



## PATIENT

Richard Cummings

## SPECIES

Canine

## BREED

Labrador Retriever

## SEX

Male Neutered

## AGE

7 years

## WEIGHT

80lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Karen Ebersole,  
DVM, DABVP

## HOSPITAL NAME

Scanvet

## REFERRING VET

Dr. Perkins

## INVOICE

31638

## DATE

6/29/23

## PRESENTING CLINICAL SIGNS

History: Seen at E clinic on 6/4/2023 for general malaise, panting, lethargy and hyporexia. Treated with Doxycycline and NSAID and is currently doing well. Echocardiogram done as a screening exam. -Abnormal PE/Chem/CBC/UA Results: CBC (6/4): Hct 30%, Wbc ct 4.9k, Plt apx 60-80k on blood smear. CBC (today, 6/29): Hct 38%, Plt 336k, WBC 10.7k. Chest rad, lateral (6/4): heart appeared rounded. TFAST - negative for PE. AFAST: no free fluid. HW4DX: Neg.

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Elongated, thickened posterior TV leaflet with truncated tethered septal leaflet. No obvious stenosis. The RV is mildly enlarged. Distorted RV papillary musculature. Moderate tricuspid regurgitation with moderate right atrial dilation. The tricuspid regurgitation velocity is normal. LV diameter is normal with adequate myocardial function. LA is normal. Mitral valve is normal with no obvious regurgitation. Normal aortic outflow velocity. Pulmonic and aortic valves appear normal with no insufficiency. No pleural or pericardial effusion. No obvious cardiac tumors.

## CARDIAC CHART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	NA	2.6	NM	1.2	28	54	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	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)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
PATIENT	NM	1.7	NM	36.3	3.3	4.6	3.3
*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)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				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)

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The only abnormality identified is tricuspid valve dysplasia. This is causing moderate tricuspid regurgitation and secondary RA dilation. This is a common form of inherited heart disease in the Labrador retriever which is present from birth. As this dog ages, there will always be risk for progression to right-sided CHF and/or development of arrhythmias such as atrial fibrillation.

In this middle-aged dog, the finding of moderate RA right dilation is concerning, although the remainder of the cardiac structure appears intact. It is important to note that little is known about the long-term effects of medical therapy prior to development of CHF in these cases. There



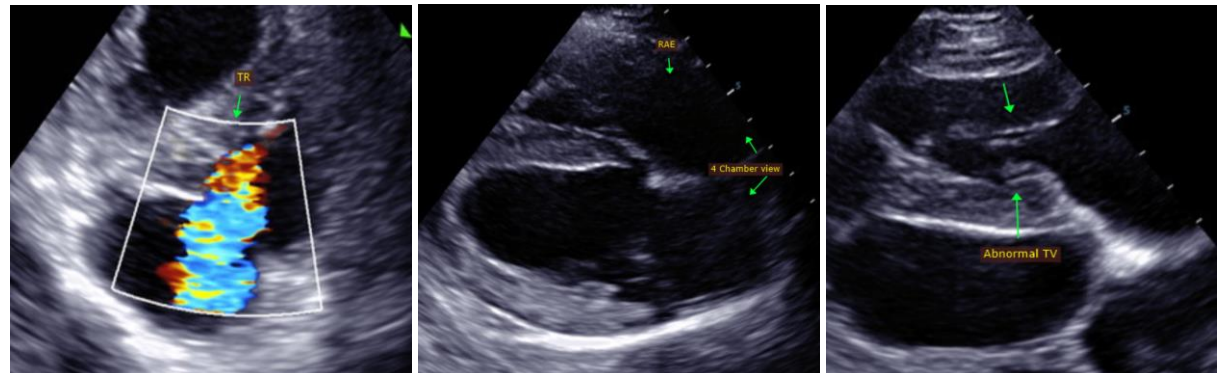
<b>PATIENT</b>	may be theoretic benefit to use of Pimobendan in this case and consider institution at this time. An alternative approach (especially given that this was an incidental finding), would be to simply monitor for progression. Discussion with the owner is advised.
Richard Cummings	
<b>SPECIES</b>	The long-term prognosis is guarded; however, outcome varies widely among TVD patients.
Canine	Anesthetic risk is considered moderately elevated if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.
<b>BREED</b>	
Labrador Retriever	
<b>SEX</b>	
Male Neutered	Monitor closely at home for development of any associated clinical signs, including abdominal distention, labored breathing, and/or collapse episodes or lethargy. Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Activity restriction is advised lifelong.
<b>AGE</b>	
7 years	
<b>WEIGHT</b>	
80lbs	
<b>INTERPRETED BY</b>	
Maggie Machen Lamy, DVM, DACVIM (Cardiology)	
<b>IMAGING PERFORMED BY</b>	
Karen Ebersole, DVM, DABVP	
<b>HOSPITAL NAME</b>	
Scanvet	
<b>REFERRING VET</b>	
Dr. Perkins	
<b>INVOICE</b>	
31638	
<b>DATE</b>	
6/29/23	

**PLAN**

Consider baseline chest radiographs (orthogonal views recommended) and ECG. Consider institution of Pimobendan for theoretic benefit; 0.25-0.3mg/kg PO q12h.

A recheck echocardiogram is recommended in 6-12 months to screen for progressive dilation, sooner if any clinical signs arise.

**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