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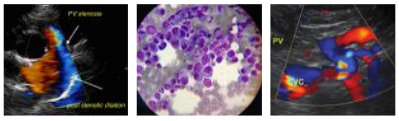

SonoPath
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PATIENT

Billy Stewart

SPECIES

Feline

BREED

Domestic Short Hair

SEX

MN

AGE

2018

WEIGHT

14lbs

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

HOSPITAL NAME

Cat Hospital at Towson

REFERRING VET

Dr. Brunt

INVOICE

21152

DATE

9/22/21

PRESENTING CLINICAL SIGNS

History: Owner adopted ~ 1 1/2 years ago as a young adult cat from a foster home. Was told he had a heart condition and to give him 1/4 of a 25 mg atenolol daily. One entry on previous owner's veterinarian referenced a "cardiology report", that the patient had HOCM and was txed with atenolol. [We are trying to get that report]. Murmur heard at CHAT one year ago (first presentation); meds continued. Presented today for routine wellness and vaccines, had 3/6 systolic murmur and weight loss.
-Pertinent abnormal PE/Chem/CBC/UA Results: Lab work currently pending
-Current medications: Increased Atenolol to 12.5mg/day; added Rx Clopidogrel 1/4 of 75mg tab po qd
-Sedation used: Alfaxan IV and Oral Gabapentin.
-STAT: Approved.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is highly asymmetric with a severely thickened septum and mildly thickened free wall. There is a diffusely hyperechoic endocardium consistent with fibrosis. Mild asymmetric 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. No TR. Normal LVOT velocity. The aortic root appears normal; however, the ascending segment is dilated. There is no obvious systolic anterior motion (SAM) of the mitral valve present. No MR. Scant pericardial effusion noted. Small volume pleural effusion appreciated. A large cranial thoracic mass is visualized just cranial to the heart base. The mass appears extra-pericardial in origin; however, an exact origin is not definitive.

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	6.4	186	0.86	1.35	0.67	44	79

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	1.3	1.4	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) persists as was previously documented in this patient. An obstruction is not visualized here; however, that may be due to chronic Atenolol therapy which is assumed based upon the history. While LV hypertrophy is significant, the LA is only mildly dilated indicating the risk for clinical issues is low at this time.

Of much greater clinical significance is a large cranial thoracic mass that warrants further evaluation. The mass is unlikely to be associated with the heart base and further evaluation is advised to understand possible differentials (i.e., FNA, thoracic CT, etc.). Pericardial and pleural effusion are identified which are also unlikely to be cardiac in origin, given only mild left atrial enlargement. Congestion from the mass is considered much more likely. Sampling the effusion may also help dictate a primary diagnosis and should be considered. The aorta appears dilated which is of unknown significance and may suggest peripheral compression; again advanced imaging such as a thoracic CT scan is advised.

Based upon what is seen on the echocardiogram, it is reasonable to continue Atenolol at the current dose going forward. No obvious indication for additional medications without significant atrial enlargement at this time. It is important to note that no medications have been shown to definitively alter long term outcome at this stage of disease.

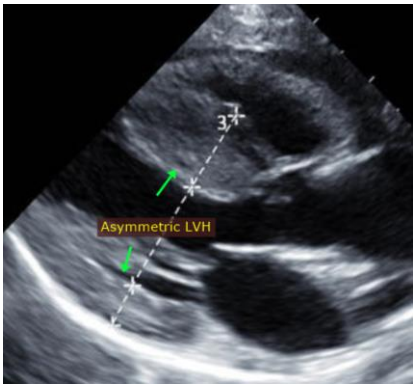
Monitor at home for any respiratory issues or signs of blood clot events (neurologic change, paralysis, etc.). Anesthetic risk is considered mild, however judicious fluid administration is advised if needed with careful RR/RE monitoring to screen for fluid overload. Additionally, drugs that stimulate 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.

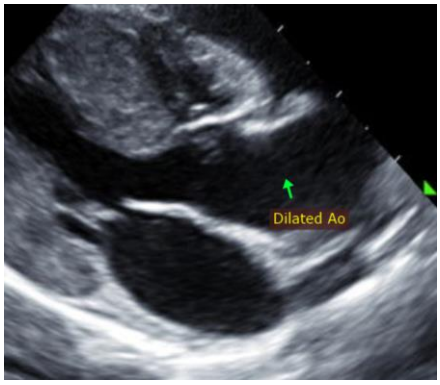
PLAN

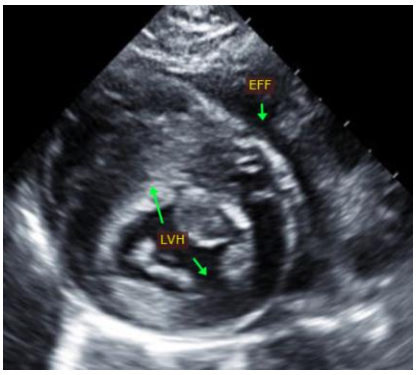
Highly recommend further cranial thoracic evaluation, including fluid sampling/cytology, FNA of the mass, thoracic CT scan, etc. Continue Atenolol 6.25mg PO q12h. No obvious indication for an increased dose or Plavix therapy at this time.

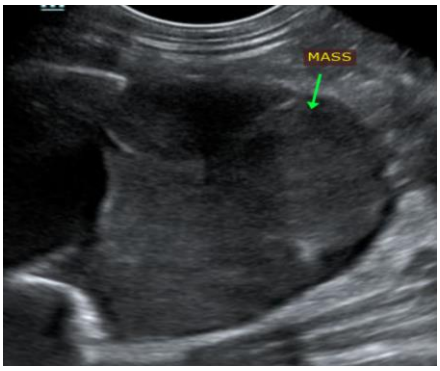
A recheck echocardiogram is recommended in 6 months to assess for progression, sooner if any issues arise in the interim.

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
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com