

**DATE PRESENTING CLINICAL SIGNS**

4/18/23 Chronic diarrhea with some blood and vomiting for about 1 month. Fecal negative. GI panel- mild decrease in Folate. Diarrhea unresponsive to Metronidazole, Tylan powder, Provable, Diigel. P remains BAR. Currently trying HP trial.

PATIENT

Curie McHenry Current Medications: Cerenia 60mg SID, Trazodone 50mg 1 ½ PO PRN for sedation.
Lab Results: See attached.

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brillhart, RDMS.

BREED

Hound X

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

AGE

11/8/21

The left kidney has a normal shape and size (5.21 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

31.8 Pounds

The right kidney has a normal shape and size (5.57 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

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Adrenal Glands

The left adrenal gland is normal in size measuring 0.60 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

HOSPITAL NAME

Festival Vet Clinic

The right adrenal gland is normal in size measuring 0.61 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

REFERRING VET

Dr. Harvey

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

INVOICE

46724

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains mild to moderate fluid. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.24 cm. Duodenum wall measures 0.55 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering, but the colon appeared somewhat thickened, measuring at 0.36 cm. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is generalized colon thickening with intact wall layering observed.

Pancreas

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a diffuse mesenteric lymphadenopathy with examples of lymph nodes measuring 0.84, 1.11, and 0.72 cm. The omentum is generally of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly to moderately fluid distended stomach – Correlate with feeding/drinking history. If the patient was adequately fasted, this could be consistent with delayed gastric emptying, a partial outflow tract obstruction, etc. (none observed).
- Thickened colon – Findings could be consistent with inflammation, infection, or less likely infiltrative disease.
- Mild to moderate mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

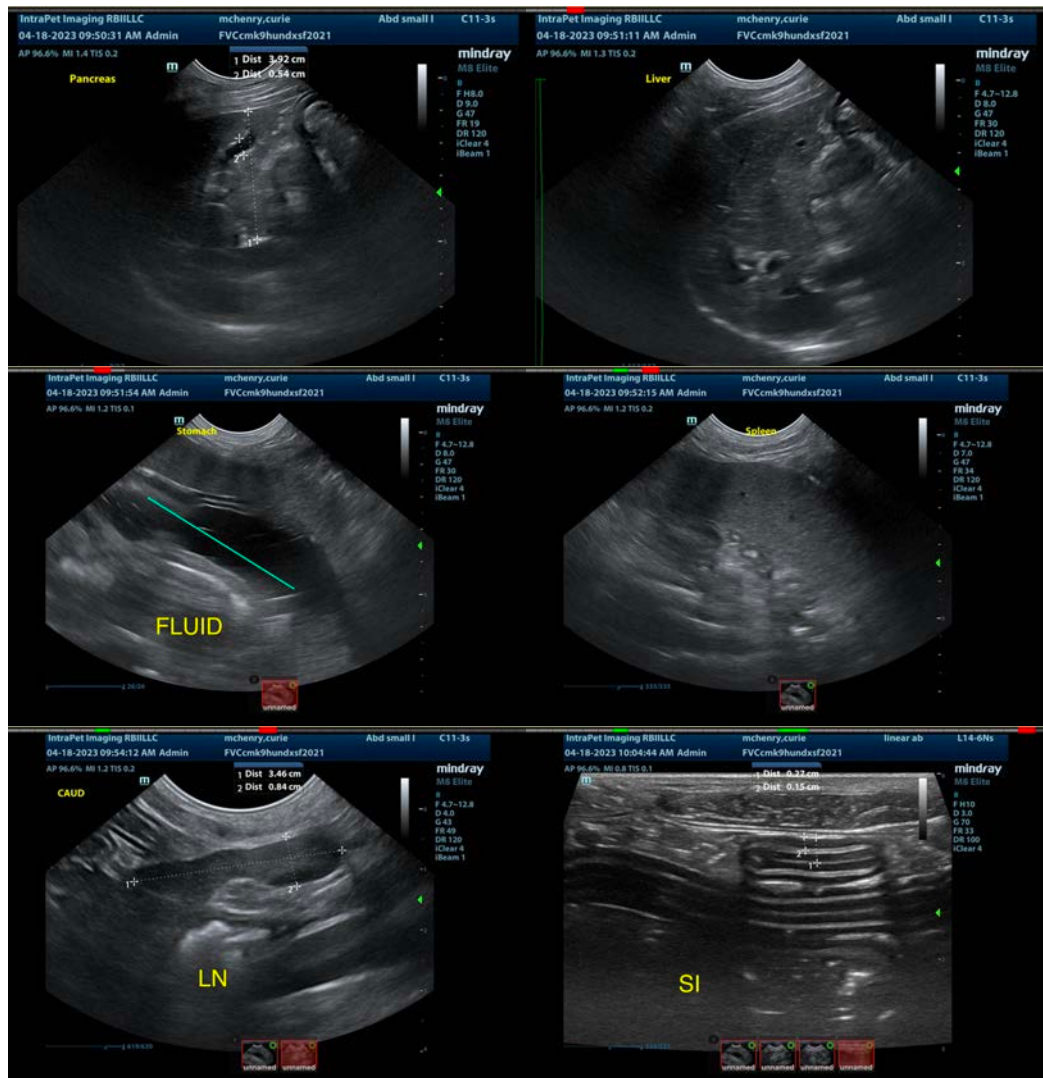
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

