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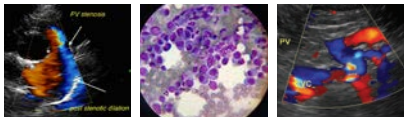
IntraPet.com



SonoPath

Clinical Sonography & Telecytology

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**DATE**

8/9/22

**PATIENT**

Rufus Streeter

**SPECIES**

Canine

**BREED**

Labrador Retriever

**SEX**

Neutered Male

**AGE**

8/7/10

**WEIGHT**

70.2 Pounds

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**

Animal Emergency Hospital

**REFERRING VET**

Dr Goessling

**INVOICE**

40266

## PRESENTING CLINICAL SIGNS

Patient started with diarrhea on Tuesday, was brown initially and then this morning was bloody. Patient was changed to a bland diet on Friday. He vomited this morning. Not lethargic, not unsupervised outside. No new treats, food or meds, but does like to eat grass and wood chips. On PE ambulatory x4 with no apparent lameness, painful on abdominal palpation, slightly dehydrated.

Current Medications: Metronidazole, Proviable, Maropitant, Buprenorphine.
Lab Results: Attached.
Radiographs: Abdomen 2 View Lat and V/D abdomen- slightly rounded liver, concern for mass effect in caudal abdomen causing ventral deviation of colon.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

## 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 prostate is unable to be well visualized in these images.

The right kidney is normal in size (6.81 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 or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

The left kidney is normal in size (6.11 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 or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

### *Adrenal Glands*

The right adrenal gland is normal in size (2.62 cm long x 1.0 cm at the cranial pole and 0.77 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (3.24 cm long x 0.73 cm at the cranial pole and 0.76 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

### *Spleen*

Spleen is subjectively large in size with normal smooth margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. A 1.5 cm diameter hypo- to anechoic nodule near the head of the spleen is noted, resulting in a capsular bulge. Splenic vasculature appears normal.

### *Liver*

The 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. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is mildly overdistended with anechoic bile as well as suspended and gravity dependent echogenic debris. Mineral debris and suspect cholecystolith are noted as well. 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 (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.

The mesenteric 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.

## PRIMARY FINDINGS

- **Coarse splenomegaly –** can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis (leave amyloidosis out if canine) as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.

- **Hypo to anechoic splenic nodule** – likely represents a benign lesion such as a cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.

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

- **Gallbladder debris with cholecystolith present -** 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.

## SECONDARY FINDINGS

- Non-obstructive dystrophic mineralization bilaterally

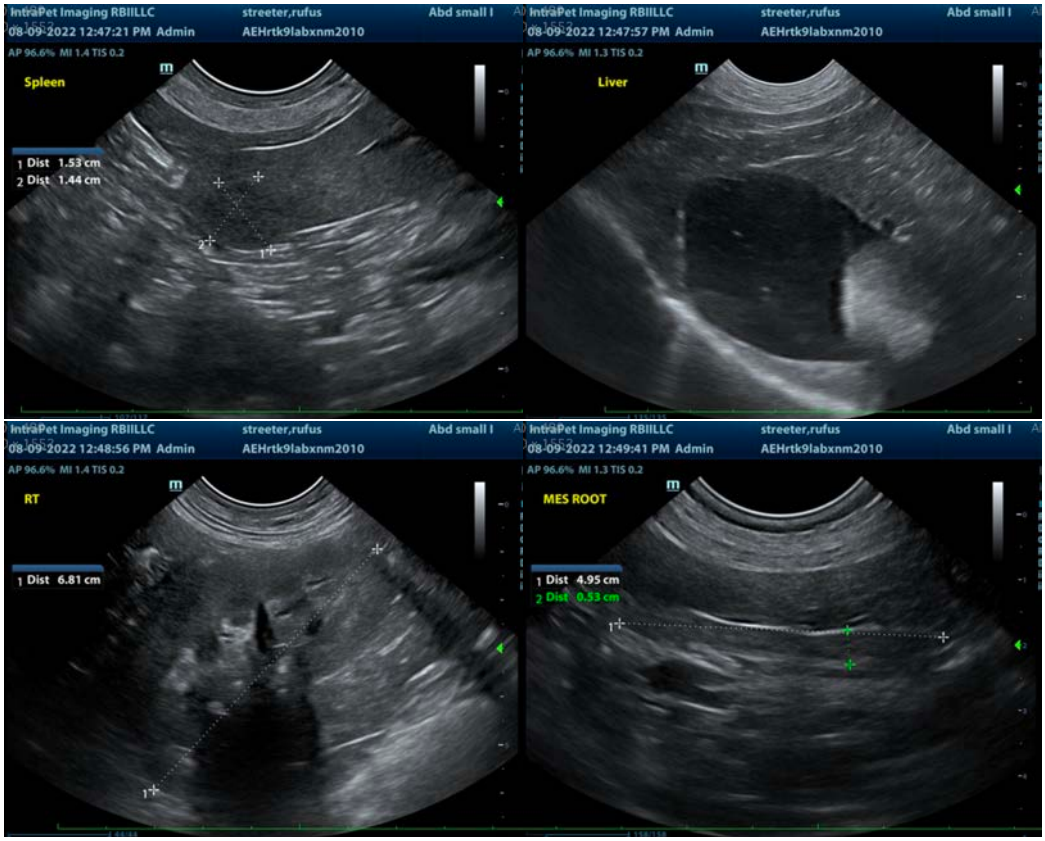
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

