



PATIENT

Bam Soyke

SPECIES

Canine

BREED

Doberman

SEX

Female Intact

AGE

5 years

WEIGHT

83lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Taylor

INVOICE

28899

DATE

2/9/23

PRESENTING CLINICAL SIGNS

History: Pelvic limb ataxia with occasional white gums. Loss of energy. He eats raw food. No murmur.
-Current medications: VRS Omega Benefits - 3 pumps System Saver - 1 capsule Collagen - 1/2 tsp Probiotic NuVet plus - 1 vitamin Recently started back on Ester C - 250mg
-Abnormal PE/Chem/CBC/UA Results: Bloodwork - Normal C Reactive Protein
-Radiographs (Neck, Spine, Hips, Knees, Hocks) Unremarkable
Holter results (1/22/23 RBVH): normal; 4vpcs, 18apcs

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 25mm/s, 10mm/mV. The average heart rate is 115bpm (range 107-125bpm). The rhythm is suspected to be sinus in origin, although p waves are inconsistently visualized due to low voltage tracing. The QRS morphologies are positive. No ectopic beats, pauses or other dysrhythmias observed.

ECG diagnosis: Normal sinus rhythm with respiratory variation.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Normal mitral valve with no obvious prolapse into the left atrial lumen. No mitral regurgitation with normal left atrial dimension. No LV dilation (LVIDdN 1.41, LVIDsN 0.99) with borderline myocardial dysfunction. Normal LV wall thickness. The tricuspid valve appears normal with mild TR. Normal velocity. Normal right atrial and ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. Normal aortic outflow velocities; laminar flow. No aortic insufficiency. Normal pulmonary outflow velocity with no pulmonic insufficiency. No pericardial or pleural effusion noted.

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	2.1	NM	1.2	24	45	0..55
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	120	1.4	1.4	37.6	2.9	4.1	3.1
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				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)

Adapted from June Boon, Veterinary Echocardiography, 1998
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435
Hansson et al, Vet Rad and Ultrasound 2002
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995



PATIENT

	50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)
--	----	------------	------------	------------

Bam Soyke

SPECIES

Canine

BREED

Doberman

SEX

Female Intact

AGE

5 years

WEIGHT

83lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Taylor

INVOICE

28899

DATE

2/9/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The only abnormality appreciated is mildly depressed myocardial function. No significant dilation is appreciated, and the LA is normal. This may reflect normal variation in this breed; however, early DCM cannot be ruled out. The diet should also be considered, and a traditional option (Hills, Science Diet or Purina) is strongly recommended in light of recent reports. A normal LA dimension indicates low risk for complication at this time. A small tricuspid regurgitation is noted, which is hemodynamically insignificant. Finally, the ECG is unremarkable with no VPCs observed.

Even with mildly depressed function, there is no cause for ataxia/pale gums seen here. The ECG and holter were both unremarkable, making arrhythmic causes unlikely.

Continued recheck echocardiograms every 6-12 months are indicated in this predisposed breed. Additionally, holter monitoring every 6-12 months can and should also be considered to screen for the arrhythmic form of disease. Finally, the BNP test has also been shown to be a decent predictor of occult DCM and can consider routine screening going forward.

No cardiac medications are indicated at this time. A taurine supplement could be considered on the off chance of a malabsorption issue. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes. I generally recommend fish oil supplementation in any Doberman, given the anti-arrhythmic properties of omega fatty acids.

Anesthetic risk is considered mild 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.

PLAN

Baseline BP and ECG are recommended every 6 months. Consider diet change. Consider a taurine supplement, 1000mg PO q12h.

Recheck is recommended in 6 months, sooner if clinical signs arise.

IMAGES



IMAGING PERFORMED BY

svsmobileimaging.com 309-737-3070



Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Bam Soyke

SPECIES

Canine

BREED

Doberman

SEX

Female Intact

AGE

5 years

WEIGHT

83lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Sarah Pender, CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

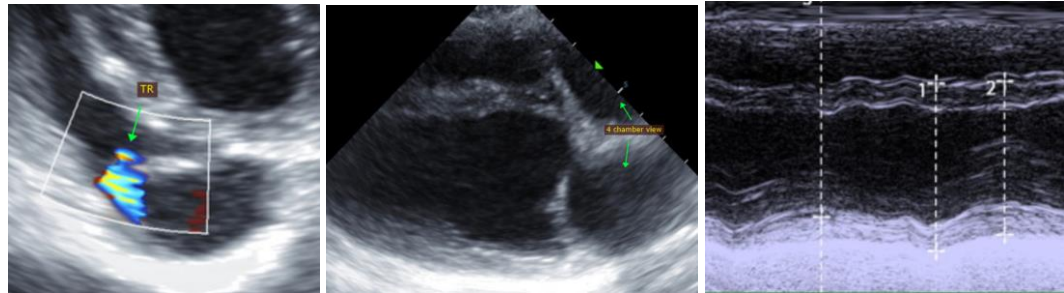
Dr. Taylor

INVOICE

28899

DATE

2/9/23



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. 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