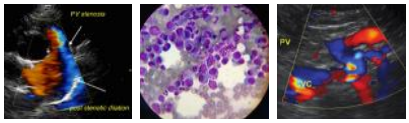
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

1/9/23

PATIENT

Hercules Troen

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

5/21/2009

WEIGHT

15.1 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Saubier

INVOICE

20526

PRESENTING CLINICAL SIGNS

History: Beginning this morning started with vomiting several times then started having bloody diarrhea, progressed to just liquid bloody stool. Indoors only. No known toxic or foreign ingestions. No diet changes. Current diet - Science Diet weight management. Also has been coughing / wheezing for past week. Does have a history of coughing Was seen AEH 2021 - pneumonia Felv/Fiv negative at that time Cardiac proBNP - wnl Has been treated for similar cough by rDVM several times. Usually gets antibiotics - last episode in August.

Current Medications: None listed.
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 or discrete cystoliths are observed, however, there is a large amount of echogenic suspended debris and some mineral/sand debris settled along the dependent wall. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface. Along the ventral apex of the bladder, there is an approximately 1.0 cm long echogenic partially mineralized density that could represent mineral debris and mucus, blood clot, etc., but a tissue polyp cannot be definitively ruled out.

Left kidney is normal is size (4.05 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. Nonobstructive nephroliths are noted bilaterally.

Right kidney is normal is size (4.27 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. Nonobstructive nephroliths are noted bilaterally.

Adrenal Glands

Left adrenal gland is normal in size (0.45 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.38 cm), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size (1.4 cm thick) with normal smooth margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. Multifocal well demarcated hyperechoic homogenous nodules are noted. 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. No focal lesions 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 empty, except for a curvilinear echogenic density with acoustic shadowing that could represent ingesta, gas, normal patient variant, etc., however, a foreign body is suspected.

The visible small intestine demonstrates areas of markedly thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction or foreign material.

The visible colon is normal in wall thickness and layering. The colon is fluid filled.

Pancreas

Pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and has a mildly irregular undulating contour. Parenchyma is coarse with mixed echogenic remodeling noted. Pancreatic duct dilation is noted.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Coarse splenomegaly with hyperechoic splenic nodules– 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. The hyperechoic splenic nodules are most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are considered less likely.
- Chronic active pancreatitis
- Suspect nonobstructive gastric foreign body

Secondary Findings

- Urinary bladder debris with some mineral sand noted with potential apical tissue/polyp.
- Small nonobstructive nephroliths are noted bilaterally.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If not recently evaluated, urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine

protein to creatinine ration is recommended.

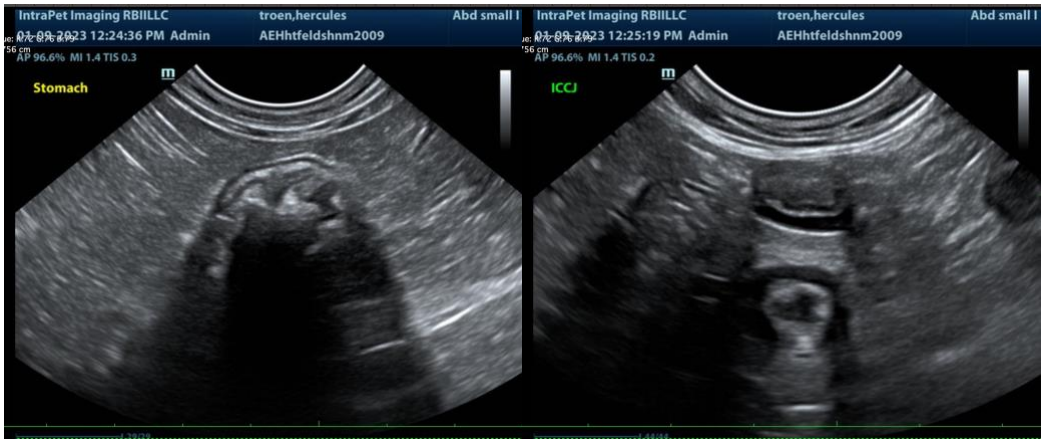
A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