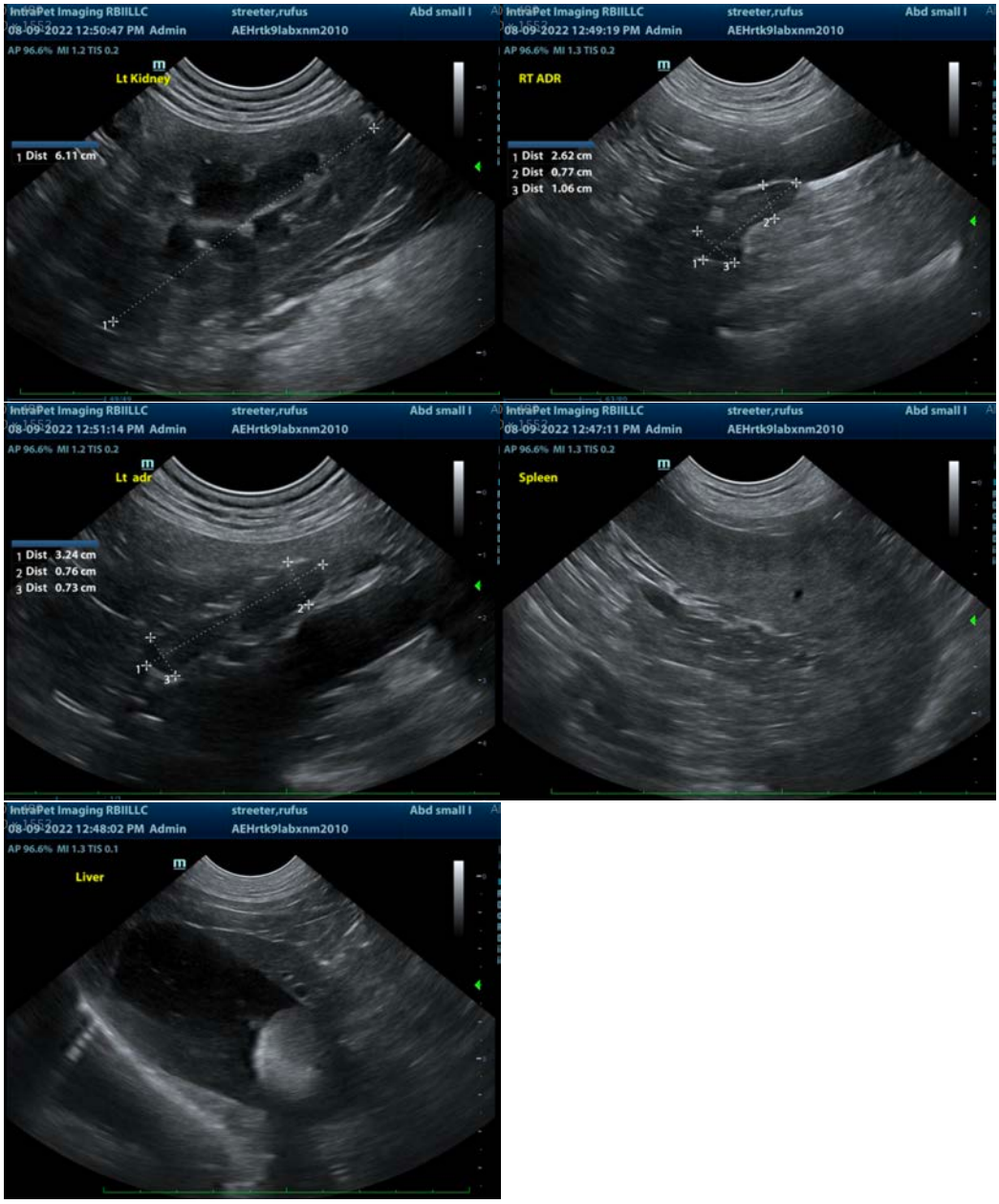
There is no evidence in these images of a caudal abdominal mass.

There is no ultrasonographically visible explanation for this patient's reported diarrhea/hematochezia. The splenic changes are likely an incidental finding, unless they represent an infiltrative round cell neoplasia that may also be affecting the bowel. Therefore, recommendations include a fine needle aspirate of the spleen if patient's coagulation status is appropriate.

Additionally, further investigation of the diarrhea with 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. A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease, as well as a fecal exam to evaluate for possible parasitic disease.

In the meantime, empirical deworming with a 5-day course of Panacur, potentially the addition of fiber to the diet, or transition to a higher fiber diet, probiotic administration, as well as an antibiotic such as Metronidazole or Tylosin could all be considered empirically while awaiting results.






**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
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