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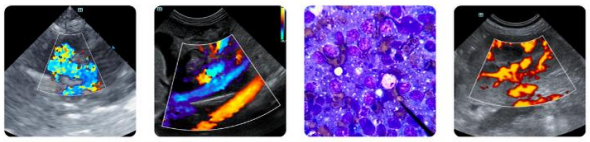


Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT

Duffy Marzen

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

18 years

WEIGHT

7.3lbs

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY

Renee Trionfetti, VMD

HOSPITAL NAME

Blue Pearl Wyomissing

REFERRING VET

Wright Veterinary Medical Center

INVOICE

46687

DATE

2/4/26

PRESENTING CLINICAL SIGNS

History: Elevated BNP. New grade 1/6 intermittent heart murmur. Weight loss and decreased appetite. Concern for progression of CKD vs other. PMH: Hyperthyroidism, CKD. On Methimazole BID. On KD diet and renal support diet. Sedated with Torb.
-Abnormal PE/Chem/CBC/UA Results: BP Doppler: 190, 190, 190mmHg. (1/29/26): CBC: Hct 28.3 L, Hgb 9.0 L, normocytic, normochromic, plts 486 H. Chem: SDMA 19 H, Cr 1.1, BUN 26, Phos 4.5-n, Alb 3.1-n, Glob 4.7-n, normal LES. USG 1.011, UPC: 0.6 – proteinuric. BNP 949 H - T4: 2.8. FeLV/FIV/HW: Neg x 3 - Feal: NPS.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is slightly increased in dimension. There is a mildly hyperechoic endocardium consistent with fibrosis. Mild symmetric papillary muscle hypertrophy and remodeling. The right ventricle is subjectively normal in size and morphology. There is no left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. Trace TR. Normal LVOT velocity. There is no obvious systolic anterior motion (SAM) of the mitral valve present. No MR. No significant AI or PI. There is no pericardial effusion noted. No pleural effusion appreciated. No obvious cardiac tumors.

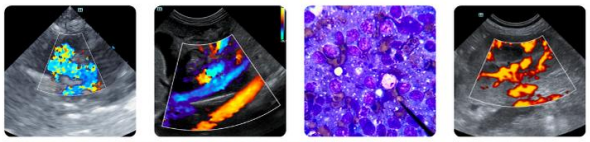
CARDIAC CHART

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	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	3.3	220	0.61	1.4	0.60	52	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	1.3	1.2	1.2		1.4	1.4	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

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. Both should be considered in this case with follow-up for the reported SHT as below. The thyroid is reported well controlled, making this unlikely. Pseudohypertrophy can also have this appearance if the patient is significantly azotemic. Regardless, what is seen here is mild, with only minimal LVH and no LA dilation. This would indicate the risk for clinical issues is low at this time. Flow through the great vessels is normal, and no significant valve regurgitation is seen. No additional pathology is identified.



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No medications are typically indicated prior to significant atrial dilation, as many cats will experience naturally slow progression. It is important to note that no medications have been shown to definitively alter long term outcome at this stage, particularly in the absence of SAM. *Regarding the newly available drug Felycin-CA1:* Recent data reports that Felycin-CA1 may improve the degree of LV hypertrophy in some cats with naturally occurring subclinical HCM. The clinical benefit is currently unknown and is still being investigated. The HALT trial is actively enrolling HCM cats all over the US in order to acquire prospective data on a larger sample size of cats. Should you wish to use the medication, the published dose is 0.3mg/kg weekly, and the drug should be avoided in cats with advanced cardiac changes, diabetes, non-healing wounds, active infections or liver disease. The medication is an immunosuppressant and should be used with caution. For further information, please visit www.triviumvet.com.

Long term prognosis is guarded for subclinical HCM, with a great deal of variability in rate of progression. The REVEAL study showed that approximately 7% of asymptomatic cats with HCM will develop CHF or a cardiogenic thrombus within 1 year, 20% within 5 years, and ~30% within 10 years. Close monitoring for progressive LA dilation going forward will help better predict long term outcome.

Monitor at home for any respiratory issues or signs of blood clot events (neurologic change, paralysis, etc.).

The reported blood pressure is elevated and should be reassessed for persistence. Ideally obtain serial measurements in a controlled, low stress environment and continue until 3 consecutive readings plateau within 5mmHg of variability. If persistently >180mmHg despite a relatively calm demeanor, recommend institution of amlodipine to effect. Additionally, if deemed accurate, screening for predisposing underlying causes of SHT is recommended (Cushing's, PLN, adrenal tumor, etc.), as primary disease is relatively uncommon and a rule out diagnosis.

Anesthetic risk is considered mildly elevated; however, judicious fluid administration is advised if needed with careful monitoring to screen for fluid overload. A reasonable protocol includes opioid/benzodiazepine premedication, propofol induction, isoflurane maintenance. Avoid ketamine, telazol, acepromazine and Dexdomitor. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine).

Risk for complication with steroid or fluid use typically follows LA dilation, which in this case is mildly elevated. If needed, monitoring of RR/RE is advised particularly in the initiation phase.

PLAN

Reassess BP as discussed.

A screening blood pressure and T4 are recommended every 6 months lifelong.

A recheck echocardiogram is recommended in 6 months to assess for progression, sooner if any issues arise in the interim.

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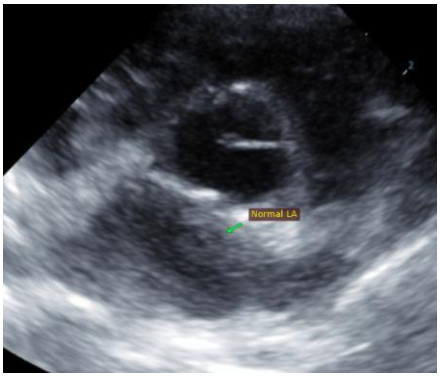

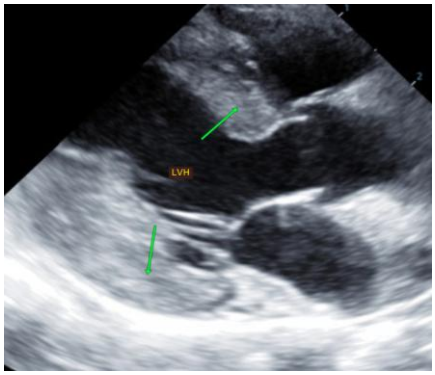

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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