



PATIENT

Roxie Mattson

SPECIES

Canine

BREED

Australian Heeler

SEX

Spayed Female

AGE

12

WEIGHT

13 kg

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kacie Edwards

HOSPITAL NAME

Boren Vet Medical Teaching Hospital

REFERRING VET

Dr. Dugat

INVOICE

45488

DATE

2/24/23

PRESENTING CLINICAL SIGNS

Presenting for hemoabdomen. LEADING DIFFERENTIAL/DIAGNOSIS: Splenic mass vs neoplasia vs other.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

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 largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 4.7 cm. The right kidney measured 5.08 cm.

Adrenal Glands

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 2.23 cm x 0.66 cm at the cranial pole and 0.70 cm at the caudal pole. The right adrenal gland measured 0.64 cm at the cranial pole and 0.46 cm at the caudal pole.

Spleen

The **spleen** presented a mixed hypoechoic complex 3.4 cm mass and a separate 3.13 cm mass.

Liver

The **liver** in this patient revealed multiple disruptive masses in the right and left liver with surrounding free fluid. Right liver mass measured 3.47 cm. A separate 3.0 cm mass was also noted, as well as other nodular changes. A left sided liver mass measured 4.68 cm. All masses were disruptive of architecture and deviation of curvilinear patterns noted, strongly suggestive for metastatic pattern. The gallbladder was 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.



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Free Abdomen

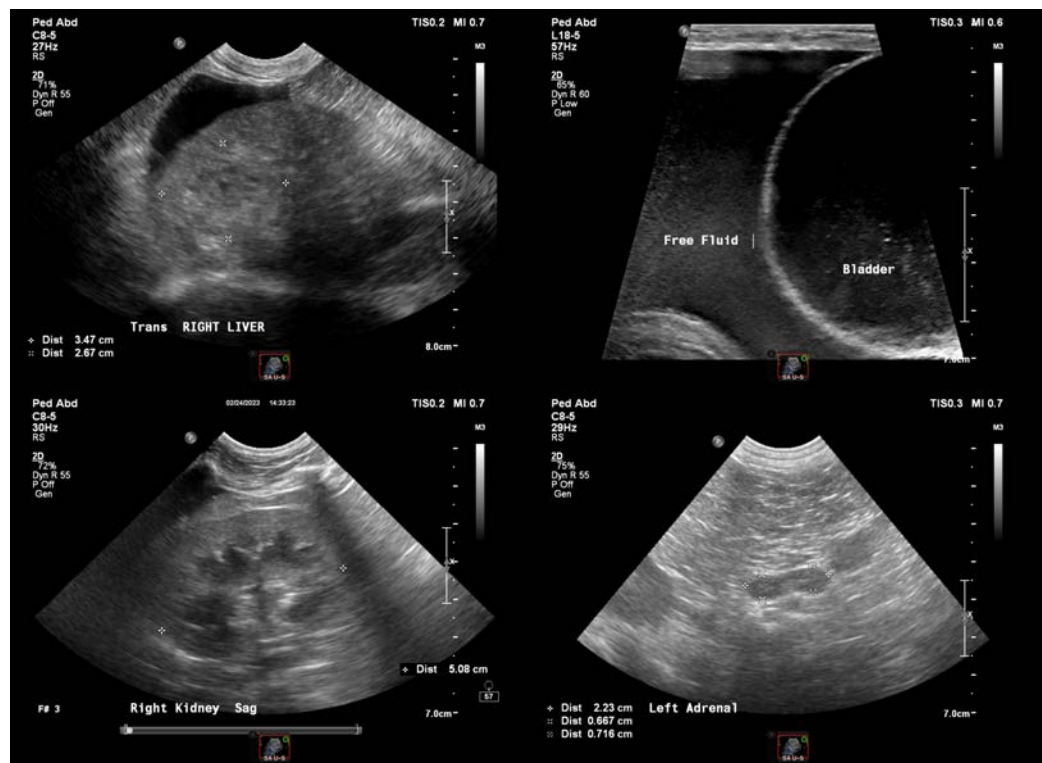
Moderate amount of mildly echogenic free fluid noted, likely owing to rupture of either the splenic or hepatic masses. Minor heterogeneous omental changes noted.

