

**PATIENT**

Ike Gribbin

PRESENTING CLINICAL SIGNS

History: Presented for hacking cough- cardiomegaly suspected on CXR. No murmur or arrhythmia appreciated. PM Hx mast cell tumor. PM Hx OA/DJD.

SPECIES

Canine

-Pertinent abnormal PE/Chem/CBC/UA Results: 4dx NEGATIVE. Rads: Increased lung pattern R sided (bronchiolar pattern), R lateral- unable to discern cardiac margins, dorsal deviation of trachea, concerns for cardiomegaly.

BREED

Bulldog Mix

-Current medications: Meds started 8/24: Prednisone 15mg PO BID 7 days then 10mg PO BID 7 days then 10mg SID 7 days then 5mg SID 7 days then [currently at taper dose for mast cell tumor treatment], Gabapentin 300mg PO BID - long term for OA/DJD, Diphenhydramine 75mg PO BID, Famotidine 10mg PO BID. Following meds started 9/15: Doxycycline 150mg tab PO BID 15 days, Cefpodoxime 200mg PO SID x 14 days.

-Sedation used: Gabapentin administered prior to the scan.

-STAT: Not requested.

SEX

Male Neutered

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Mild double jet of mitral regurgitation with mild left atrial dilation. Normal MR velocity. Borderline LV dimension with mild LV dysfunction. The tricuspid valve appears normal with mild tricuspid regurgitation. 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 pulmonic and aortic outflow velocities with laminar flow. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses.

AGE

11 years

WEIGHT

72lbs

CARDIAC CHART**INTERPRETED BY**

Maggie Machen
Lamy, DVM, DACVIM
(Cardiology)

HOSPITAL NAME

Eastern Animal
Hospital

REFERRING VET

Dr. Haviland

INVOICE

21111

DATE

9/20/21

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	5.5	2.2	NM	1.3	24	42	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	91	1.1	0.61	32.7	2.9	4.6	3.5
*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)
				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

Chronic degenerative valve disease causing mild mitral and tricuspid regurgitation. Mild left atrial enlargement indicates the current risk for complication is low. Mild systolic dysfunction is identified which may be secondary to valve disease in a large breed dog. Follow up is certainly advised. No additional issues noted in this study.

Given only mild changes seen on this exam, cardiomegaly on films is likely a normal variant due to patient anatomy. These films should be used as a baseline of future comparison. Additionally the cough is unlikely to be cardiac in origin, and respiratory causes should be considered.

Given these findings, no cardiac medications are clearly indicated. Consider assessing for causes of LV dysfunction that may be treatable, such as BEG diet, thyroid status, etc. Regardless of diet, consider a Taurine supplement on the off chance of a malabsorption issue. Assessment of progression in the future will help predict long term prognosis, which is highly variable at this stage (B1). Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

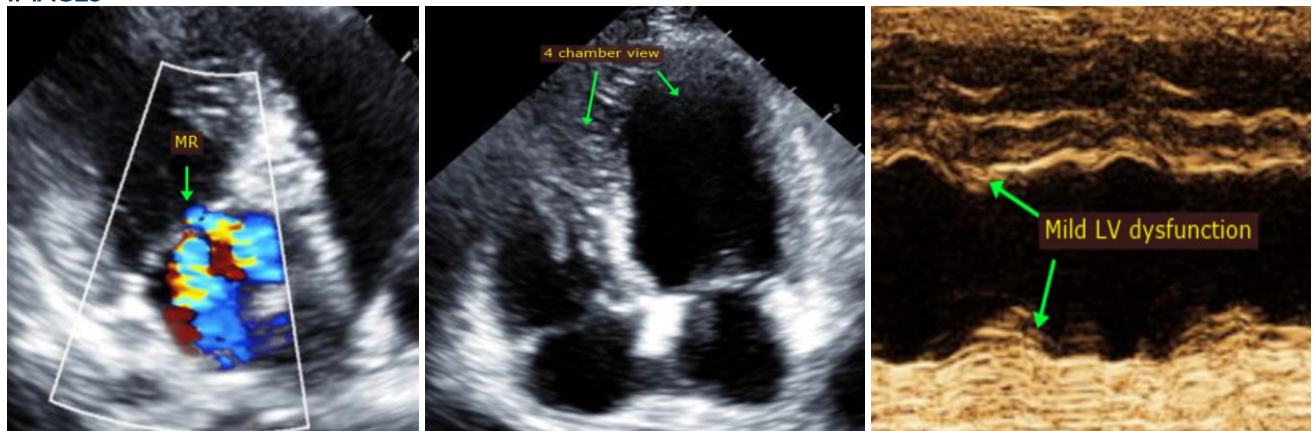
Anesthetic risk is considered mild if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively 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 is recommended. Consider diet/thyroid status. Institute Taurine supplement 1000mg PO q12h.

Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

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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