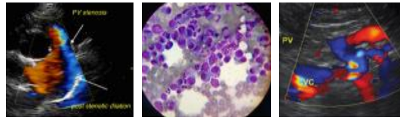
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

6/26/23

PATIENT

Roxy Muller

SPECIES

Canine

BREED

Mixed Breed

SEX

Spayed Female

AGE

6/23/22

WEIGHT

34.8 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Hicks

INVOICE

23087

PRESENTING CLINICAL SIGNS

History: Referral form Basin Run - HGE Lethargic Decreased food intake since Wednesday Vomiting since Wednesday (2-3 times) Bloody diarrhea started today Chem/CBC - - ALT - did not run - TBil - 4.9 (H) - Glu 157 (H) - Phos 7.6 (H) - Lipa – did not run - Na - did not run - HCT 53.4% - WBC 25.59 (H) - Mono 1.48 (H) - Neut 19.54 (H) Parvo - neg RV UTD (due 6/6/26) DHPP +L UTD (due 6/6/24) ATO (spoke with in exam room) - Vomited fluid on Wednesday but ate breakfast/dinner fine - Yesterday (Thus) - ate breakfast but then no interest in dinner, Vomited grass - 4 am P defecated in the house, normal consistency but then turned to diarrhea - then became bloody - 6 a.m today P threw up kibble (hasn't eaten since yesterday morning)

Current Medications: Omeprazole. Metoclopramide, Trazodone, Sucralfate, Duphenhydramine, Proviable, Ondansetron, Metronidazole, Baytril, Denamarin.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Left kidney is normal is size (5.92 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal is size (5.87 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

Right adrenal gland is normal in size (2.04 cm long x 0.65 cm at cranial pole and 0.66 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Left adrenal gland is normal in size (2.5 cm long x 0.67 cm at cranial pole and 0.72 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free fluid. The mesenteric and sublumbar lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

ULTRASONOGRAPHIC FINDINGS

- Hypoechoic hepatomegaly-This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.

- Reactive mesenteric and sublumbar lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

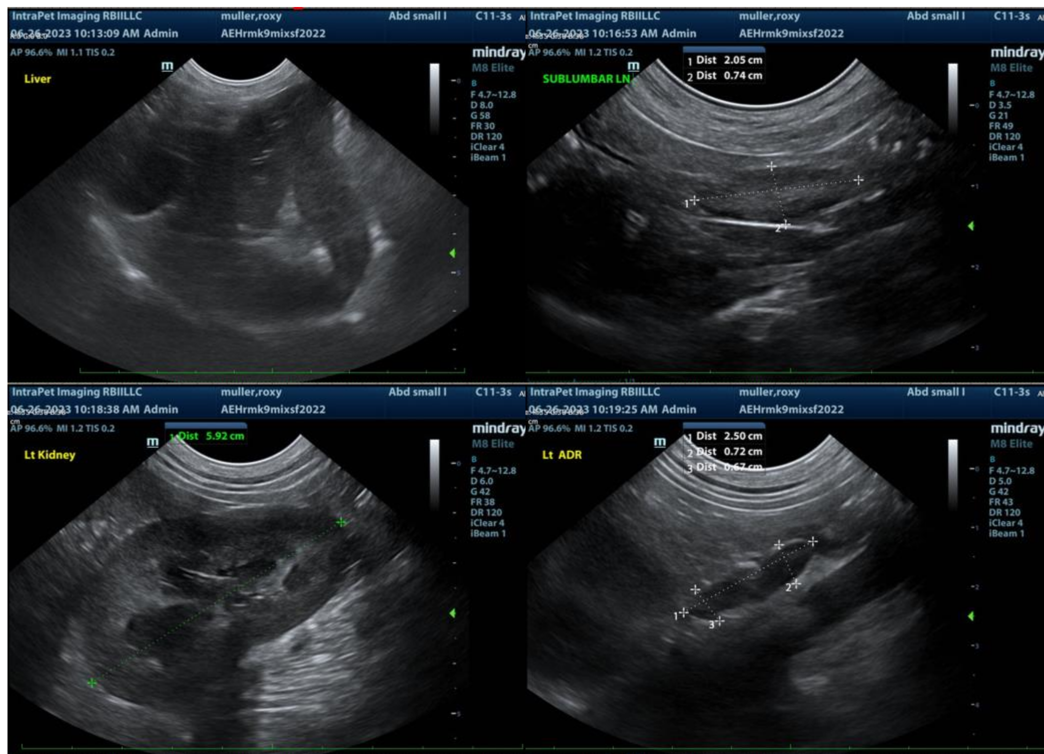
Testing for Leptospirosis is recommended. Bile acids are recommended, if total bilirubin is not increased. Assessment of coagulation factors/clotting times is recommended.

