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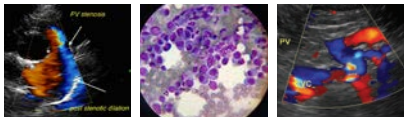
IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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**DATE**

6/21/22

**PATIENT**

Neo Merryman

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

4/1/21

**WEIGHT**

10 lb 14 oz

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**

Cat Sense Feline Hospital

**REFERRING VET**

Dr. Sinclair

**INVOICE**

38951

## PRESENTING CLINICAL SIGNS

Neo has been having intermittent episodes of bloody, slimy stools since he was a kitten. They weren't frequent and did initially respond to probiotics and metronidazole but now the stools have gotten worse and did not respond to ether the probiotics or metronidazole. Had been dewormed at the shelter with strongid and ponazuril. A fecal float was negative. A diarrhea PCR is pending.

Current Medications: Proviable 1 sid, Metronidazole 62.5mg bid
Lab Results: No current bloodwork. Was FeLV/FIV negative at the shelter.
Date of Previous IntraPet Ultrasound: No previous.

Sedation: IV sedation 0.15ml butorphanol

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 right kidney is normal in size (3.8 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 (3.68 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 (0.31 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.30 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

### *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). No focal nodules or masses are observed. 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.

The 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 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 intestine demonstrates areas of 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, foreign material or infiltrative disease.

The large bowel is also diffusely thick, measuring between 0.24-0.34 cm in thickness with a thick muscularis layer relative to mucosa. Submucosa is similarly slightly irregular, thick and hyperechoic without evident loss of layering appreciated. 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 peritoneal effusion.

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.

Colonic lymph nodes are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail.

## ULTRASONOGRAPHIC FINDINGS

- Inflammatory bowel disease (IBD) pattern (small and large bowel) - This finding has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma.
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- Aggressive colonic lymph nodes – most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

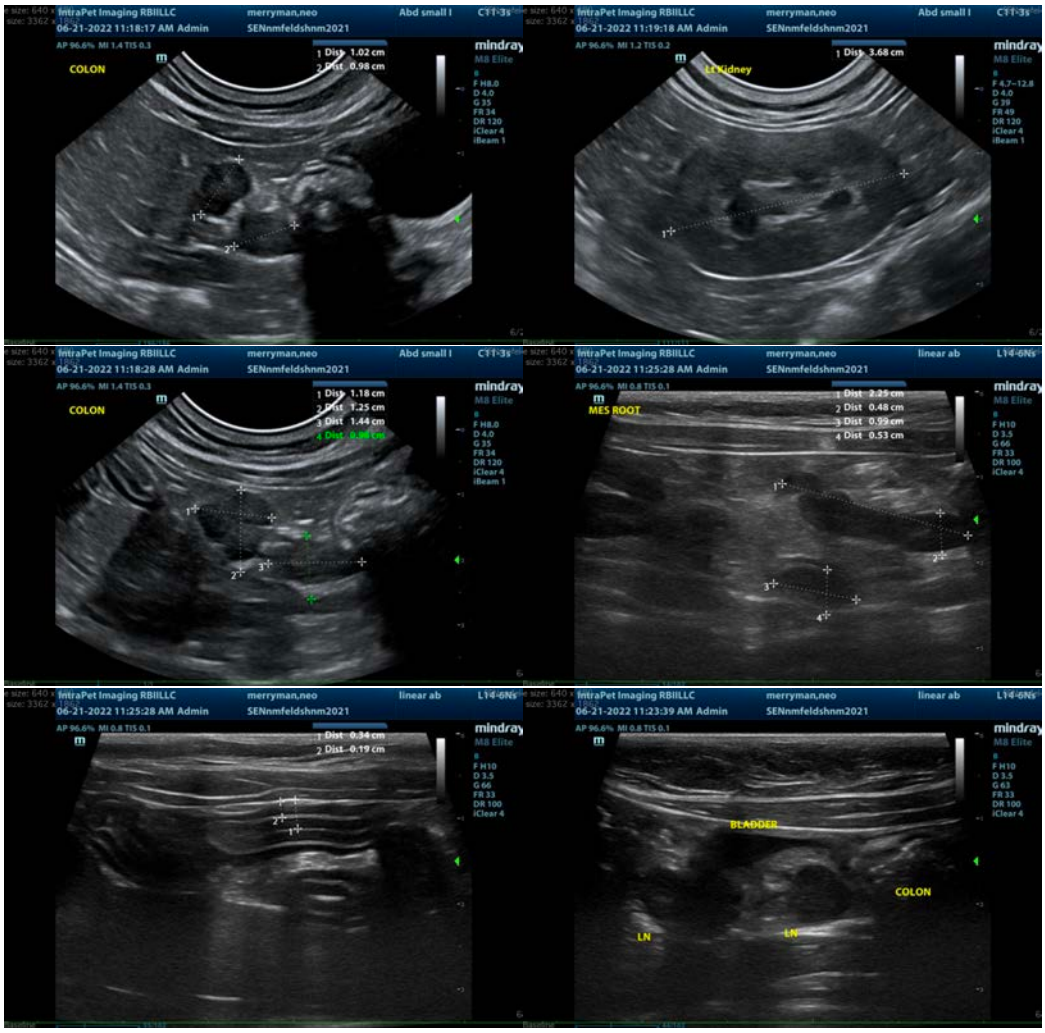
These ultrasound images provide both supportive evidence for diffuse inflammatory bowel disease as well as potentially a more aggressive infectious problem or even infiltrative neoplasia, given the appearance of the lymph nodes. Given this patient's young age, infectious disease is the top differential followed by infiltrative neoplasia.

