



**PATIENT**

Zeke Boone

**PRESENTING CLINICAL SIGNS**

History: Renal issues, increased BP-203/107mmHg.  
-Abnormal PE/Chem/CBC/UA Results: BUN 68, Crea 2.8.

**SPECIES**

Canine

**ECHOCARDIOGRAM FINDINGS**

2D, m-mode, color flow and doppler imaging is available. Normal mitral valve with no obvious prolapse into the left atrial lumen. Trivial mitral regurgitation with normal left atrial dimension. Normal LV diameter with normal myocardial function for this breed. Normal LV wall thickness. The tricuspid valve appears normal in form and function with no TR. 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. Normal pulmonary outflow velocity with no pulmonic insufficiency. No pericardial or pleural effusion noted.

**BREED**

Doberman

**SEX**

Male

**CARDIAC CHART**

**AGE**

3 years

**WEIGHT**

108lbs

**INTERPRETED BY**

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

**IMAGING PERFORMED BY**

Sand Hills Mobile  
Veterinary Ultrasound

**HOSPITAL NAME**

Surf City Animal  
Hospital

**REFERRING VET**

Dr. Wick

**INVOICE**

22251

**DATE**

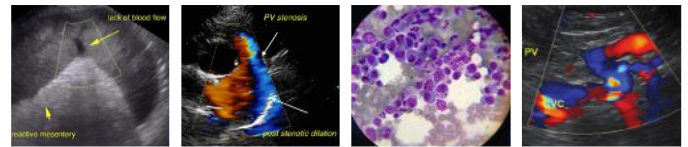
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CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	NA	NA	1.2	1.2	37	70	0.6
CANINE CARDIAC PARAMETERS	HR (BPM)	AV 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	124	1.4	0.92	49.0	2.8	4.3	2.7
*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 cardiac structure and function in this patient are overtly normal, with no evidence of occult DCM or congenital disease. The function is normal for this signalment, and no valvular issues, structural changes or arrhythmias are noted.

Chronic systemic hypertension can certainly lead to cardiac issues and should be addressed as needed. Consider choice of vasodilator based upon underlying renal issues. Consultation with an Internal Medicine Specialist may be useful in this case.



**PATIENT**

Zeke Boone

Recheck echocardiograms every 6-12 months is 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. BNP may be difficult to evaluate as renal insufficiency can lead to its elevation. Ideally avoid this test in this patient with use of periodic imaging considered ideal.

**SPECIES**

Canine

No cardiac medications are indicated at this time. 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.

**BREED**

Doberman

Recheck every 6-12 months, sooner if clinical signs or a heart murmur arises.

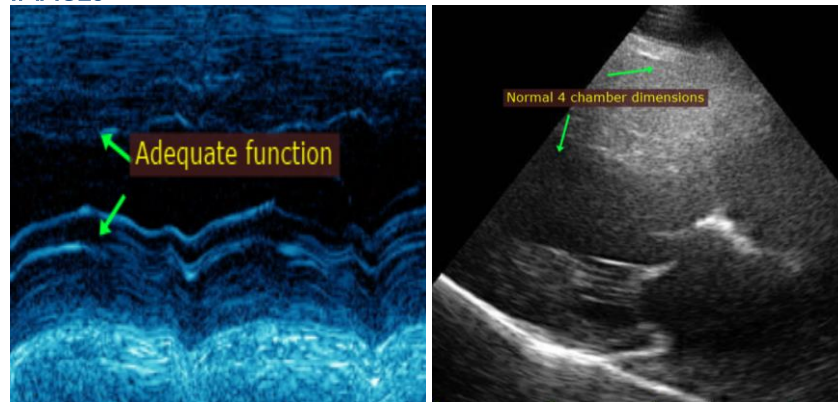
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**IMAGES**

**AGE**

3 years



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108lbs

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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.

**IMAGING PERFORMED BY**

Sand Hills Mobile Veterinary Ultrasound

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**  
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info@sonopath.com

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