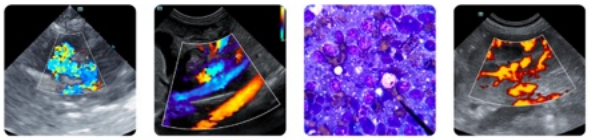

PATIENT

RC Klein

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Spayed female

AGE

14 years

WEIGHT

7.34 lbs

INTERPRETED BY

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

IMAGING PERFORMED BY

Dr. Andrea Nason

HOSPITAL NAME

Caravan Vet

REFERRING VET

Dr. Nason

INVOICE

69187

DATE

12/1/25

PRESENTING CLINICAL SIGNS

History: RC has been through 6 rounds of Lomustine for an intestinal MCT and metastatic intestinal lymph node. On serial abdominal scan rechecks, the mass has shrunk and the lymph node has shrunk. She has tolerated the medication very well. Her recent proBNP screen has elevated. The reason for the cardiac work up is to evaluate for an underlying cardiac condition and assess if continued use of Lomustine is safe. Chest radiographs and ECG screen attached. She is a controlled diabetic on glargine 1 U BID.
Blood Pressure - 110 systolic probnp 241 Crea 1.0, BUN 29, T4 1.8, fructosamine 289

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The left atrium is normal in dimension. There are no distinct left atrial thrombi/clots or spontaneous echo contrast appreciated. The left ventricle is normal in dimension as well as wall thickness, and no evidence of restriction. Left ventricular systolic function is normal, with adequate contractility. The right atrium and ventricle are prominent to mildly dilated with normal wall thickness and adequate systolic function. The anterior and posterior mitral and tricuspid valve leaflets presented normal linear structure, extension in systole, and union in diastole without regurgitation. There is no evidence of systolic anterior mitral valve motion documented. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural valvular integrity. The visible aorta is unremarkable. Pulmonary outflow tract assessment revealed normal valve structure, laminar flow, and appropriate diameter and distensibility. There is no evidence of pulmonary hypertension documented. There is no visible pericardial, pleural, or free peritoneal fluid noted.

FELINE CARDIAC PARAMETERS	**BODY WEIGHT** (kg)	**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	3.34 kg	NM	0.54	1.31	0.43	50	NM
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	NM	1.15	1.21		NM	0.65	NM
Adapted from June Boon,Veterinary Echocardiography,1998 Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705							

ECG:
The underlying rhythm is sinus in origin with an average rate of 190bpm. The R-R intervals are regular, with a uniform P-R interval that is within normal limits. A right axis deviation is documented. There are rare premature complexes with a wide QRS (>40ms), consistent with a ventricular origin. There are no ventricular couplets or runs of tachycardia documented. There is no evidence of atrioventricular block or atrial ectopy documented.

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ULTRASONOGRAPHIC FINDINGS

These findings identify a mildly enlarged right side in the setting of a right axis shift and rare premature ventricular complexes. This is most consistent arrhythmogenic right ventricular cardiomyopathy (ARVC aka right ventricular cardiomyopathy or RVC). The cardiac effects of the chemotherapy drugs also cannot be excluded as an etiology for the right sided enlargement, but would be considered a less likely cause for the structural changes given the normal left side.

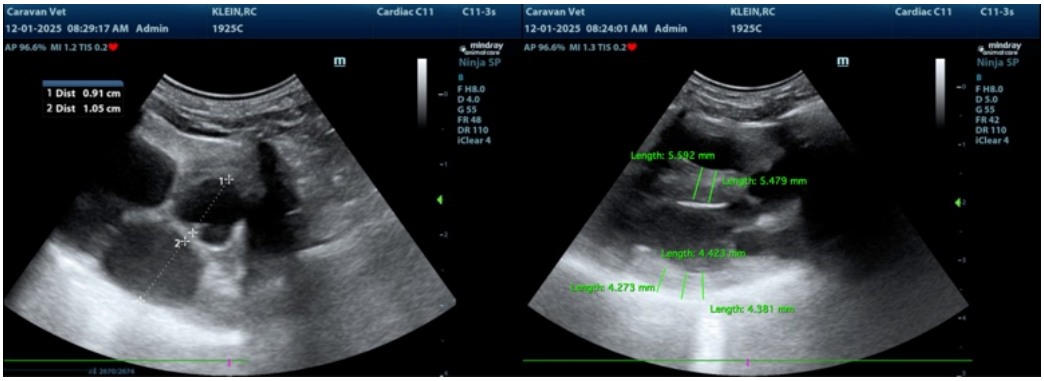
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Therapy with Vetmedin (0.25-0.35mg/kg BID) is reasonable at this time. Enalapril/benazepril (0.5mg/kg q24) can also be considered, pending BP and kidney function. If an ACEi is started, a recheck chemistry panel and blood pressure should be performed 1-2 weeks after starting therapy. Given the rarity of the ventricular ectopy, anti-arrhythmic will not be recommended at this time, but a 24-hour Holter monitor should be considered (although quite challenging to use in most cats). Barring any setbacks or complications, a repeat echocardiogram, thoracic radiographs, blood pressure, and chemistry panel are indicated in another 3-6 months.

Anesthesia considerations:
No special cardiac considerations are necessary

Diet:
No special considerations are necessary. Any high-quality food from Hills, Royal Canin, Science Diet, Eukanuba, Iams, or Purina is reasonable.

Activity:
No special considerations are necessary.



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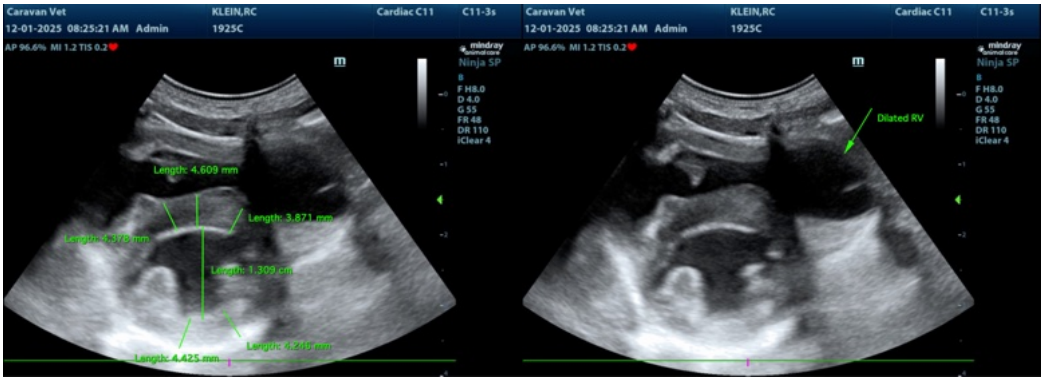

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Bradley Harris, DVM, DACVECC, DACVIM (cardiology)

info@SonoPath.com