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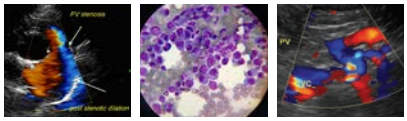

SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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DATE

3/8/22

PATIENT

Bandit Wright

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

3/25/20

WEIGHT

11.7 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Churchville VC

REFERRING VET

Dr. Kauffman

INVOICE

35986

PRESENTING CLINICAL SIGNS

P initially seen September 2021 after having diarrhea for 2 weeks. Treated with probiotic, bland diet, vitamin B12 injection, SQ fluids and stools became formed within a few days. O has since noted she never sees P drink water. Labwork performed and a persistent lymphocytosis has been identified.

Current Medications: None.
Lab Results: FELV/FIV negative (tested as a kitten ans has been indoors with no other cats since). Fecal negative 9/2021. Bloodwork 1/17/22: CBC: HCT high normal, mild-moderate lymphocytosis 9447. Chem: Mild hypercholesterolemia. UA: USG 1.036 pH 6.0, protein 1+, glucose negative, 0-2 WBCs/hpf, no bacteria. T4 WNL. CBC 2/25/22: mild-moderate lymphocytosis 9221.
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 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.

The left kidney has a normal shape and size (4.25 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.17 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.37 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.

The right adrenal gland is normal in size measuring 0.38 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.

Spleen

The spleen is subjectively normal in size (0.85 cm in height at the level of the hilus), 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.

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 primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm 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 uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.24 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibits areas of bowel with loss of normal wall layering and increased thickness. The cecum appears thickened with a wall measuring 0.41 cm. There is surrounding hyperechoic mesentery and clustered lymph nodes around the ileocecal junction.

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. Prominent pancreatic duct noted.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There is a moderate lymphadenopathy present surrounding the ileocecal junction with lymph nodes measuring 0.57, 0.58, and 0.73 cm. The omentum is of increased echogenicity around these lymph nodes.

ULTRASONOGRAPHIC FINDINGS

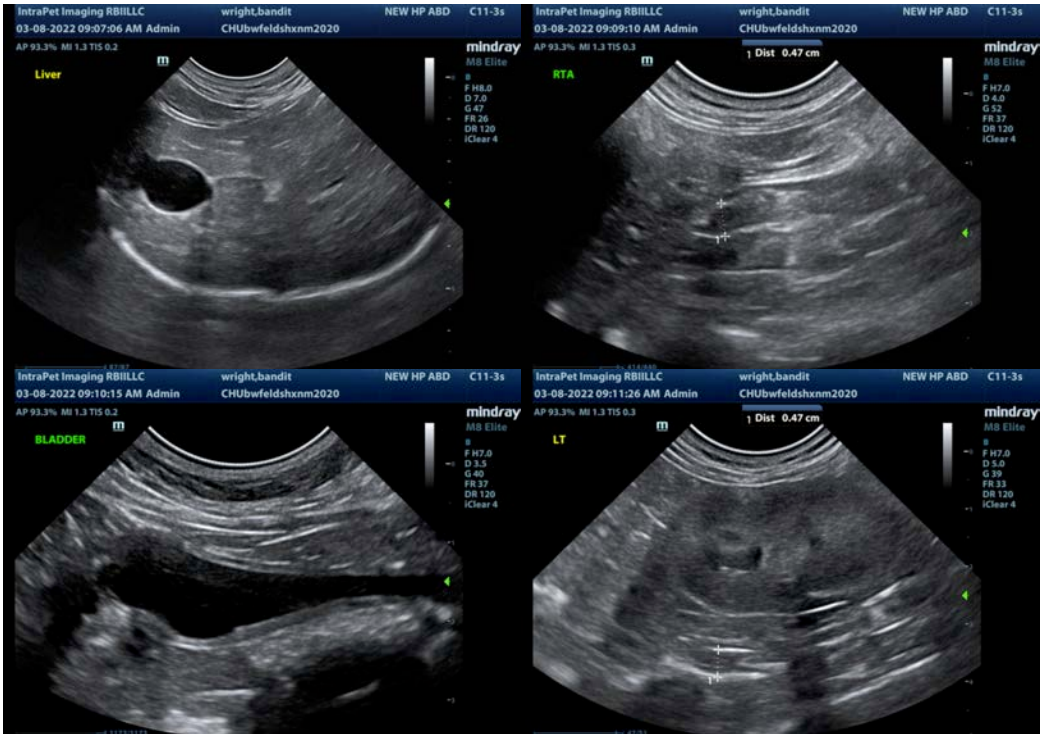
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Thickened small intestine with prominent muscularis layer – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Thickened bowel involving the ileocecal junction – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia. A reduction in the detail of wall layering favors either severe intestinal disease or neoplastic infiltration. Biopsy is recommended.
- Enlarged mesenteric lymph nodes clustered around the ileocecal junction – The moderate mesenteric lymphadenopathy could be concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease(tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

