IMAGING PERFORMED BY

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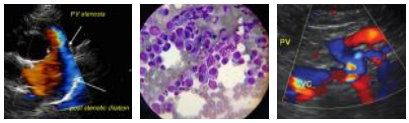

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DATE
11/21/22

PATIENT
Charlie Laschinsky

SPECIES
Canine

BREED
Terrier Mix

SEX
Neutered Male

AGE
8/15/07

WEIGHT
18.4 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Everhart VH

REFERRING VET
Dr. Notarangelo

INVOICE
18176

PRESENTING CLINICAL SIGNS

History: New Client, previously seen at Parkville Animal Hospital. Decreased appetite for a few months, staedy weight loss. Hyporexia started at the time last house-mate. Intermittent vomiting of bile. Mild kidney change on labs. Eats home-cooked chicken and turkey, previously did not tolerate i/d. Heart murmur 3/6 systolic PMI L apex, years. Unknown if previously heart study. Chronic skin disease also.

Current Medications: None.
Lab Results: BUN 1, Crea 1.8, USG 1.024, 1+ protein
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

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.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, or infarcts observed. The left kidney measures 4.05 cm. The right kidney measures 5.13 cm. Nonobstructive nephrolithiasis is noted bilaterally. Cortical cysts are noted bilaterally.

Adrenal Glands

Adrenal glands are small (flattened contour). Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measured 1.47 cm long x 0.42 cm at cranial pole and 0.37 cm at caudal pole. The right adrenal gland measured 1.85 cm long x 0.63 cm at the cranial pole and 0.47 cm at the caudal pole.

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). A 3.6 cm x 2.8 cm heterogenous mass, resulting capsular disruption was noted in the mid body. Splenic vasculature appears normal.

Liver

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. A 4.5 cm x 5.0 cm heterogenous primarily hyperechoic mass is noted in the deep right liver. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as 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.

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
There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Flat adrenal glands – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.

- Heterogenous splenic mass concerning for infiltrative neoplasia such as round cell neoplasia versus sarcoma versus other. However, benign lesions such as cysts, hematomas, extramedullary hematopoiesis, etc. can mimic neoplastic disease and cannot be ruled out without tissue sampling.

- Liver mass, differentials for which include infiltrative neoplasia such as round cell neoplasia versus sarcoma versus hepatocellular carcinoma, as well as a benign hepatoma/adenoma, marked nodular hyperplasia, etc., and cannot be differentiated without tissue sampling.

Secondary Findings

- 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.

- Age-related kidney changes with nonobstructive nephrolithiasis bilaterally. Cortical cysts are also noted bilaterally.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patients attached laboratory changes are not suggestive of azotemia, however, they appear to

potentially be a typo given the BUN of 1. Given the patients reported history of chronic kidney disease and the appearance of the kidneys, further evaluation of the kidneys in the form of a urine protein to creatinine ratio given the reported proteinuria, as well as a blood pressure is recommended if not recently evaluated to help guide management.

Given this patients flat adrenal glands, a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

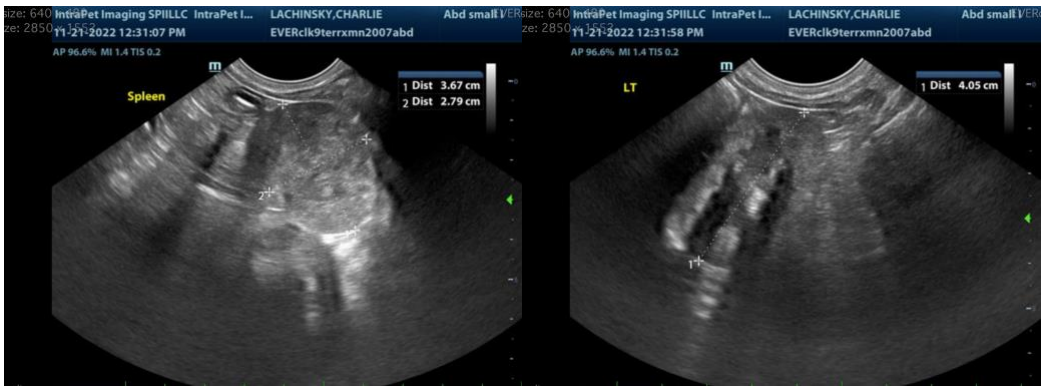
The splenic and liver changes may be incidental and not contributing to this patients clinical signs, however, further evaluation is recommended in the form of fine needle aspirates of both the liver and splenic masses if patients coagulation status is appropriate.

