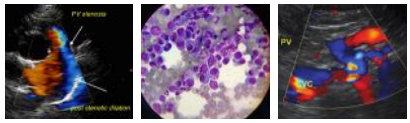
IMAGING PERFORMED BY

IntraPet.com



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DATE
7/14/22

PATIENT
Sadie Mullins

SPECIES
Canine

BREED
Rottweiler

SEX
Spayed Female

AGE
8/8/06

WEIGHT
65.5 Pounds

INTERPRETED BY
Beth Johnson, DVM
DACVIM

HOSPITAL NAME
Bayside Animal
Medical Center

REFERRING VET
Dr. Oliver

INVOICE
16620

PRESENTING CLINICAL SIGNS

History: Concern for liver disease. No other history given.

Current Medications: Simplicef, Enrofloxacin.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound:
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.

Kidneys are bilaterally normal in size, irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed. The left kidney measures 5.34 cm. The right kidney measures 5.56 cm.

Adrenal Glands

Left adrenal gland is normal in size (3.2 cm long x 0.76 cm at cranial pole and 0.64 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (2.79 cm long x 0.84 cm at cranial pole and 0.86 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with a swollen and scalloped/undulating capsular contour. Multifocal coalescing nodules are noted throughout the parenchyma. Splenic vasculature appears normal. Enhanced hyperechoic surrounding fat is noted. A larger poorly differentiated, hypo- to anechoic mass is present in the mid body, measuring approximately 1.5 cm x 2.5 cm in size. It is non-capsule disrupting and does not appear to be vasculature.

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. Multifocal intrahepatic biliary mineral is present. One small anechoic cyst is present.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. Some of the gallbladder debris appears mineral and is adhered to the wall. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is

mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. 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
Cranial abdominal 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. No evidence of free fluid, including no pericardial effusion is noted in these images

ULTRASONOGRAPHIC FINDINGS

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

- Gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

  *Given the combination of these findings, combined with intrahepatic biliary mineral and reactive lymph nodes, and inflammatory process, such as cholangitis or cholangiohepatitis is suspected.

- Honeycomb Spleen – This finding is strongly suggestive of infiltrative disease such as round cell neoplasia. Benign disease cannot be ruled out but is considered less likely.

- Chronic Kidney Disease – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

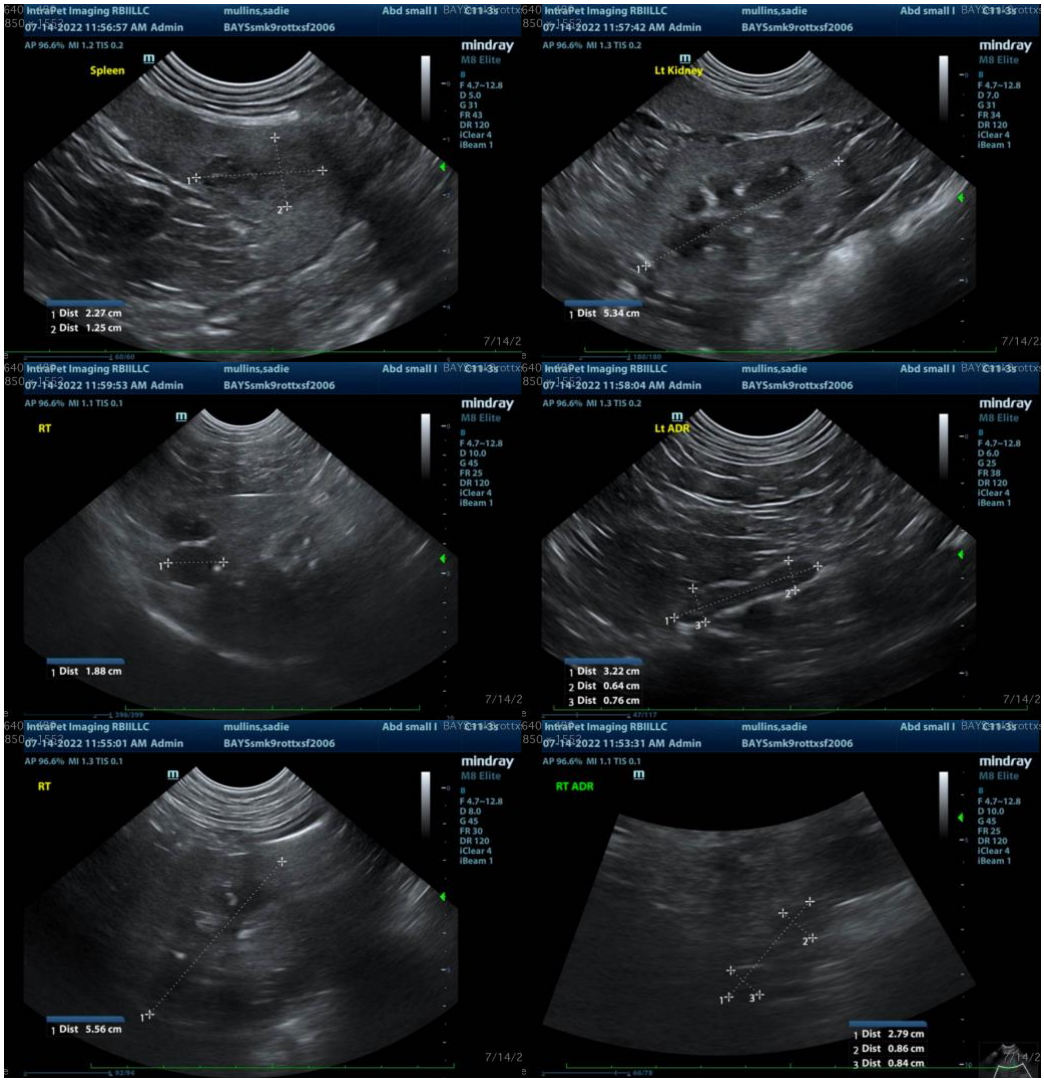
- Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

