



PATIENT

Bass Sobel

SPECIES

Canine

BREED

Doberman

SEX

Male Intact

AGE

8.5 years

WEIGHT

94lbs

PRESENTING CLINICAL SIGNS

History: On and off cough for last month. Initially responded to doxycycline but then cough returned. No history of murmur. Eats Zignature turkey and pork dry food mixed together. Sedated with Torb/Midazolam/Alfaxan FYI. He was also fairly hypertensive before sedation @ 187/116, MAP= 134
 -ECG: WNL. BP: 187mmHg
 -Radiographs: Enlarged heart with interstitial pattern in lungs seen.
 -Current medications: 10mg Vetmedin/50mg, Furosemide twice daily – responded to medications.
 -Sedated with torb/alfaxalone/midazolam

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only.
 Significant cardiomegaly with evidence of CHF.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Severe left ventricular dilation with diminished systolic function. Moderate to 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 MR velocity. Decreased LV wall thickness and increased sphericity. The tricuspid valve appears normal in form and function. Mild right atrial and ventricular dilation. Mild tricuspid regurgitation. The aortic valve is normal in morphology and mobility. No subvalvular ridge present; decreased LVOT and RVOT velocities. No aortic insufficiency. Normal pulmonic valve with no pulmonic insufficiency seen. No pericardial or pleural effusion noted. No obvious cardiac tumors.

CARDIAC CHART

INTERPRETED BY

Maggie Machen Lamy,
 DVM, DACVIM
 (Cardiology)

IMAGING PERFORMED BY

Christensen, DVM

HOSPITAL NAME

Tranquility Veterinary
 Clinic

REFERRING VET

Dr. Christensen

INVOICE

32447

DATE

8/18/23

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	4.0	NM	NM	1.9	10	18	2.2
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	1.4	0.7	42.6	4.3	7.0	6.3
*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

Bass Sobel

SPECIES

Canine

BREED

Doberman

SEX

Male Intact

AGE

8.5 years

WEIGHT

94lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Christensen, DVM

HOSPITAL NAME

Tranquility Veterinary
Clinic

REFERRING VET

Dr. Christensen

INVOICE

32447

DATE

8/18/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Unfortunately, this patient has end-stage cardiomyopathy and systolic dysfunction. This is causing dilation and overload of the left heart resulting in insufficiency of the mitral valve. The degree of dilation and pump failure is resulting in congestive heart failure (pulmonary edema). The right heart is also mildly affected, with mild dilation.

Systolic failure can be primary in nature (DCM) or secondary to taurine deficiency, myocarditis, tachycardia-induced cardiomyopathy, or infiltrative disease such as lymphoma. In a predisposed breed such as a Doberman, genetic primary DCM is certainly likely. That being said, the diet was on the reported FDA list and may be contributing. Regardless of cause, prognosis is poor to grave at this stage in the disease process, with an average survival time of <6 months. Most Dobermans will succumb to either refractory CHF or sudden arrhythmic death at any time, and this risk should be relayed regardless of therapy.

Continuing full cardiac supportive medications is recommended as below. If the patient appears is or becomes unstable, hospitalization for supportive care is ideal. Cases of systolic failure are at high risk for malignant tachyarrhythmias (such as VT) and sudden death, and 24-hour holter monitor is recommended.

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

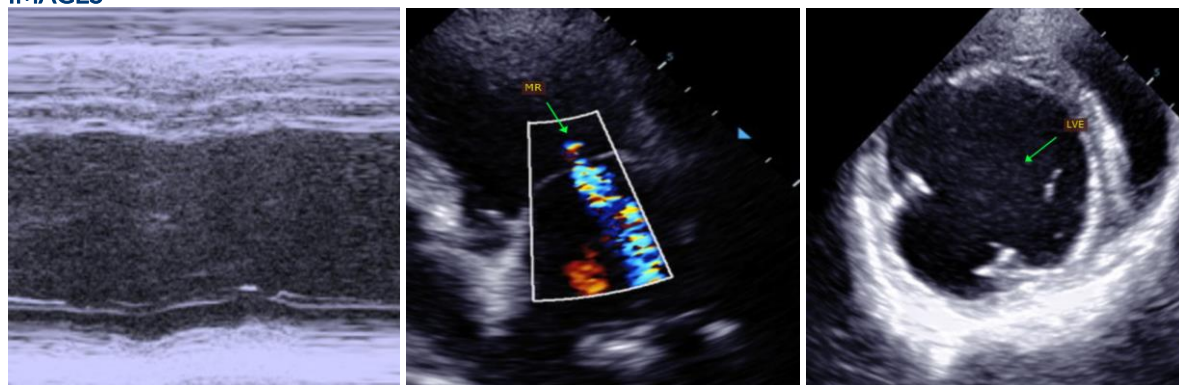
PLAN:

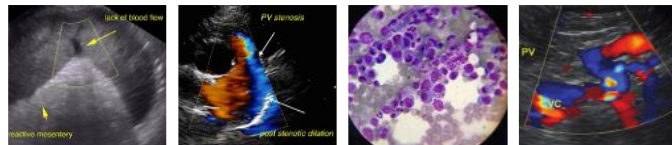
Recommend baseline holter monitor and BP. Immediate diet change is suggested. Recommend the following oral medications: Furosemide 1-2mg/kg PO q12h. Pimobendan 0.25-0.3mg/kg PO q12h. Spironolactone 1-2mg/kg PO q12h.

Recheck renal panel, BP and clinical response in 5-7 days, sooner if any decline. If BP is >130mmHg, institute ACE-I 0.5mg/kg PO q12h.

Recheck echocardiogram in 6 months to screen for progression, sooner if clinical signs arise in

IMAGES





PATIENT

Bass Sobel

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

Doberman

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com

SEX

Male Intact

AGE

8.5 years

WEIGHT

94lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Christensen, DVM

HOSPITAL NAME

Tranquility Veterinary
Clinic

REFERRING VET

Dr. Christensen

INVOICE

32447

DATE

8/18/23