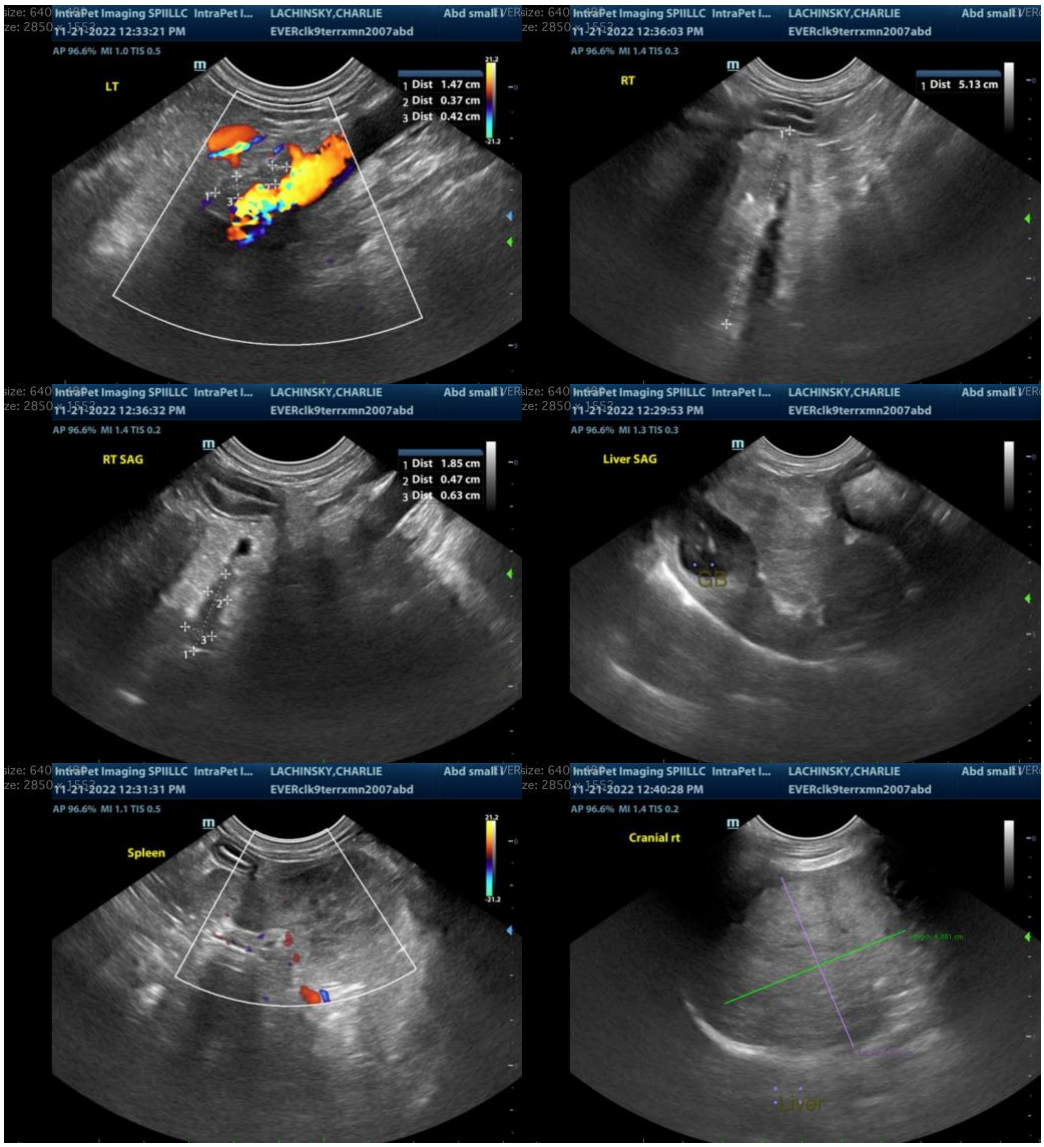
Alternatively, an exploratory laparotomy for planned liver mass removal and splenectomy could be considered. The liver mass appears resectable based on these images, however, definitive resectability cannot be guaranteed.

Prior to surgery, 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.

Prior to surgery, given this patients reported GI signs, further evaluation for possible concurrent maldigestive or malabsorptive disease in the form of a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function. Pending results, if surgery is elected, biopsies of the GI tract could also be considered.

In the meantime, in addition to supportive/symptomatic therapy of the gastrointestinal signs, empirical deworming with a 5-day course of Panacur is recommended.





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