

**PATIENT**

Borzoo Ghasri

SPECIES

Canine

BREED

Boxer Mix

SEX

Male Neuterd

AGE

11.11.11

WEIGHT

66.6lbs

PRESENTING CLINICAL SIGNS

History: 5-day history of malaise. Vomited once on Saturday. Has had soft stool since Saturday and has been anorexic since Saturday. Possible adrenal mass and aortic dilation on AUS; pending.

-Pertinent abnormal PE/Chem/CBC/UA Results: ALP 490, ALT 437, GGT 13.

-Radiographs: Poor serosal detail; questionable mass effect in right cranial abdomen.

-Current medications: None listed.

BP: 90mmHg

-Sedation used: Not required to complete full diagnostic ultrasound.

-Pertinent previous ultrasound results: No previous.

-STAT: DVM requested

-Imaging performed by: Stephanie Pearce, RDCS, RVT.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. The LV is normal to slightly decreased in dimension with depressed myocardial function. The LV wall thickness is moderately increased. Moderate left atrial enlargement. The mitral valve appears mildly thickened with no obvious prolapse into the left atrial lumen. Mild central mitral regurgitation. The tricuspid valve appears normal in form and function. No TR. Normal right heart, The aortic and pulmonic valves appear normal in morphology and mobility. No PI; no AI. Normal LVOT/RVOT velocities. No pericardial or pleural effusion noted. No obvious cardiac tumors.

CARDIAC CHART**INTERPRETED BY**

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Nexus Animal Hospital

REFERRING VET

Dr. Valero

INVOICE

25959

DATE

8.23.22

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	NM	NA	NM	1.8	16	35	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	0.9	0.7	30.9	3.3	3.8	3.2
*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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most significant abnormality identified is significant LV dysfunction. What is unusual is the chamber is not dilated and there is evidence of LV hypertrophy. Whether this in total reflects a primary DCM or a secondary phenomenon remains to be seen; however, the latter is most likely given abdominal pathology. Some combination is also possible such as primary DCM with concurrent hypertension, etc. The BP of 90mmHg is confounding given the appearance of the heart; however, depending on abdominal diagnosis may reflect a waxing and waning systemic pressure. Serial monitoring is advised. Regardless, what is seen here is hemodynamically significant with moderate LA enlargement. An irregular rhythm is noted throughout the study and **an ECG is strongly recommended**. It is worth noting that these findings are highly unusual, and referral to a multi-specialty center is recommended for further diagnostics and evaluation.

Going forward there may be risk for development of right or left sided congestive heart failure, malignant arrhythmias (AF, VT), collapse and/or sudden death, depending on remainder of systemic evaluation.

Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes in the future. Monitoring of sleeping breathing rates at home is recommended to screen for progression in the future. Mild activity restriction is advised. Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.

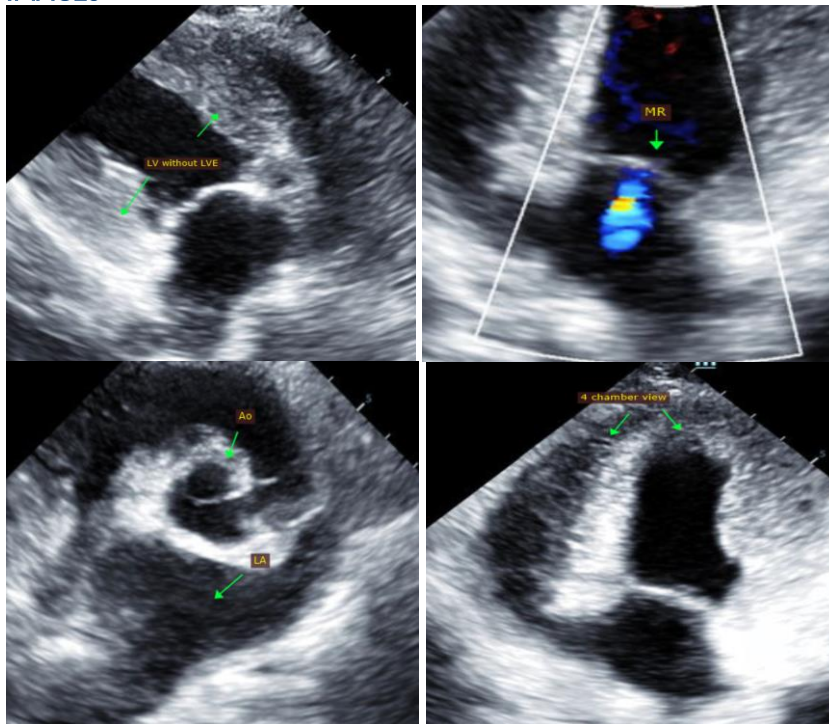
Anesthetic risk is elevated, given an hypotensive patient with poor cardiac output and likely arrhythmias. Further evaluation should be performed prior to proceeding with any anesthetic procedures.

PLAN

Institute Pimobendan 0.25-0.3mg/kg PO q12h. Institute taurine supplement 1000mg PO q12h. Highly recommend baseline ECG and CXR. Highly recommend referral for further diagnostics/supportive care. Serial BP monitoring is advised in hospital to screen for hypertension.

A recheck echocardiogram is recommended in 6 months to assess for progression, sooner if 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.

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