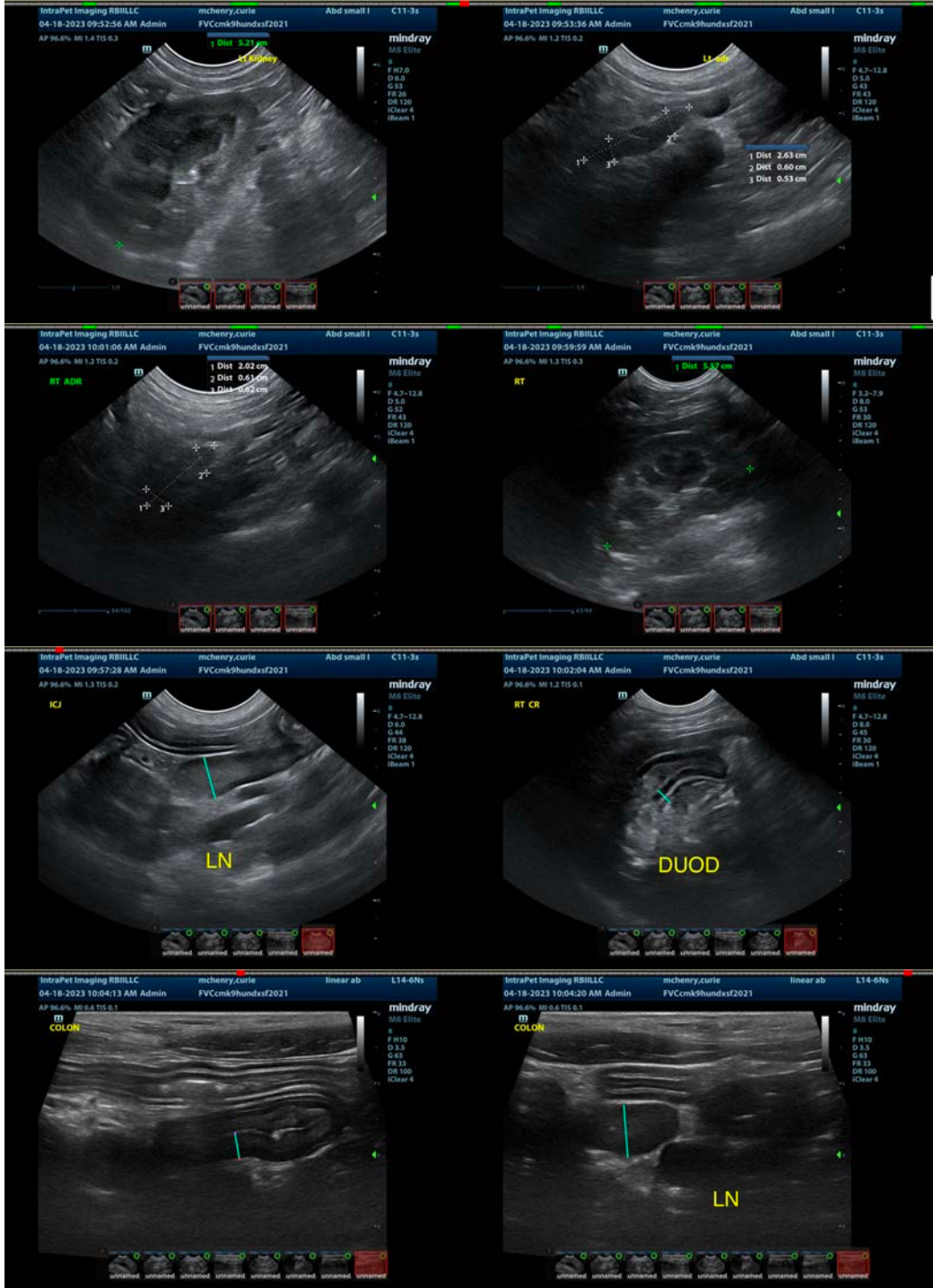
There is the general impression of slightly “ropey” small intestine and thickened large intestine. These findings are most consistent with colitis (inflammation/infection), although infiltrative disease cannot be definitively ruled out. I suspect the surrounding mesenteric lymph nodes are inflammatory, but if symptoms are persisting, you could consider a fine needle aspirate to rule out round cell neoplasia, infectious disease, etc.

In a dog this age, the most likely differentials would include dietary intolerance/food allergy, GI parasitism, dysbiosis, histiocytic colitis, chronic pancreatitis, less likely IBD or intestinal neoplasia. Consider the following:

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks). I believe a new diet has been initiated.
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease (I believe this has largely been done and supportive of possible dysbiosis).
- Recommend chronic probiotic therapy. This should likely be continued, and administration should be spaced at least two hours from any antimicrobials.

If symptoms are persisting despite taking these measures, consider obtaining biopsies with upper and lower GI endoscopy. If dysbiosis is strongly suspected, you could consider a fecal transplant. Additionally, histiocytic colitis could be a consideration. This is typically diagnosed based on colonic biopsies and ideally FISH testing on a colonic sample, looking for evidence of pathogenic E. coli.





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.

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