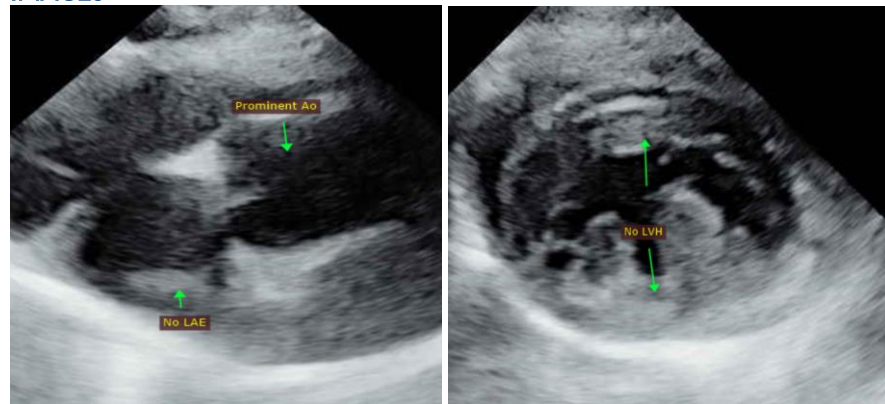
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IMAGES

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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.

HOSPITAL NAME

Willamette Veterinary
Hospital

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.

REFERRING VET

Dr. Jimmerson

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