

PATIENT

Bo Hoppe

SPECIES

Canine

BREED

German Shepherd

SEX

Neutered Male

AGE

9 Years

WEIGHT

106 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Shari Reffi

HOSPITAL NAME

Shohola VH

REFERRING VET

Dr. Gramazio

INVOICE

12623

DATE

8/20/21

PRESENTING CLINICAL SIGNS

History: Lethargic, decreased appetite, blood loss on cbc (decreasing from 7 days ago), concern for bleeding mass. Current meds: Prednisone 80mg/day, Famotidine 20mg /day, Doxy 350mg /day, finished course of panacur.

Abnormal PE/Chem/CBC/UA Results: RBC 5.48, HCT 34.4, Hgb 12.4, Retics 115.1, Retic hgb 32, WBC 29.42, PLT 87 MPV 17. 8. Path review pending. USG 1.049, Prot 2_, Ca+ Ox

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

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	--	--	1.3	1.33	36	66	0.34
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				
PATIENT	94	2.22	1.28	--	4.67	4.39	--

Cardiac Presentation

The cardiac presentation presented trivial mitral insufficiency. A 2.62 cm x 2.3 cm right auricular base mass was noted. Mild pericardial effusion was noted around the heart at the right auricular mass with echogenic debris either owing to mass extension and/or blood clots. Contractility was mildly subnormal. Internal chambers were normal diameter. Tamponade effect was not present.

Urinary System

The urinary bladder, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The kidneys revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. Both kidneys measured 8.05 cm.

Adrenal Glands



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Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 3.2 cm x 0.47 cm at the cranial pole and 0.5 cm at the caudal pole. The right adrenal gland measured 3.48 cm x 1.84 cm at the cranial pole and 1.02 cm at the caudal pole.

Spleen

The **spleen** was enlarged with irregular contour. Heterogenous nodular changes were present throughout the parenchyma, measuring 1.91 cm x 0.86 cm at the mid body. A separate rounded nodule measured 1.34 cm x 1.2 cm.

Liver

The **liver** was enlarged, irregular and nodular with multifocal target type appearance consistent with metastatic neoplasia. The liver was coarse in architecture and mild to moderately heterogenous throughout the parenchyma. Other target nodules in the liver measured up to 1.2 cm x 0.9 cm. Cavitation of some of the nodules appeared to be present as well. The gallbladder and common bile duct were unremarkable.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Infiltrative splenic and hepatic, likely hemangiosarcoma with right auricular spread and secondary pericardial effusion

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Empirical doxorubicin/Adriamycin could be considered as a palliative measure in this patient given the pattern is strongly suggestive for multicentric hemangiosarcoma. Prognosis long term is poor.