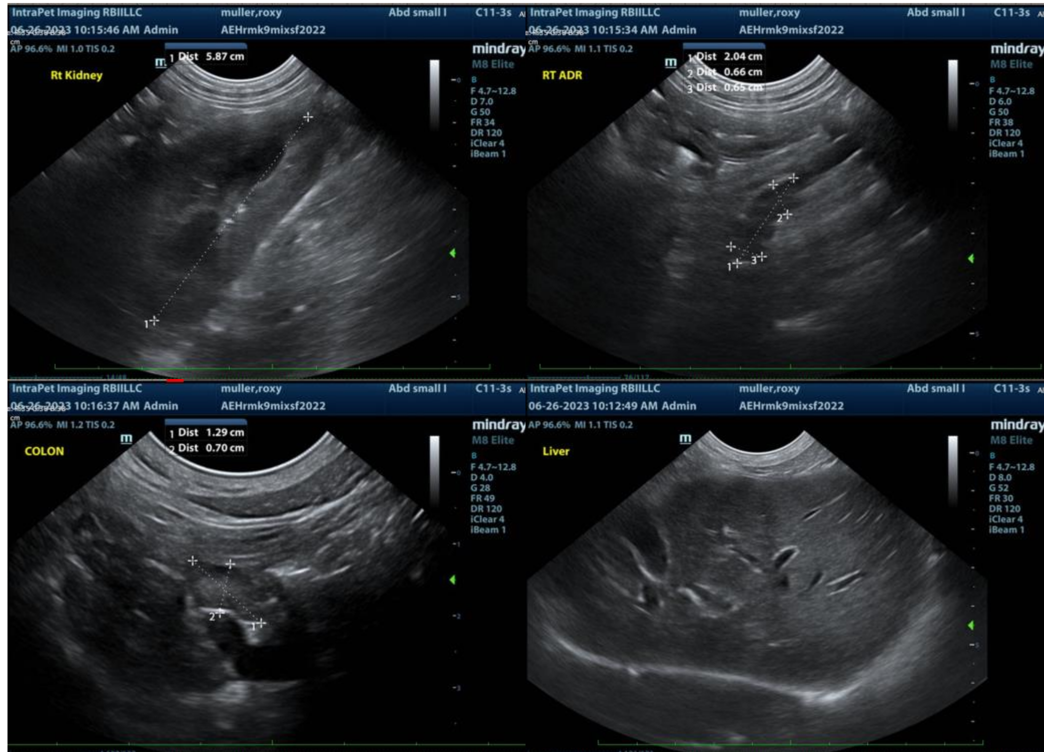
Given the gastrointestinal signs, additionally, a fecal exam is recommended if not recently evaluated, as is a fecal enteropathogen PCR panel (to Texas A&M GI Laboratory), for further evaluation of possible infectious disease +/- a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory, for further evaluation of GI and pancreatic function.

Pending results up above, a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

In the meantime, in addition to supportive/symptomatic medical management of the hemorrhagic gastroenteritis with antiemetics, gastroprotectants, including sucralfate, a probiotics, such as Visbiome or Proviable, empirical deworming with a 5-day course of Panacur, and empirical course of antibiotics and hepatic nutraceuticals could be tried while monitoring the ALT for improvement.

If a diagnosis is not obtained and/or ALT does not begin to improve, liver sampling should be considered, beginning with a fine needle aspirate of the liver to assess inflammatory cell type, rule in/out round cell neoplasia, etc., if patient coagulation status is appropriate. If round cell neoplasia is not diagnosed, a liver biopsy, including copper level assessment may ultimately be required to definitively diagnose and underlying hepatopathy if present.





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. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Beth Johnson, DVM DACVIM
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