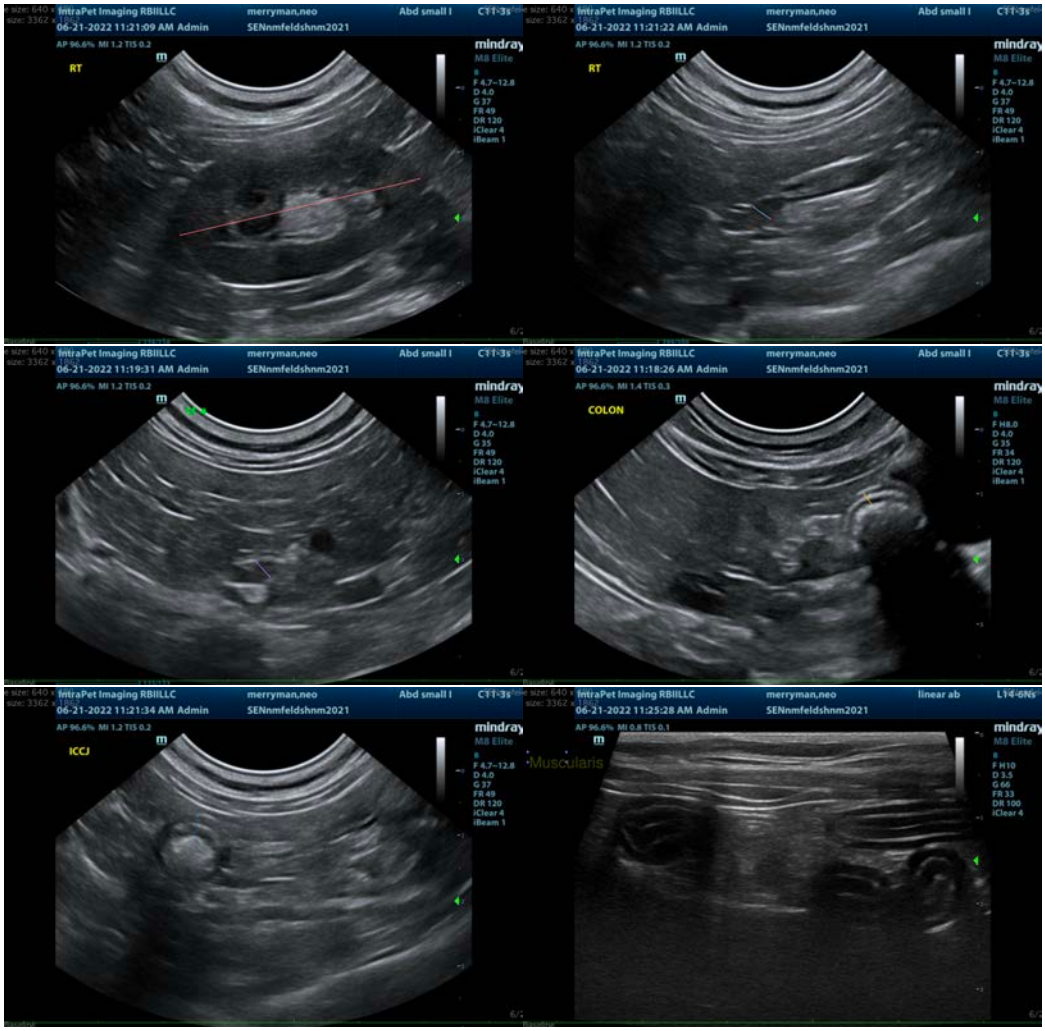
- CBC/ chemistry panel with electrolytes and urinalysis, if not recently evaluated, with special attention paid to the globulin count.
- Fine needle aspirate of the enlarged lymph nodes around the colon, if patient's coagulation status is appropriate, for further evaluation of possible infiltrative round cell neoplasia such as lymphoma.

- Pending results of cytology, further investigation for infectious disease is recommended, beginning with the reportedly already pending enteropathogenic PCR panel, followed by testing for histoplasmosis, FIP, etc.

- Ultimately, if a diagnosis is not obtained from infectious disease testing and/or cytology of the lymph nodes, biopsies of the GI tract, both upper and lower, are recommended to definitively diagnose and therefore manage the infiltrative bowel process.

- In the meantime, further empirical deworming with a 5-day course of Panacur is recommended, as is a transition to a high fiber diet or fiber supplementation of the current diet, and if no improvement there, considerations for a novel or hydrolyzed protein diet, etc., using diets on a trial and error basis.






**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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