



PATIENT

Sheriff Ennis

SPECIES

Canine

BREED

German Shepherd

SEX

Male Neutered

AGE

6 years

WEIGHT

94lbs

PRESENTING CLINICAL SIGNS

History: Lethargic and weak. Abnormal lab results: ALT 609, BUN 52, Phos 8.6, Creat 1.8, Na 137, K+ 5.8 Na/K 23.6 WBC 34.25, mono 2.08, Neut 30.55, Hct 61.76, Radiographs: Moderate generalized cardiomegaly with morphologic changes consistent with pericardial effusion. Mild pleural effusion, likely associated with pericardial tamponade. The ascites may also be secondary to pericardial tamponade but hemorrhage from the splenic mass is also possible. FAST ultrasound- pericardial effusion, minimal ascites. Cavitated splenic mass 45x48mm diameter. Abdominocentesis with ultrasound guidance- straw colored fluid, sl blood tinged toward the end of the centesis. Removed 500ml hemorrhagic fluid from pericardium and pleural space. Admin Vitamin K Pre op panel sent to the lab for clotting times. Alb 2.6, ALT 568, BUN 68, Creat 1.9, glu 61, WBC 26.5, platelet 75k, decreased estimate (WNL in house yesterday, this was pulled from peripheral vein possible falsely lowered), mono 2650, PT/PTT WNL (PT high end at 12.0) does not appear rodenticide is causing the hemorrhagic effusion. Pt much brighter today, eating, ambulatory and seems more like his usual self. Concern for heart base mass, hepatic and splenic neoplasia. Pt currently on Yunnan Baiyao, Dex drops OU for pannus

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Large heterogenous mass associated with the external surface of the heart base; 3.1 x 2.2cm; however, this is thought to be a gross underestimation. An exact origin cannot be determined due to the size. LV function adequate. Left atrium is normal in diameter. LV is normal. The pulmonic and aortic valves are normal in appearance. No obvious valve regurgitation. The right heart is normal without tamponade. Normal outflow velocities. No pericardial effusion. Small pockets of pleural effusion.

CARDIAC CHART

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Brighton Greens
Veterinary Hospital

REFERRING VET

Dr. Janeway

INVOICE

27744

DATE

11/30/22

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	NA	NA	NM	1.3	49	92	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	1.6	NM	42.6	4.0	4.7	2.4
*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)
<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



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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

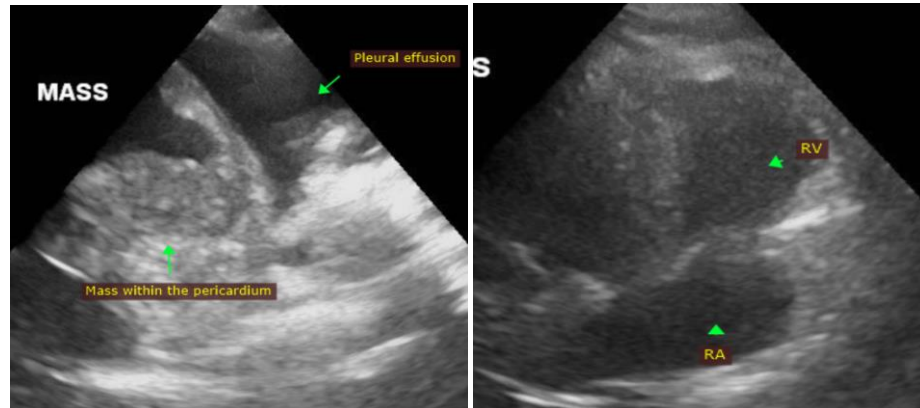
Cardiac neoplasia associated with the external surface of the heart. While the exact origin cannot be determined, the finding of concurrent splenic lesions strongly suggests hemangiosarcoma (HSA). Other tumor types cannot be definitively ruled out and sampling of abdominal pathology is recommended in search of a definitive diagnosis. Regardless, the patient was in cardiac tamponade and pericardiocentesis was successful. Small volume pleural effusion persists; however, no obvious tamponade is appreciated at this time.

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. 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. Chemotherapy can also be discussed with an Oncologist and may extend average survival time to 4-6 months.

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).

A recheck of tumor dimension and fluid accumulation can be considered in 1-2 months if patient does well, sooner if recurrence 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.

Maggie Machen Lamy, DVM
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