

IMAGING PERFORMED BY

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**PATIENT**

Pork Chop Darling-Merkel

**SPECIES**

Feline

**BREED**

DMH

**SEX**

Male Neutered

**AGE**

9 years

**WEIGHT**

8.5lbs

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

**IMAGING PERFORMED BY**

Stephanie Pearce, RDCS, RVT

**HOSPITAL NAME**

Prime Care Animal Hospital

**REFERRING VET**

Dr. Martin

**INVOICE**

22306

**DATE**

12/6/21

**PRESENTING CLINICAL SIGNS**

History: Murmur progressing, grade 4/6. Elevated ProBNP, not eating well, weight loss. Previous echo done at CVCA in 2019, diagnosed with mild HCM, no medications prescribed.

-Abnormal lab results: NSF.

-Sedation used: Not required for a full diagnostic ultrasound.

-Pertinent previous ultrasound results: No previous IntraPet scans.

-STAT: Not requested.

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The left ventricular wall is mild to moderately 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. Elevated RVOT velocity with a dynamic profile. No TR. Normal LVOT velocity. There is no obvious systolic anterior motion (SAM) of the mitral valve present. Trace 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) (Moise, Pipers)	LVIDd (cm) (Moise, Pipers)	LWVd (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	3.9	220	0.63	1.2	0.68	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	1.2	1.2		1.7	2.0	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. Both should be ruled out in this case as contributing factors. The degree of disease is mild, with only mild to moderate LVH and no LA dilation. This would indicate the risk for clinical issues is low at this time. Compared to what is noted in the prior study, these findings appear similar. The murmur is benign and is secondary to a RVOT obstruction. This type of murmur will wax and wane depending on volume/heart rate status. 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.

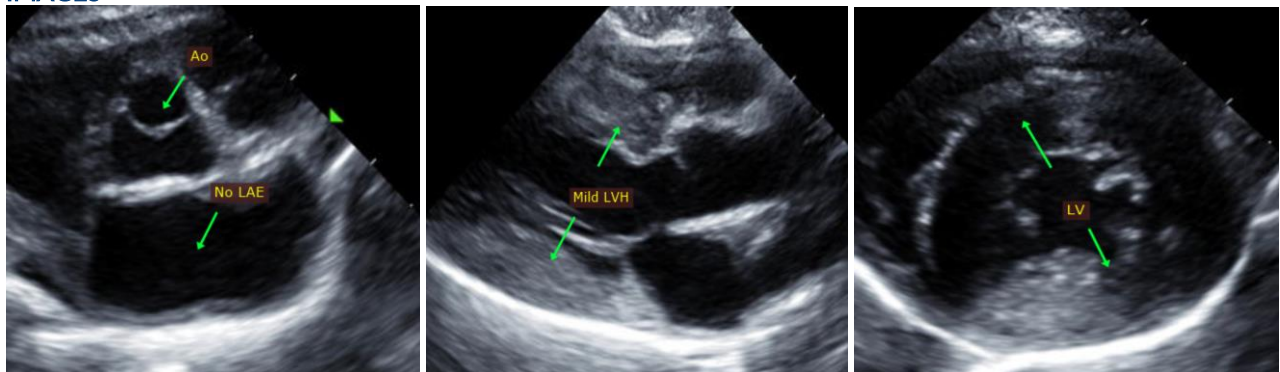
Monitor at home for any respiratory issues or signs of blood clot events (neurologic change, paralysis, etc.). Anesthetic risk is considered mild, however judicious fluid administration is advised if needed with careful RR/RE monitoring to screen for fluid overload. Additionally, drugs that stimulate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

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