ULTRASONOGRAPHIC FINDINGS

- Aggressive splenohepatic neoplasia – hemangiosarcoma pattern or similar.
- Free fluid – consistent with likely hemoabdomen.
- Age related changes elsewhere

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Abdominocentesis with cytospin and 25-gauge FNA spleen and liver could be considered for further definition, yet prognosis is poor and the pathology is extensive. Rapid echocardiogram of the right auricle and pericardium (SDEP #3 echo) would be recommended to assess for metastatic disease to the heart, given the pattern consistent with hemangiosarcoma. Chest radiographs also ideal to assess for comorbidity.





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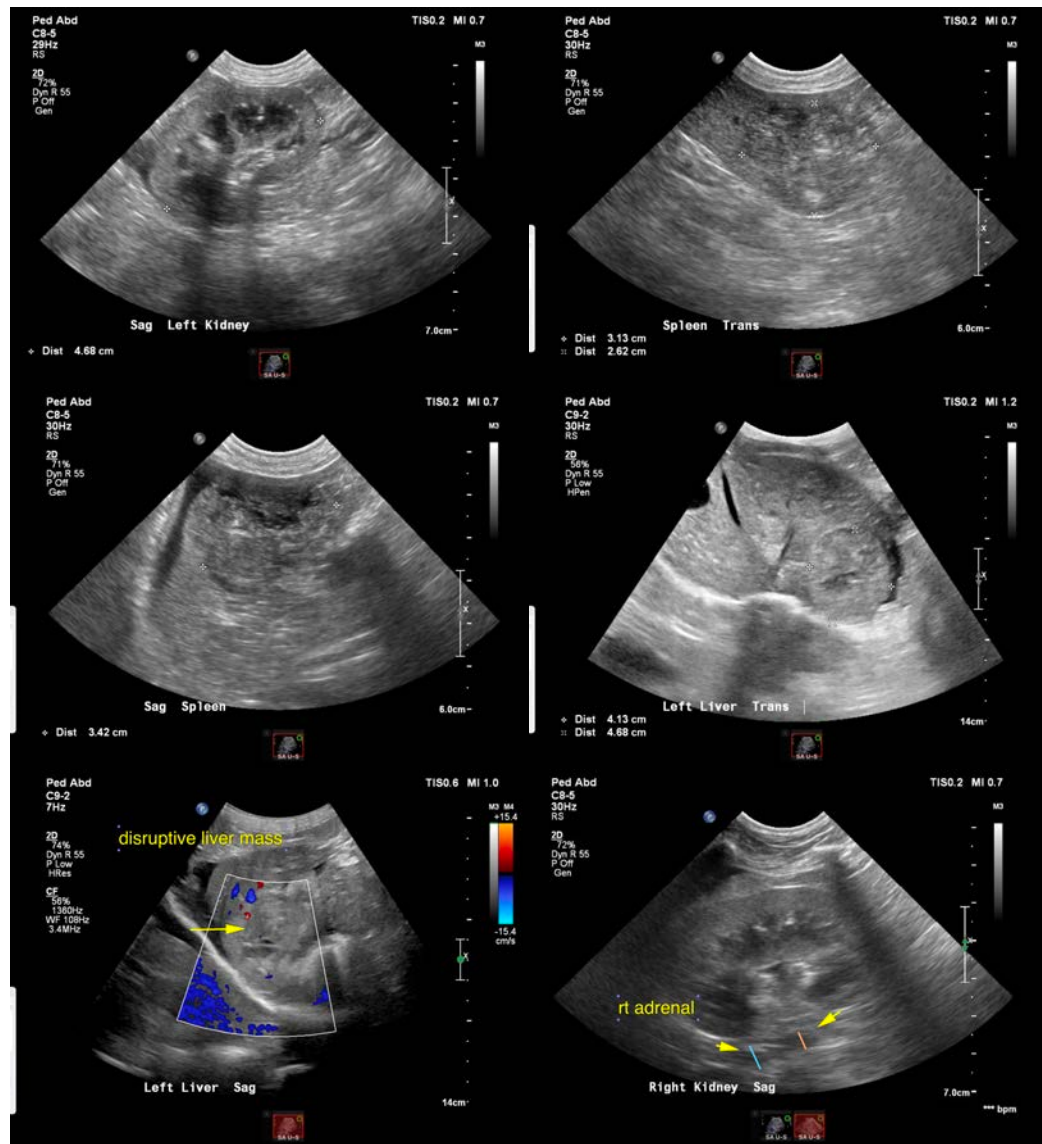
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

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