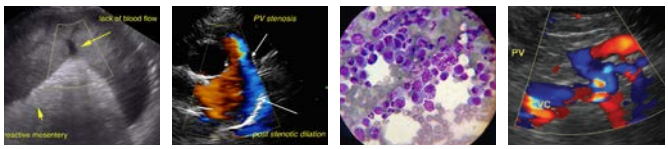
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com™
1-800-838-4268 info@sonopath.com

PATIENT
Leah Martin

SPECIES
Canine

BREED
Beagle X

SEX
Spayed Female

AGE
13 Years

WEIGHT
46.6 Pounds

INTERPRETED BY
Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY
Chaley Hunt, LVT

HOSPITAL NAME
Columbia AC

REFERRING VET
Dr. Laura Baker

INVOICE
45934

DATE
3/15/23

PRESENTING CLINICAL SIGNS

Has had a history of mildly elevated liver enzymes with response to treatment for GI upset. Recent seizure activity- Had a seizure in the middle of the night on 2/14 & again on 2/23. On 2/14 patient was neurologically normal on PE with no changes from recent preventive care exam (mild arthritis, mild dental disease, mild overweight, few small skin tags & sebaceous gland tumors). CBC was normal. Chemistry abnormalities: ALT-323, AlkPhos-1161, TBili-1.1, Glob-4.7. Started Amoxicillin, metronidazole, Proviable (metronidazole D/C after a few days d/t stomach upset). Recheck chem on 3/3: ALT-307, AlkPhos-1939, Tbili-0.4, Glob-4.1. Prescribed Ursodiol 3/3.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately 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.

The right kidney is normal in size (6.13 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.

The left kidney is normal in size (6.44 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

The right adrenal gland is normal in size (0.75 cm at the cranial pole and 0.47 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The caudal pole of the left adrenal gland is normal in size (0.53 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The cranial pole is unable to be well visualized in these images.

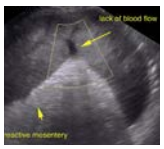
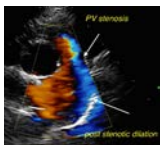
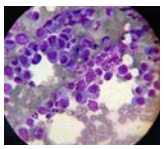
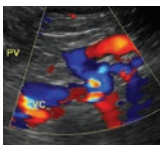
Spleen

The 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). A 5.0 cm heterogeneous, hypo- to anechoic but vascular mass is noted in the mid body, resulting in a capsular bulge, but no evident capsular escape. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

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

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Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- **Heterogeneous, cavitated, vascular splenic mass** – This is concerning for infiltrative neoplasia such as round cell neoplasia versus sarcoma versus other. However, benign lesions including hematomas, nodular hyperplasia, extramedullary hematopoiesis, etc. can mimic infiltrative neoplasia and cannot be ruled out without tissue sampling.

- **Heterogenous Liver –** These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

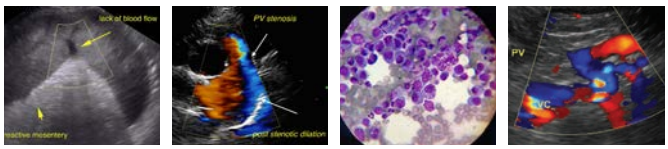
- **Mild gallbladder debris -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted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

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.

Fine needle aspirates of the splenic mass and liver are recommended if patient's coagulation status is appropriate. Or alternatively, given the risk of hemorrhage with even benign cavitated splenic masses, an exploratory laparotomy for planned splenectomy and liver biopsy could be considered.

Given this patient's new presentation of seizures, however, additional evaluation is recommended prior to an invasive approach such as surgery, including a blood pressure if not recently evaluated, as well as a urinalysis and, if indicated based on urinalysis results, urine culture to look for evidence of proteinuria or other causes of a potential vascular event that may have resulted in seizures. If protein is present in



