

PATIENT

Mr. Boo Sierra

PRESENTING CLINICAL SIGNS

History: Presented for labored breathing, lethargy. Pericardial and pleural effusion found on FAST scan. Hemorrhagic effusion removed via pericardiocentesis.

SPECIES

Canine

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Mild eccentric mitral regurgitation with mild left atrial dilation. Normal MR velocity. Normal LV diameter with adequate myocardial function. 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 effusion seen. Pockets of pleural effusion noted. A hypoechoic soft tissue lesion is seen adjacent to/overlying the right atrium (2.7 x 2.2cm). Possible infiltration not ruled; suspect AV groove origin.

BREED

Mix

SEX

Male Neutered

AGE

11 years

CARDIAC CHART

WEIGHT

24lbs

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	5.0	2.0	1.3	1.4	52	84	0.3
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	1.5	1.1	10.9	1.8	3.0	1.4
*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)
Adapted from June Boon, Veterinary Echocardiography, 1998				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
Hansson et al, Vet Rad and Ultrasound 2002				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				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)

INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY

A. Nicastro, DVM

HOSPITAL NAME

Veterinary Specialty Care Blue Pearl Mt. Pleasant

REFERRING VET

Dr. Graham

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Cardiac neoplasia suspected to be associated with the external surface of the right heart is the cause of hemorrhagic pericardial effusion. Infiltration into the RA is possible, although not confirmed. The most likely tumor type given the appearance and location is a hemangiosarcoma (HSA); however, alternatives such as a large chemodectoma cannot be ruled out. The cardiac structure and function are normal with subclinical mitral valve disease. No additional issues are seen.

INVOICE

46667

DATE

2/3/26



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Pericardiocentesis was performed to relieve acute symptoms, and there is no persistent effusion seen here. Re-effusion can happen at any time as the tumor experiences recurrent bleeds and the owner should be warned of this possibility. No other significant issues are identified at this time.

SPECIES

Canine

If confirmed, the prognosis with cardiac hemangiosarcoma is poor, with an MST of <3 months. The emergent limiting factor is often recurrent hemorrhage, and a pericardial window or subtotal pericardiectomy may relieve recurrent clinical signs though is rarely recommended.

BREED

Mix

Chemotherapy and/or RT can also be discussed with an Oncologist and may extend average survival time to 4-6 months. HSA also has a high metastatic rate, and chest radiographs/full systemic work up are recommended to assess for metastasis. Patients with cardiac neoplasia are at high risk for recurrent hemorrhage, development of tamponade and malignant arrhythmias/sudden death in the future.

SEX

Male Neutered

No cardiac medications are clearly indicated at this time. Over the counter herbal supplement Yunnan Baiyao may help decrease risk of bleeding, however true benefit is speculative (1 capsule PO BID).

AGE

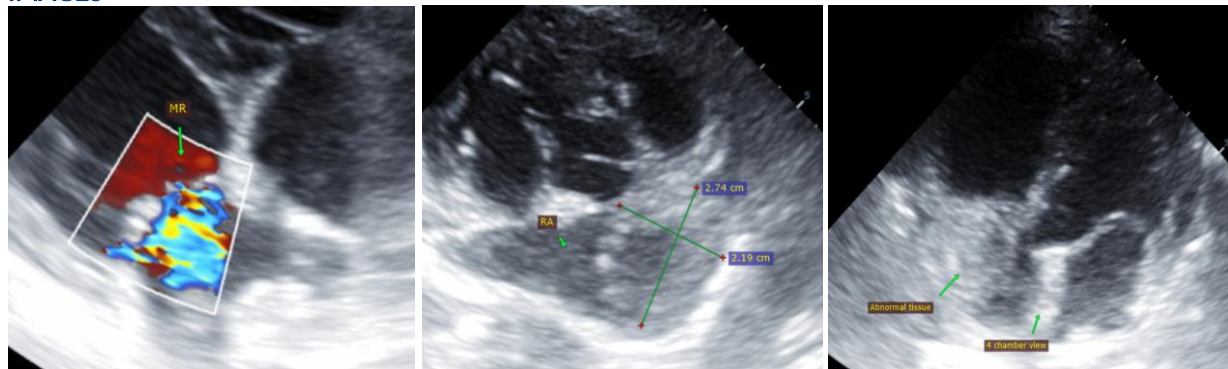
11 years

A recheck of tumor dimension and fluid accumulation can be considered in 2-3 months if patient does well, sooner if recurrence of clinical signs.

WEIGHT

24lbs

IMAGES



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Maggie Machen Lamy,
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HOSPITAL NAME

Veterinary Specialty
Care Blue Pearl Mt.
Pleasant

REFERRING VET

Dr. Graham

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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