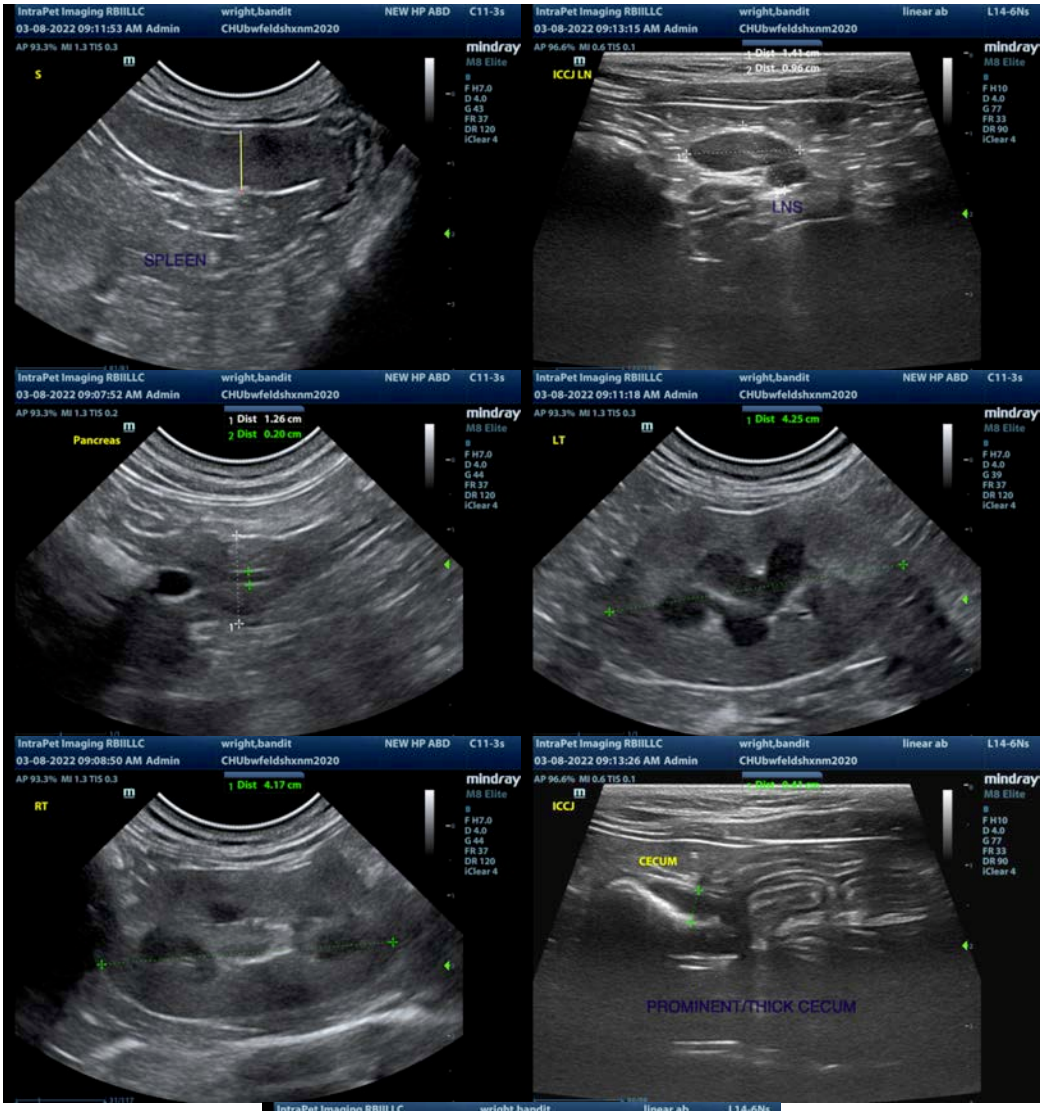
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is diffuse moderate small intestinal thickening with a prominent muscularis layer, as well as more severe bowel thickening at the level of the ileocecal junction with loss of distinct layering. The cecum is suspected to be involved in this area, but the large and small bowel could be affected as well. These findings in

combination with the mesenteric lymphadenopathy are concerning for either a severe inflammatory disease, infectious disease such as FIP, or intestinal neoplasia.

- Consider fine needle aspirate of the mesenteric lymph nodes in addition to the thickened bowel at the ileocecal junction.
- Consider GI panel with fPLI, TLI, cobalamin and folate to Texas A&M to further evaluate the pancreas and small intestine.
- Recommend screening for GI parasites and empirical treatment (if not already done).
- Recommend chronic probiotic therapy.
- Consider hydrolyzed protein or novel protein prescription diet.
- If FIP is strongly suspected based on additional symptoms such as fever, elevated globulins, etc., then consider FIP testing to the Auburn University.
- If symptoms persist, and a diagnosis cannot be made based on cytology, then consider exploratory surgery to obtain biopsies of the small bowel, mesenteric lymph nodes, and ileocecal junction.
- Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.
- Additionally, consider a pathologist review of CBC or a blood smear to ensure that the lymphocytosis is real and there are no blasts observed.

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Pancreas
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2 Dist 0.20 cm
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1 Dist 4.25 cm
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ICCJ LN
THICK BOWEL AT ICCJ

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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