



PATIENT

Sammy Mulcahy

SPECIES

Canine

BREED

Retriever x

SEX

Neutered Male

AGE

10

WEIGHT

68

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway Animal
Hospital

REFERRING VET

Dr. Brooks

INVOICE

75044

DATE

5/8/26

PRESENTING CLINICAL SIGNS

Hyporexia 5-7 days lethargic PU/PD 3-4 days Coombs positive marked regenerative anemia , icteric gums ears eyes Current meds Dex SP unasin pantro IVF Denamarin

Abnormal PE/Chem/CBC/UA Results: RBC 2.62 HCT 20.4% hgb 6 MCV 77.9 Retics 380.4 WBC 20.76 Glob 4.8 ALT 416 ALP 1675 GGT 13 Tbili 1.9 CPL 405 4DX neg Lepto neg U/A protein 30 Bilirubin 3 Blood 250 USG 1.010

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size. (7.06 cm) Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (7.21 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.62 cm at the cranial pole and 0.63 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 1.29 cm at the cranial pole and 0.67 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size (2.32 cm), echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is large and irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are too numerous to count cystic lesions visualized within the liver. Some of these appear somewhat grouped in



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poorly defined hyperechoic regions, creating hyperechoic mass effects. An example in the mid cranial liver measures 7.13 cm x 4.6 cm and in the right mid caudal liver measuring 5.9 cm x 5.5 cm. Additionally, there are hypoechoic nodules throughout the liver, some of which deform the hepatic margins. Examples measure 0.99, 1.58, 1.85, and 2.05 cm.

The gall bladder lumen is moderately distended. The gallbladder wall appears somewhat thickened in some views, measuring up to 0.52 cm with no evidence of significant surrounding inflammation. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.45 cm. Jejunum wall measures 0.34 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

ULTRASONOGRAPHIC FINDINGS

- Large, irregular, heterogeneous liver with too numerous to count complex cystic “mass effects” and solitary cysts as well as numerous hypoechoic nodules. The nature of these changes is uncertain. This could represent cystadenomas, cystadenocarcinomas, benign cysts with benign or neoplastic hypoechoic nodules.
- Moderate gallbladder debris with gallbladder wall thickening – Possible differentials could include edema or cholecystitis.



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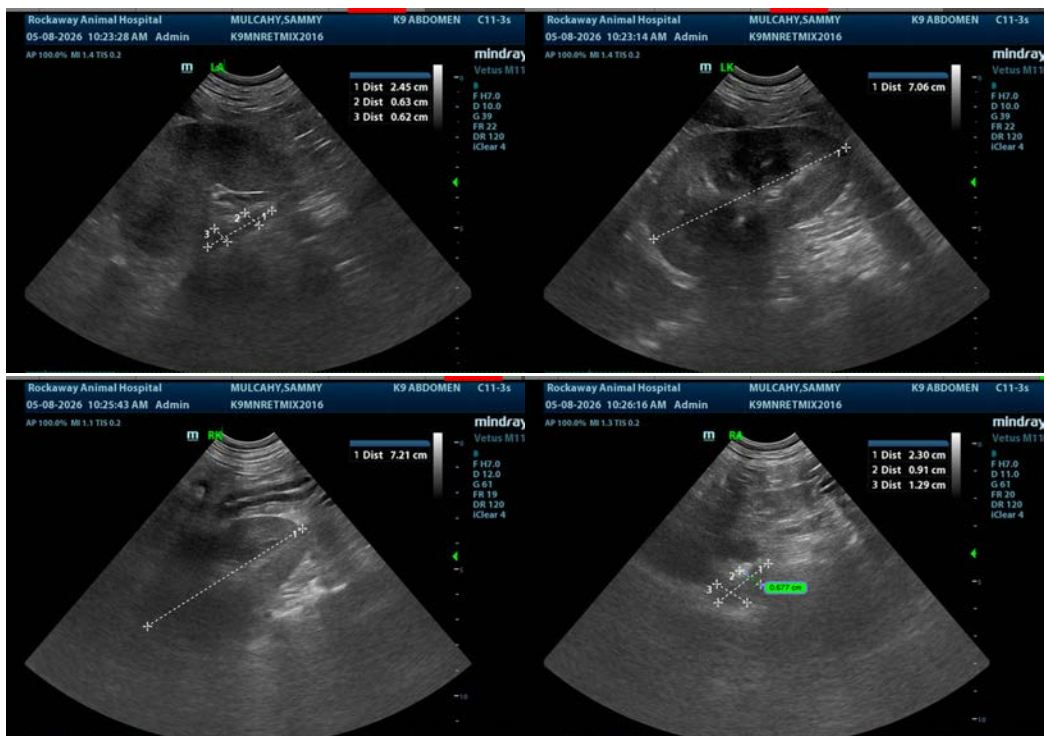
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver is abnormal in appearance. The hypoechoic nodules are somewhat concerning for possible metastatic lesions, although benign lesions are possible. Recommend a fine needle aspirate of a hypoechoic nodule (left caudal liver lobe is a good location). Additionally, there are almost mass-like complex collections of cystic lesions that typically are not in an area easy to sample. Unfortunately, it is difficult to assess if this is a neoplastic or a benign lesion, although neoplasia is a significant concern. If cytology is not diagnostic, surgical biopsies of the liver may need to be warranted if the patient can be stabilized. You could consider pre- and post-prandial bile acids to try to better understand if the bilirubin elevations are secondary to hemolysis or primary liver dysfunction.

