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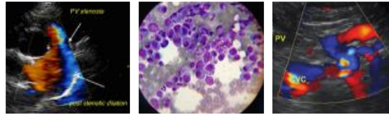

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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PATIENT
Tiger Sappenfield

SPECIES
Feline

BREED
DSH

SEX
Male Neutered

AGE
4.29.11

WEIGHT
14.6lbs

INTERPRETED BY
Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME
Happy Tails Veterinary Hospital

REFERRING VET
Dr. Calpeno

INVOICE
23728

DATE
4.18.22

PRESENTING CLINICAL SIGNS

History: Patient undergoing cardiac work-up prior to dental procedure. Heart - Murmur grade III/VI most prominent over PV and AV and normal rhythm. Weak peripheral synchronous pulses
-Pertinent abnormal PE/Chem/CBC/UA Results: June 2021 elevated cardio ProBNP
-Current medications: Clopidogrel 75mg (1/4 SID) and Atenolol 25mg (1/4 BID)
-Blood pressure: systolic 140/90, 165, HR 205. 120/205, 145, HR 210. 195/115, 140, HR 190. 185/115, 130, HR 190.
-Sedation used: Not required to complete full diagnostic ultrasound.
-Pertinent previous ultrasound results: No previous.
-STAT: Not requested
-Imaging performed by: Andi Parkinson

ELECTROCARDIOGRAPHIC FINDINGS

A six lead ECG is available at both 25 and 50mm/s; 5mm/mV. The average heart rate is 230bpm with a largely regular rhythm. The rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS is isoelectric. MEA is shifted left. No ectopic beats, pauses or dysrhythmias observed.
ECG diagnosis: Normal sinus tachycardia with a LAFB.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is irregular with moderate overall hypertrophy. There is a diffusely hyperechoic endocardium consistent with fibrosis. Mild symmetric papillary muscle hypertrophy and remodeling. The right ventricle is subjectively normal in size and morphology. There is mild left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. Trace TR. Normal LVOT velocity on Spectral; however, an intermittent LVOTO is suspected. There is no obvious systolic anterior motion (SAM) of the mitral valve present. Mild to moderate MR is present. 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	3.5-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	6.6	200	0.7	1.3	0.9	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	1.4	1.4		1.6	0.94	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

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. Blood pressure is too variable to be interpreted and should be reassessed for accuracy. Regardless, the degree of disease is mild, with moderate LVH and mild LA dilation. This would indicate the risk for clinical issues is low at this time. The murmur is suspected to be due to an intermittent LVOT obstruction, which appears highly heart rate dependent and leading to MR. No additional issues are identified.

The ECG is largely normal with a sinus tachycardia. An LAFB is diagnosed, which is a common benign bundle branch block in senior cats. No additional issues are noted.

No medications are indicated prior to significant atrial dilation. 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.

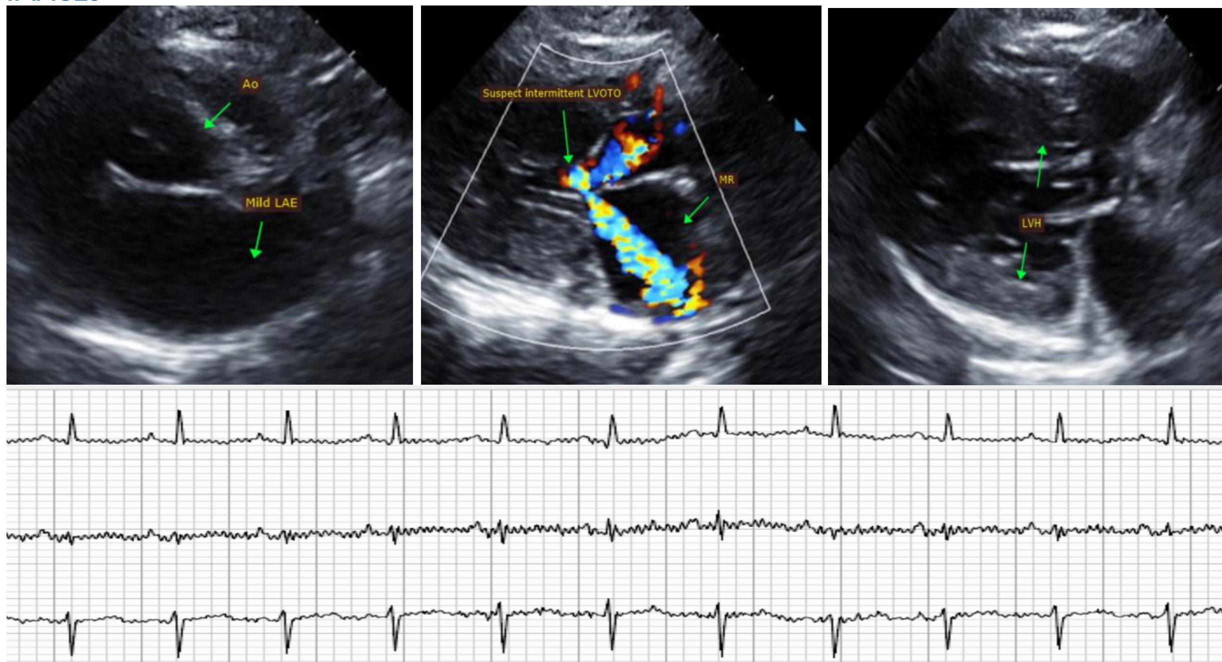
Monitor at home for any respiratory issues or signs of blood clot events (neurologic change, paralysis, etc.). Anesthetic risk is considered mild, however judicious fluid administration is advised if needed with careful RR/RE monitoring to screen for fluid overload. Additionally, drugs that stimulate heart rate should be avoided unless clinically necessary (glycopyrrolate, atropine). Risk for complication with steroid 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

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

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

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
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