



PATIENT

Ruby Lozano

SPECIES

Feline

BREED

Persian

SEX

Female Spayed

AGE

13 years

WEIGHT

6.9lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Melissa Weisman,
DVM

HOSPITAL NAME

Minnesota Veterinary
Ultrasound

REFERRING VET

Dr. Weisman

INVOICE

28726

DATE

2/1/23

PRESENTING CLINICAL SIGNS

History: Presented to referral emergency center 1-28-23 for sudden blindness. ER doctor dx with systemic hypertension (220mmHg) and bilateral hyphema and retinal swelling. Bloodwork showed BUN=38. Abdominal US performed today shows small left kidney, bilateral degenerative kidney changes, normal adrenal glands, thickened ileal muscularis, and decreased pancreatic echogenicity.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is mildly increased in dimension. 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 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. 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) <small>(Moise, Pipers)</small>	LVIDd (cm) <small>(Moise, Pipers)</small>	LVWd (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	3.2		0.62	1.1	0.65	62	93
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 (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	1.1	1.1		0.70	0.90	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

Hypertrophic cardiomyopathy (HCM) is a rule out diagnosis once a patient is deemed normotensive and euthyroid. In this patient with reported systemic hypertension, this may be the cause. A baseline T4 is recommended if not recently assessed. Regardless, the degree of disease is mild, with only mild LVH and no LA dilation. This would indicate the risk for clinical issues is low at this time. No additional issues are identified.

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.

Continued treatment for systemic hypertension is recommended as indicated by abdominal ultrasound results, UA results, etc. It is important to note that cardiac disease is not a cause of



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hypertension; rather, the structural changes can occur secondary to high blood pressure. Consider an IM consultation, particularly if the blood pressure proves difficult to control.

SPECIES

Feline

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

BREED

Persian

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.

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PLAN

Reassess and/or treat hypertension as discussed. A screening T4 is recommended.

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

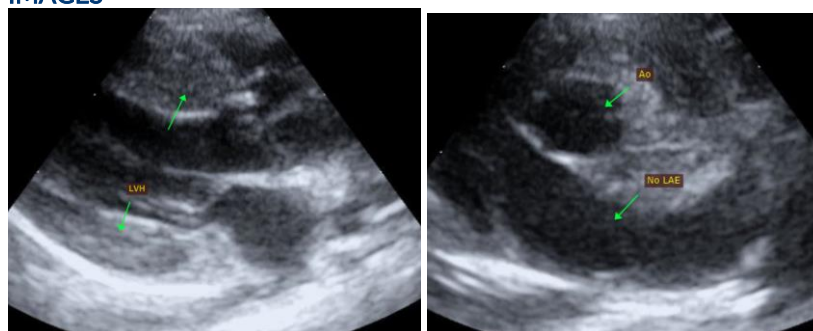
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

HOSPITAL NAME

Minnesota Veterinary Ultrasound

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.

REFERRING VET

Dr. Weisman

Maggie Machen Lamy, DVM
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info@sonopath.com

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