The gallbladder has a moderate amount of debris and the gallbladder wall appears prominent and somewhat thickened. Consider Ursodiol therapy and continued monitoring of the gallbladder.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement (disregard if this has already been done).





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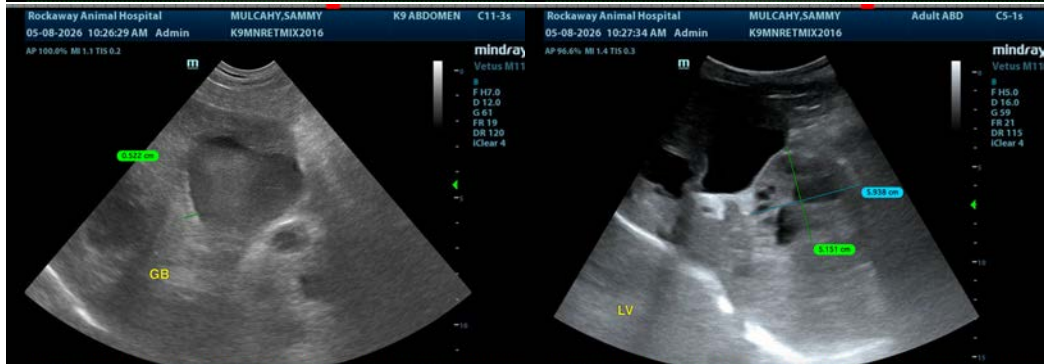
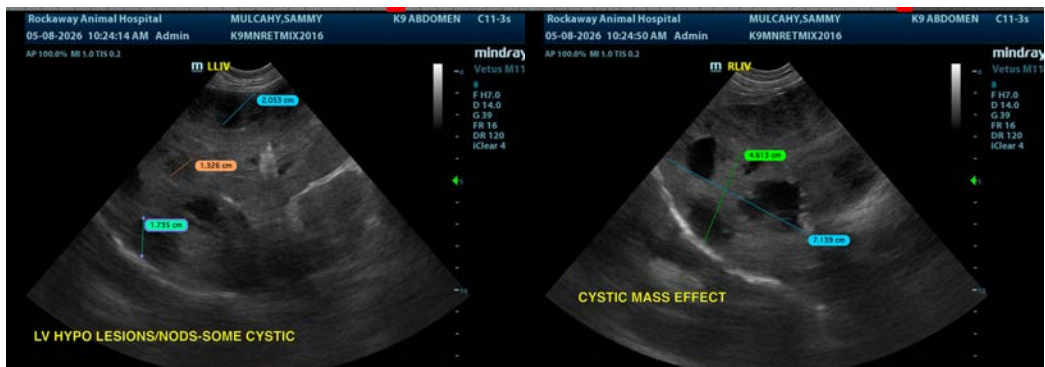
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

info@sonopath.com