



PATIENT

Toeg Deforrest

SPECIES

Canine

BREED

Doberman

SEX

Male

AGE

4 years

WEIGHT

73.6lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Stephanie Cory, DVM

HOSPITAL NAME

Brighton Veterinary
Clinic P. C. Inc.

REFERRING VET

Dr. MacAulay

INVOICE

47478

DATE

4/8/26

PRESENTING CLINICAL SIGNS

History: Shortness of breath noted March 25th. Progressed to respiratory distress. Seen at EC and started on Vetmedin 10 mg PO BID, Furosemide 40 mg PO BID on April 4th. ECG done: NSF. BP: 116/88(94) 141/110(108) 133/114(118). Significant improvement as per owner. On exam here, grade 3/6 systolic heart murmur, heard everywhere. Synchronous acceptable (but not excellent) femoral pulses. Normal RR, lungs clear, BAR. On raw beef patties and eggs. On chem today, low potassium at 3.2 (normal 3.7-5.8), switching to Spironolactone 50 mg PO BID instead of Furosemide. Also starting 50 mg/kg Taurine PO BID. No familial history of DCM as per breeder.
-Abnormal PE/Chem/CBC/UA Results: Chem: Moderate hypokalemia at 3.2 - suspect from furosemide treatment. Otherwise WNL.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Marked left ventricular dilation with diminished systolic function. Decreased LV wall thickness with increased sphericity. Severe left atrial enlargement. The mitral valve appears normal in form and function, with no obvious prolapse into the left atrial lumen. Mild to moderate central mitral regurgitation secondary to annular stretch. Decreased velocity. Moderate right atrial and ventricular dilation. Mild tricuspid regurgitation. The aortic valve is normal in morphology and mobility. Normal LVOT velocity. No aortic insufficiency. Normal RVOT velocity. Normal pulmonic valve with trace pulmonic insufficiency seen. No pericardial or pleural effusion noted. 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	4.3	NM	2.0	2.2	9	19	1.7
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	1.3	1.0	33.4	5.0	6.5	5.9
*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)
*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)

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

Toeg Deforrest

SPECIES

Canine

BREED

Doberman

SEX

Male

AGE

4 years

WEIGHT

73.6lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Stephanie Cory, DVM

HOSPITAL NAME

Brighton Veterinary
Clinic P. C. Inc.

REFERRING VET

Dr. MacAulay

INVOICE

47478

DATE

4/8/26

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

As was previously diagnosed, this patient has significant cardiomyopathy and systolic dysfunction. There is dilation and volume overload of both the left and right heart resulting in insufficiency of the mitral and tricuspid valves. The severity of dysfunction and pump failure is great, and the patient is at high risk for complications at any time. Patient will always be at risk for right and/or left-sided CHF, development of arrhythmias/syncope and/or sudden death going forward.

Development of the DCM-phenotype can be primary in nature (i.e. genetic DCM as is seen in Dobermans) or develop secondary to a variety of issues such as a non-traditional diet, myocarditis, hypothyroidism, chronic tachycardia, or infiltrative disease such as lymphoma. While primary disease is always suspected in this breed, consider a diet history and thyroid status as possible contributing issues.

Regardless of cause, prognosis is poor at this stage in the disease process, with an average survival time of <6 months. Continuation of full cardiac supportive medications is recommended as below. **Lasix should not be discontinued; however, Spironolactone should be instituted in addition. Lasix is for diuresis, while the latter is for anti-aldosterone properties.** Cases of systolic failure are at high risk for tachyarrhythmias (such as VT or rapid AF) and sudden death, and this should be expressed to the owner. Activity restriction is advised, and a baseline ECG recommended.

Elective anesthesia is not advised due to high risk for complications.

Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, worsening labored breathing, abdominal distention, exercise intolerance or collapse episodes in the future. Monitoring of sleeping breathing rates at home is recommended to assess response to medications and recurrence of CHF in the future.

PLAN:

Assuming the patient is doing well, **continue Lasix** (1-2mg/kg PO q12h, institute Spironolactone (1-2mg/kg PO q12), continue Pimobendan (0.3mg/kg PO q12h). Taurine deficiency is unlikely in this breed; however, continuing the supplement is reasonable.

Monitor a renal panel and blood pressure in 1-2 weeks, then every 3-4 months lifelong. If BP >130mmHg and doing well, institute an ACE-I 0.5mg/kg PO q12h.

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



PATIENT

Toeg Deforrest

SPECIES

Canine

BREED

Doberman

SEX

Male

AGE

4 years

WEIGHT

73.6lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Stephanie Cory, DVM

HOSPITAL NAME

Brighton Veterinary
Clinic P. C. Inc.

REFERRING VET

Dr. MacAulay

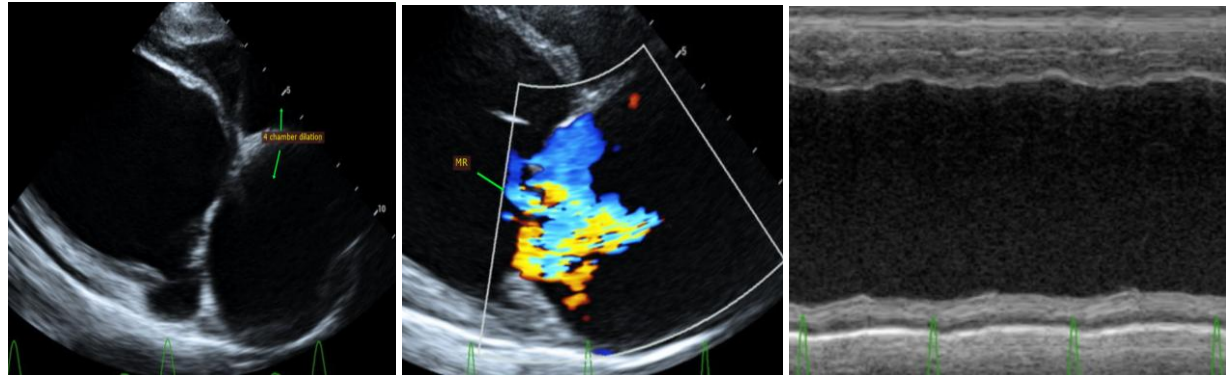
INVOICE

47478

DATE

4/8/26

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