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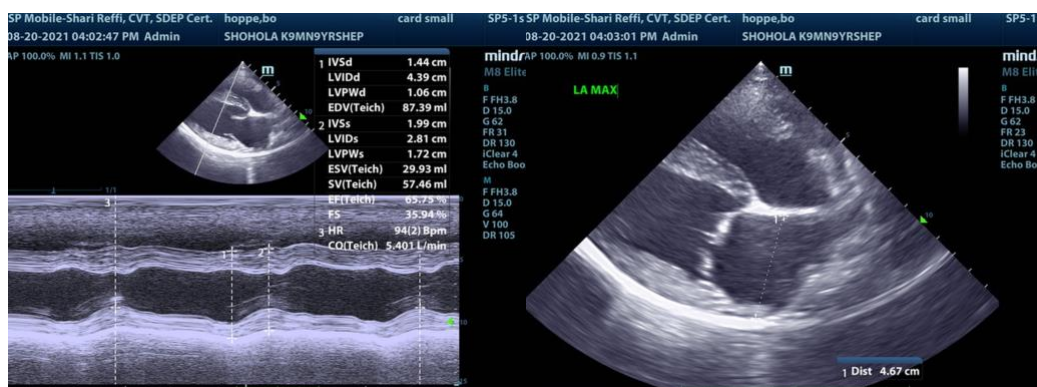
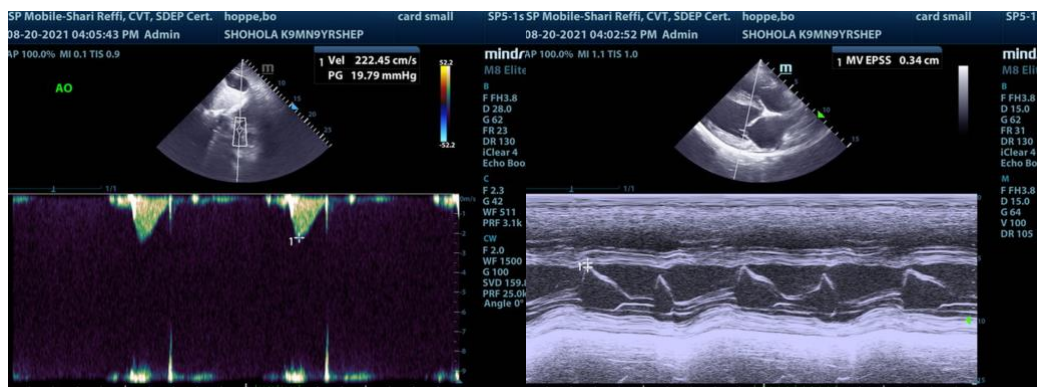
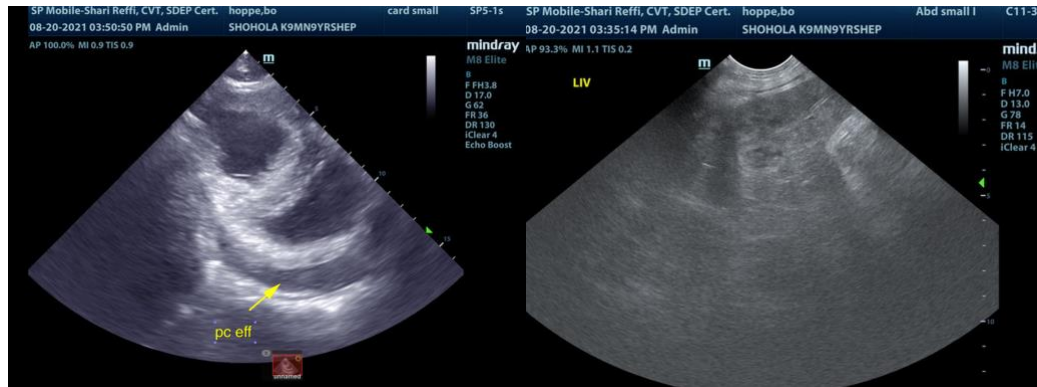
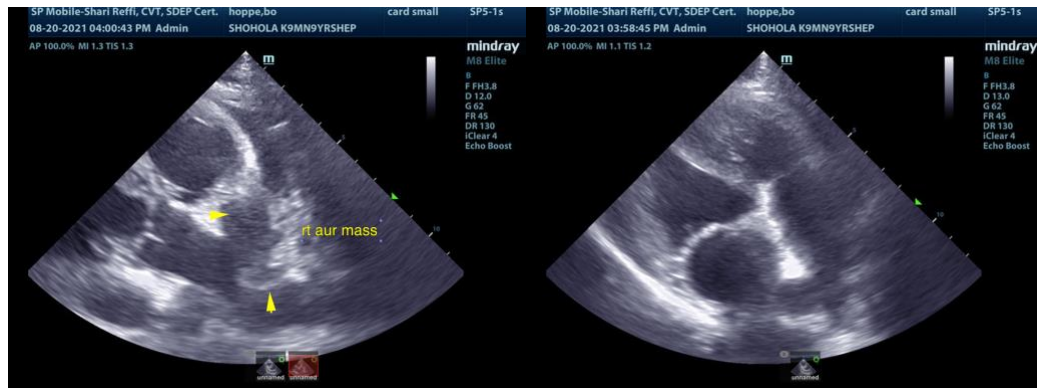
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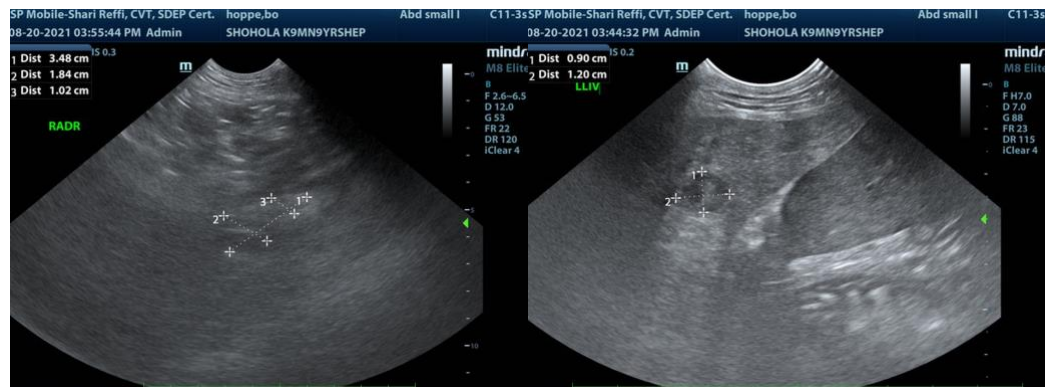
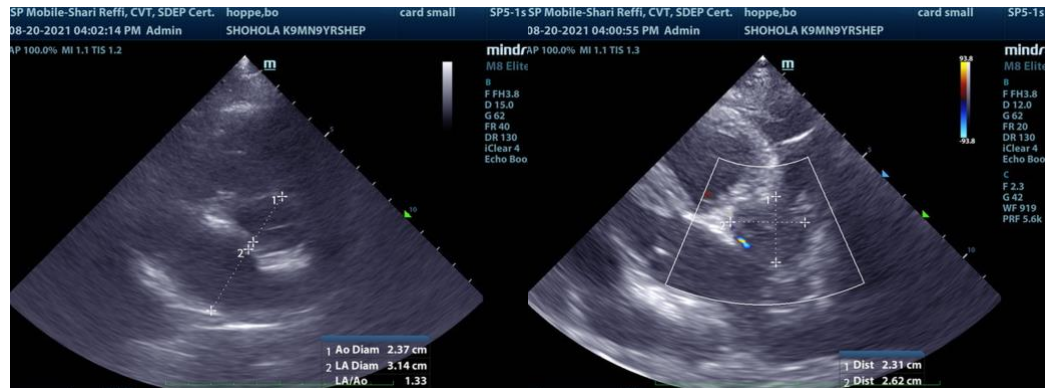
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not



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visible in the image/video clips provided.

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Thank you for this referral. 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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