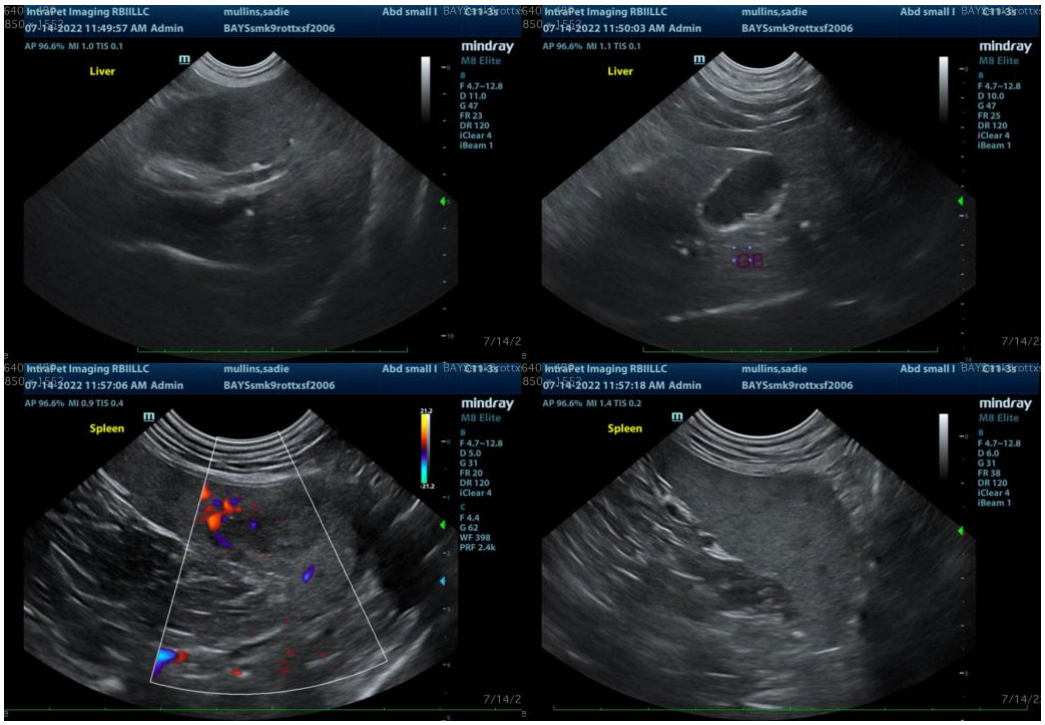
- Given the appearance of the spleen, a fine needle aspirate of both the spleen and liver is recommended, if patients coagulation status is appropriate, being aware of the potential for hemorrhage from the anechoic portion of the spleen.

- If a more conservative therapeutic approach is preferred first, recommendations include an “antigen search” for sources of reactive hepatopathy (including testing for Leptospirosis), followed

by a course of empirical antibiotics and hepatic nutraceuticals, with monitoring of ALT for improvement. If improvement is not noted and/or enzyme increase progresses, a liver biopsy may be warranted. If liver enzymes improve while on antibiotics, antibiotics should be continued until they either normalize or plateau. If improvement is not noted, antibiotics can be discontinued, but nutraceuticals should be considered long-term.

- If a more aggressive approach is elected, with the desire to minimize the risk of hemorrhage from aspirates, an exploratory laparotomy for splenectomy and liver biopsy could be considered.





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
Beth.Johnson@SonoPath.com