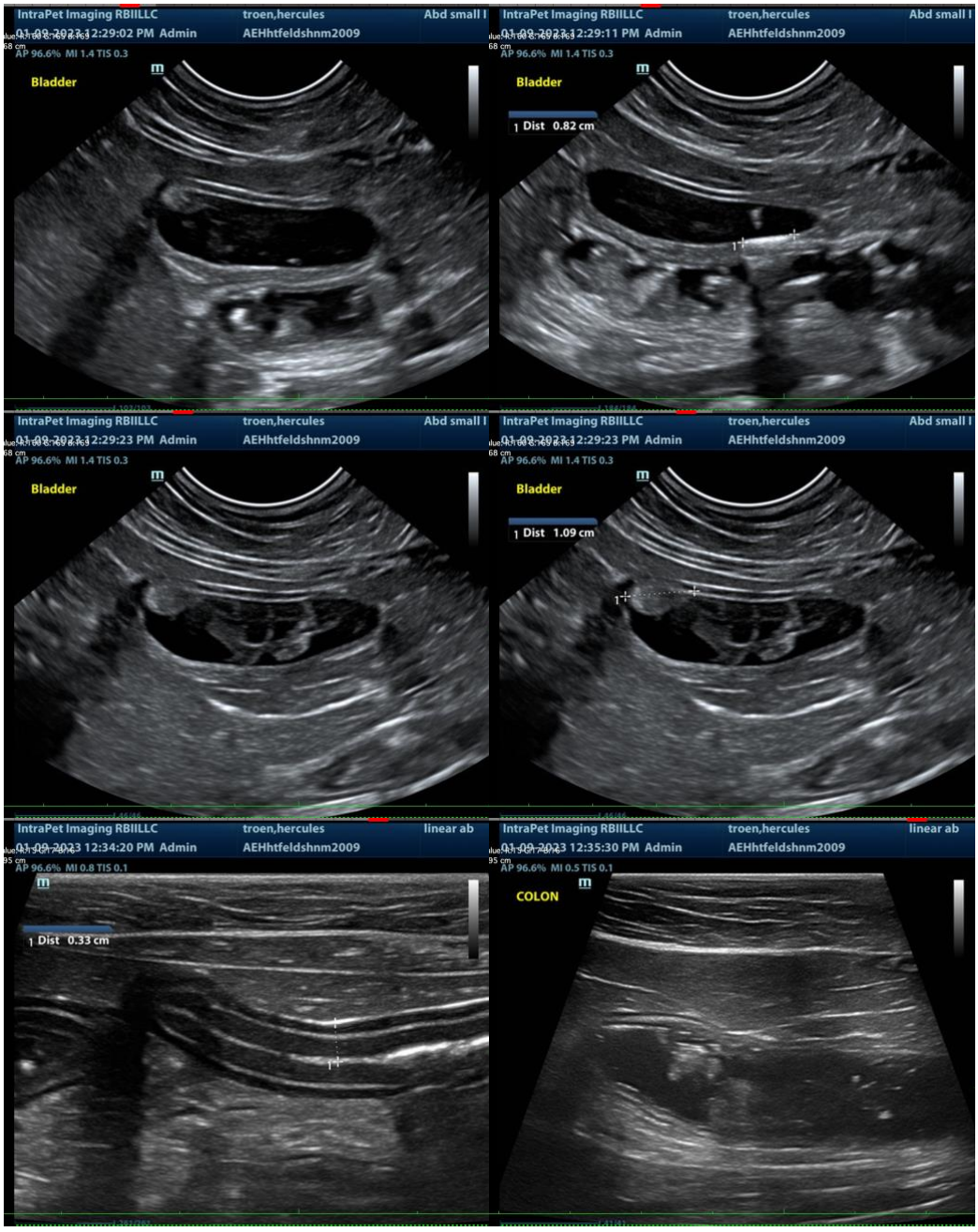
Additionally, a fecal exam, as well as a fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

