



PATIENT

Calvin Morrison

SPECIES

Feline

BREED

Himalayan

SEX

Male Neutered

AGE

14 years

WEIGHT

2.3lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Dr. Belan, DVM

HOSPITAL NAME

Signal Hill Animal
Hospital

REFERRING VET

Dr. Lebouldus/Cumyn

INVOICE

21392

DATE

10/6/21

PRESENTING CLINICAL SIGNS

History: Inappropriate urination and hematuria, 3/6 murmur and severe elevation of ProBNP.
Abnormal PE/Chem/CBC/UA Results: T4 normal Sept 19, 2021

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is markedly hypertrophied with obliteration of the LV chamber. There is a diffusely hyperechoic endocardium consistent with fibrosis and ventricular remodeling. Severe papillary muscle hypertrophy. The right ventricle appears subjectively normal. There is moderate left atrial enlargement present. No right atrial enlargement present. Normal RVOT velocity. There is systolic anterior motion (SAM) of the mitral valve present, with an elevated LVOT velocity (not captured on doppler). There is mild eccentric mitral regurgitation present secondary to SAM. No TR. No other obvious valvular regurgitation is present. Scant pericardial effusion noted. No pleural effusion appreciated.

CARDIAC CHART

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm) <small>(Moise, Pipers)</small>	LVIDd (cm) <small>(Moise, Pipers)</small>	LWVd (cm) <small>(Moise, Pipers)</small>	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.35-0.55	<2 (mean 1.5)	3.5-0.55	35-67	80-100
PATIENT	5.1	170	0.94	1.1	0.97	40	76
FELINE CARDIAC PARAMETERS	LA/AO <small>(Boon)</small>	LA/AO HEART BASE (Swe) <small>(Abbott)</small>	LA 2D short axis Base view (cm) <small>(Abbott)</small>		LVOT VEL <small>(m/s)</small>	RVOT VEL <small>(m/s)</small>	E max <small>(m/s)</small>
NORMAL	<1.5	<1.3	<1.2		<1.6	<1.3	<0.9
PATIENT	1.6	1.6	1.6		1.3	0.8	NM
<p><i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i> 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.</p>							

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient has underlying hypertrophic obstructive cardiomyopathy as the cause of the heart murmur. This indicates LV thickening with a dynamic LVOT obstruction (SAM). There is moderate left atrial dilation present, which typically confers a relatively elevated risk for complication (spontaneous CHF and/or a thrombotic event). No additional issues are identified.

Pericardial effusion in cats (broadly speaking) can be due to congestive heart failure, neoplasia, FIP, infectious insult, etc. In a cat with only urinary signs, it is hard to know how relevant this finding is. Given moderate LA dilation on the echocardiogram, I would recommend treating for early CHF as below, and reassessing both LA dimension and presence of pericardial fluid in the future for comparison. The gold standard diagnostic would be a diagnostic pericardiocentesis, in search of a more definitive answer, however the amount is scant, and this is not recommended. Atenolol is not clearly indicated in this case, given a mild obstruction at this time. Full screening lab work is also recommended if not recently performed.



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Monitor at home for any respiratory signs or sign of blood clot events (neurologic change, paralysis, etc.). Long term prognosis is guarded, and serial monitoring advised.

SPECIES

Feline

PLAN

Screening blood pressure is recommended. Institute Lasix 1mg/kg PO q12 hours. Institute Plavix (Clopidogrel) 18.75mg PO q24 hours lifelong (bitter on cut edge). If BP >150mmHg, institute ACE-I 0.5mg/kg PO q12h.

BREED

Himalayan

Recheck blood work in 1-2 weeks to ensure tolerance of medications.

SEX

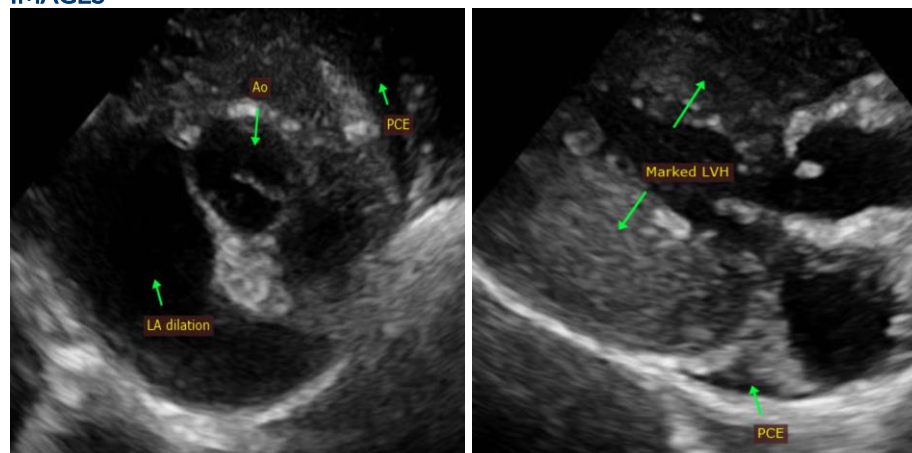
Male Neutered

Recheck echocardiogram in 2-3 months to establish a stable baseline and revisit use of atenolol, sooner if clinical issues arise.

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IMAGES



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(Cardiology)

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.

IMAGING PERFORMED BY

Dr. Belan, DVM

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.

HOSPITAL NAME

Signal Hill Animal
Hospital

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