



PATIENT

Domino Doering

SPECIES

Feline

BREED

DSH

SEX

Female Spayed

AGE

8.23.11

WEIGHT

10.5lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

North Laurel Animal
Hospital

REFERRING VET

Dr. Cohn

INVOICE

24747

DATE

6.13.22

PRESENTING CLINICAL SIGNS

History: Presented for dental and heart block was noted on pre-surgical ECG. Dental postponed.
-Pertinent abnormal PE/Chem/CBC/UA Results: 3/10/22- Senior screen- all values WNL. 5/25/22 ProBNP 703.
-Sedation used: Declined but recommend for future scans.
-Pertinent previous ultrasound results: No previous.
-STAT: Declined.
-Imaging performed by: Stephanie Pearce RDCS, RVT.

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. The basilar septum measures increased. There is a diffusely hyperechoic endocardium consistent with fibrosis. The endocardium also appears mildly remodeled. The papillary muscles appear mildly remodeled. The left atrium is borderline dimension. 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 with trace mitral regurgitation. Blood flow through the RVOT is normal. No aortic insufficiency. No evidence of cardiac tumors or metastatic lesions on this scan.

CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LVWd (cm) (Moise, Pipers)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	4.8	NM	0.6	1.2	0.41	59	92
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	1.3	1.3		0.96	1.1	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 abnormality appreciated is a focal septal bulge with significant LV remodeling and irregularity. These findings may be indicative of early hypertrophic pathology or may simply represent a normal variant. Regardless, the left atrial dimension is borderline normal, and there is minimal risk for complication at this time.

Given these findings, no medications are indicated at this time. AV block may or may not be related, although it is rare for this combination to be seen in cats. Consider high vagal tone versus sinus node dysfunction versus other. Follow up should be dictated based upon the ECG report.

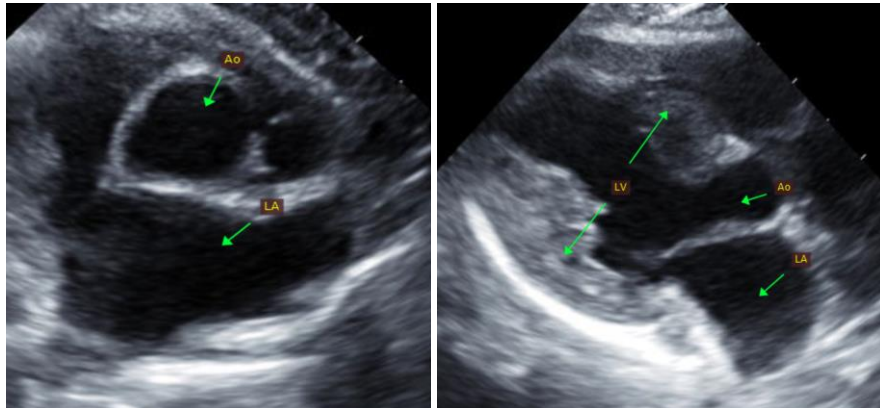
These findings may or may not explain BNP elevation pending follow up evaluation. Consider screening for alternative causes of elevation, including decreased renal clearance, hypertension, etc.

From a structural standpoint, the risk for general anesthesia is low; however, further evaluation of the ECG is certainly warranted. Avoid heart rate stimulating drugs such as atropine, glycopyrrolate or ketamine should be avoided unless medically necessary. Even without significant pathology, with this degree of remodeling and diastolic stiffening there is a mildly elevated risk for fluid overload in this patient. Judicious IV fluid use is recommended. Additionally, a screening blood pressure is recommended in any older cat 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 screen for any progressive issues.

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.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com