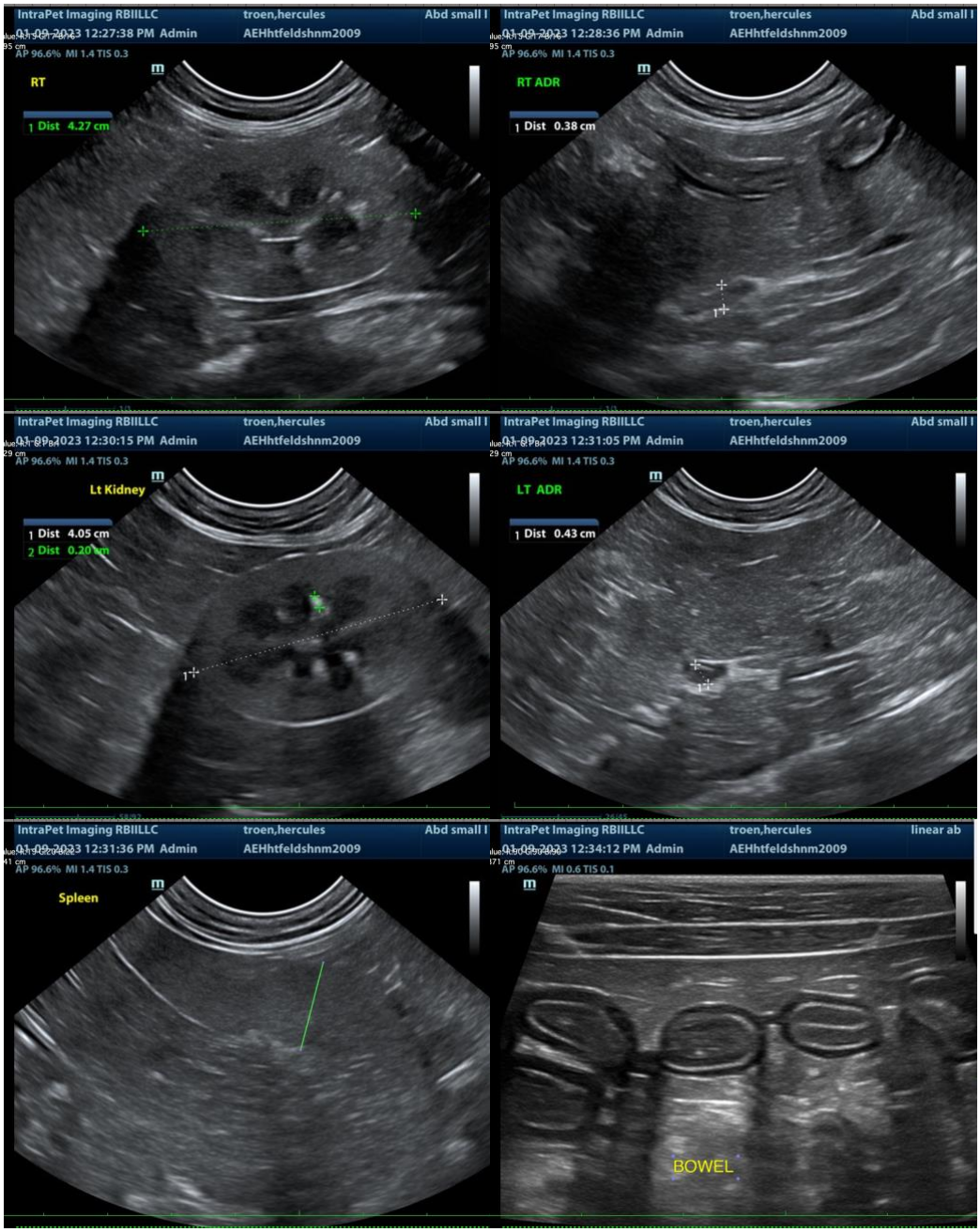
A fine needle aspirate of the spleen is recommended, if patient coagulation status is appropriate with the goal of looking for infiltrative round cell neoplasia, such as lymphoma. If a diagnosis is not obtained, then ultimately biopsies of the GI tract, being sure to include colon and ileum, if possible, are recommended to definitively diagnose and therefore manage the infiltrative bowel disease, therefore, upper GI endoscopy/colonoscopy may be warranted.

In the meantime, empirical therapeutic recommendations include a diet change, if tolerated, beginning with a hydrolyzed protein diet based on trial-and-error response, empirical deworming with a 5-day course of Panacur, cobalamin supplementation, unless cobalamin supplementation is not warranted based on GI panel results, and a probiotic, such as Visbiome or Proviable.

In the meantime, additionally, close evaluation of the possible gastric foreign body, is recommended, which could be obtained with 12-24 more hours of fasting and a recheck of the stomach or potentially proceeding to upper and lower endoscopy, sooner rather than later, at which time, if there is a gastric foreign body present, it could potentially be removed or more conservatively, beginning the empirical medical management recommendation given and if vomiting persists, rechecking the stomach.




IntraPet Imaging RBIILLC
troen,hercules
Abd small l
AEHhtfeldshnm2009
AP 96.6% MI 1.4 TIS 0.3
Bladder
IntraPet Imaging RBIILLC
troen,hercules
Abd small l
AEHhtfeldshnm2009
AP 96.6% MI 1.4 TIS 0.3
Bladder
1 Dist 0.82 cm
IntraPet Imaging RBIILLC
troen,hercules
Abd small l
AEHhtfeldshnm2009
AP 96.6% MI 1.4 TIS 0.3
Bladder
IntraPet Imaging RBIILLC
troen,hercules
Abd small l
AEHhtfeldshnm2009
AP 96.6% MI 1.4 TIS 0.3
Bladder
1 Dist 1.09 cm
IntraPet Imaging RBIILLC
troen,hercules
linear ab
AEHhtfeldshnm2009
AP 96.6% MI 0.8 TIS 0.1
1 Dist 0.33 cm
IntraPet Imaging RBIILLC
troen,hercules
linear ab
AEHhtfeldshnm2009
AP 96.6% MI 0.5 TIS 0.1
COLON



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