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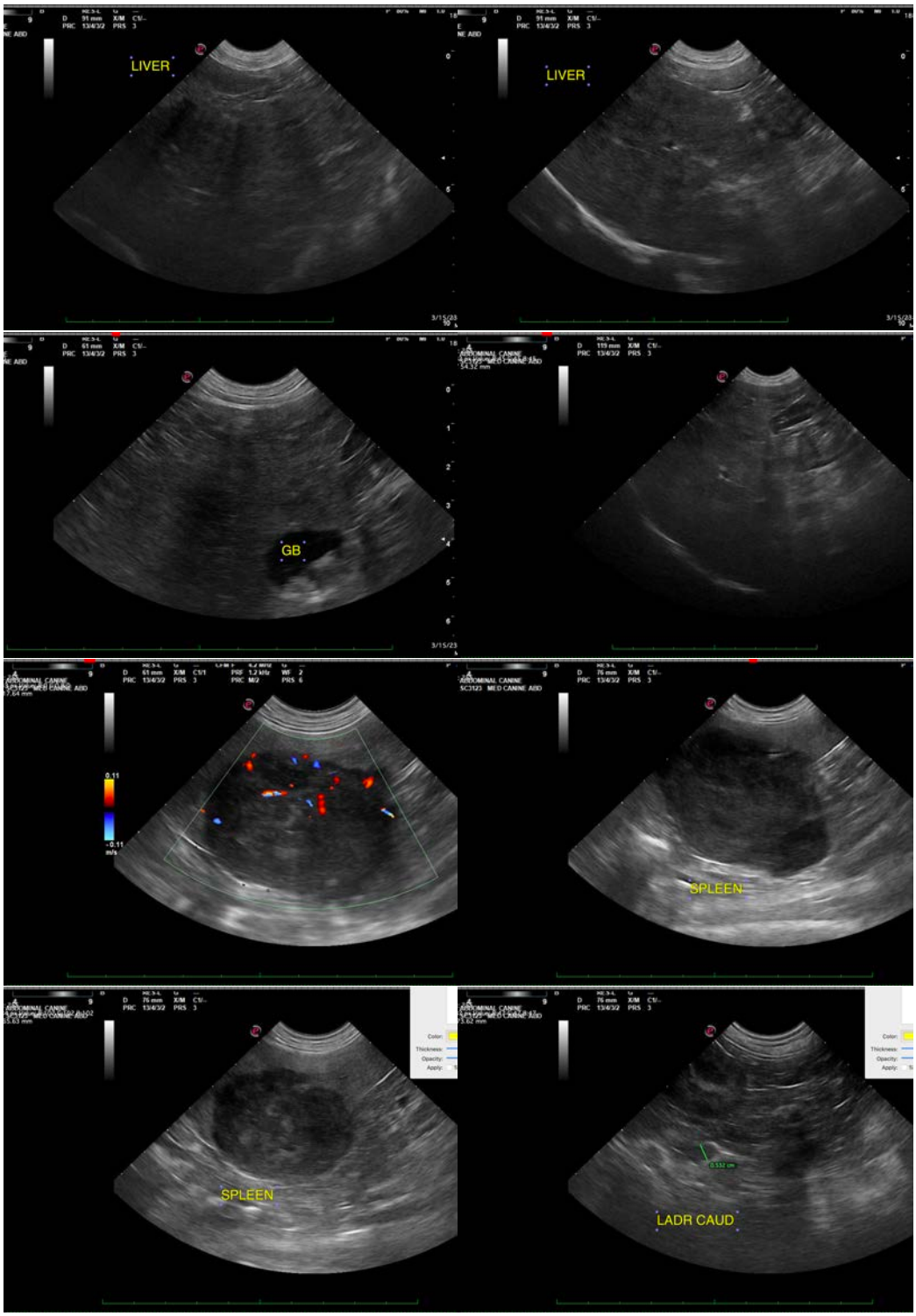
an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

Additionally, pending aspirate results, or prior to surgery if that is the elected option, bile acid testing is recommended if patient's bilirubin is normal.



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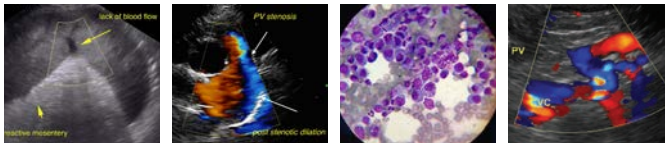

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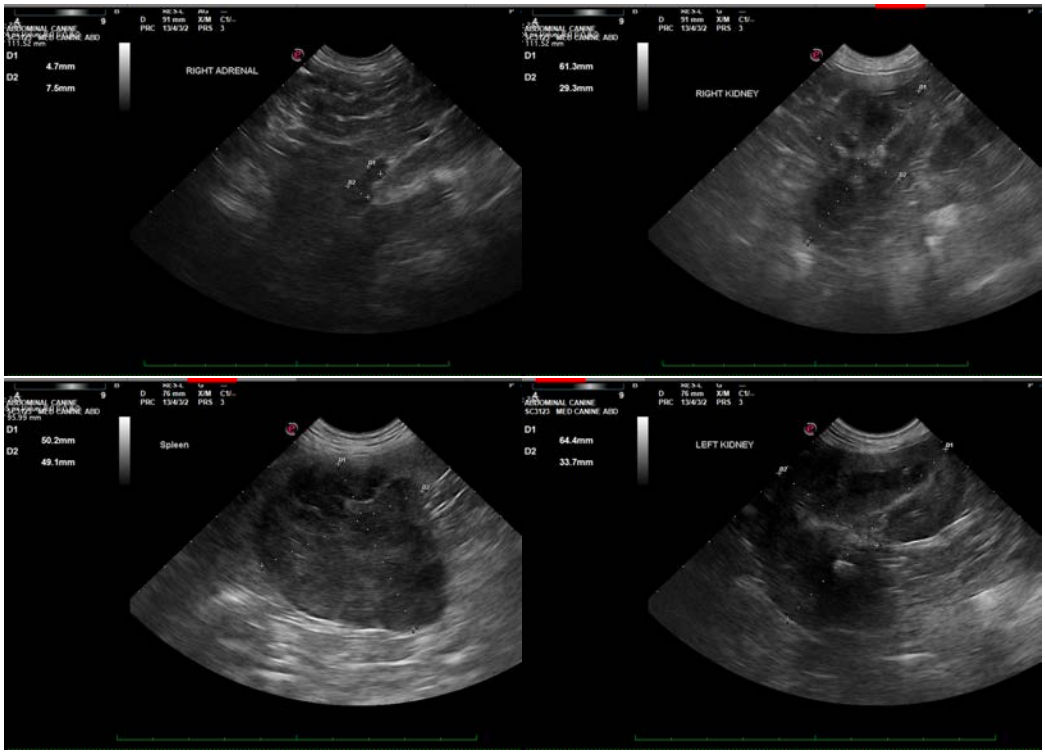

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com