



**PATIENT**

Clyde Gallop

**PRESENTING CLINICAL SIGNS**

History: Coughing. Heart murmur. Suspected tracheal collapse, treated with Pimobendan 1.25mg BID, Enalapril 2.5mg BID.

**SPECIES**

Canine

**RADIOGRAPHIC FINDINGS** \*NOTE: Images submitted for supplemental cardiac information only.  
Severe cardiomegaly. No obvious evidence of CHF.

**BREED**

Chihuahua

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. The mitral valve is diffusely thickened with mild prolapse into the left atrial lumen. There is severe eccentric mitral regurgitation present. The MR velocity is normal. There is severe left atrial enlargement. There is mild left ventricular dilation. Left ventricular systolic function is hyperdynamic. There is normal systolic flow velocity across the aortic valve. The aortic valve appears trileaflet with normal mobility. The main pulmonary artery is mildly dilated. Mild right atrial and right ventricular dilation. The tricuspid valve is thickened with mild tricuspid regurgitation. Elevated TR velocity consistent with moderate pulmonary hypertension. No pulmonic insufficiency; mild aortic insufficiency. Scant pericardial effusion. No pleural effusion or cardiac masses are seen. Evidence of hepatic congestion.

**AGE**

12 years

**CARDIAC CHART**

**WEIGHT**

10

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
<b>PATIENT</b>	4.5	3.9	2.0	2.4	39	70	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
<b>PATIENT</b>	133	1.0	0.7	10	3.3	4.2	2.5
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

**IMAGING PERFORMED BY**

Sands Hill Mobile  
Veterinary Ultrasound

**HOSPITAL NAME**

Pine Valley Animal  
Hospital

**REFERRING VET**

Dr. Tarter

**INVOICE**

23979

**DATE**

5/3/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Chronic degenerative valve disease causing severe mitral and mild tricuspid regurgitation. Severe left heart enlargement indicates the risk for spontaneous left-sided congestive heart failure is elevated. Additionally there is moderate pulmonary hypertension present, which puts the patient



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Clyde Gallop

at risk for right-sided congestion, and/or syncope. Finally, a small aortic leak is noted, and a baseline blood pressure is recommended. No additional issues are identified.

**SPECIES**

Canine

Given the symptoms, finding of PCE and severity of disease seen here, the likely diagnosis is CHF even without obvious CXR evidence, and full lifelong cardiac supportive medications are recommended as below. PCE and hepatic congestion likely reflect right-sided CHF and monitoring is advised. Depending on clinical response to the medications, cough suppression may also be useful. Monitoring of sleeping breathing rates in the future will be paramount to determine the origin of any future cough. Sildenafil is not clearly indicated at this time; however, if any exertional syncope/dyspnea are noted this should be added in the future.

**BREED**

Chihuahua

**SEX**

Male Neutered

The average survival of canine patients with active CHF is 8-9 months on medications, however they generally are able to maintain a good quality of life for that period. Monitoring of renal values is recommended lifelong. Patient will always be at risk for recurrent CHF, development of arrhythmias/LA tear, syncope and/or sudden death in the future.

**AGE**

12 years

Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a worsening cough, labored breathing, exercise intolerance or collapse episodes.

**WEIGHT**

10

Elective anesthesia is not advised.

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DVM, DACVIM  
(Cardiology)

**PLAN**

Screening BP is recommended. Administer Pimobendan 0.3mg/kg PO BID. Administer Benazepril or Enalapril 0.5mg/kg PO q12h (assuming BP is >130mmHg). Administer Lasix 1-2mg/kg PO q12h. Administer spironolactone 1-2mg/kg PO q12h. Consider hydrocodone with homatropine (0.2-0.4mg/kg PO up to q4-6 hours PRN) if cough persists despite normal SRRs.

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Sands Hill Mobile  
Veterinary Ultrasound

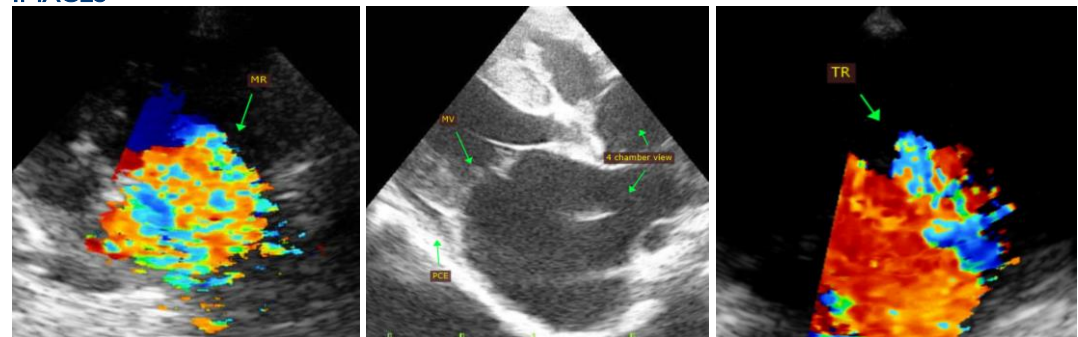
A renal panel is recommended in 10-14 days, then every 3-4 months on diuretics to ensure tolerance of medications. If exertional syncope/dyspnea develop, institute Sildenafil 1-2mg/kg PO q12h.

A recheck echocardiogram is recommended in 6 months to screen for progression, sooner if clinical signs arise/persist.

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**IMAGES**



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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.

**SPECIES**

Canine

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.

**BREED**

Chihuahua

**Maggie Machen Lamy, DVM**  
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**SEX**

Male Neutered

**AGE**

12 years

**WEIGHT**

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