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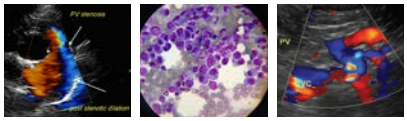

SonoPath
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DATE

1/18/22

PATIENT

Mom Cat Reinhorldt

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

10/10/11

WEIGHT

9.2 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Warm & Fuzzy Vet Clinic

REFERRING VET

Dr. Williams

INVOICE

34377

PRESENTING CLINICAL SIGNS

History: Presented 1/10/22 for vomiting, diarrhea and hyporexia for 4 days duration, has always vomited, no change in food, no new treats, stools were normal one day and then diarrhea the next. Photo shows liquidy stool, normal color. BW NSF, Rads, NSF, Urine SG 1.047 with 2+ protein, 3DX negative, not UTD on vaccines, tried SQF and probiotic and appetite stimulant and at recheck on 1/18 patient still having diarrhea, not eating well at all, has lost an additional 1.2 lbs. did another round of SQF and sent home with Cerenia 4mg po SID and Metronidazole 50mg po BID and told owner to try wet food.

Current Medications: Cerenia 4mg po SID. Metronidazole 60mg po BID Mirtazapine 3.75mg po Q48-72 hours.
Lab Results: Attached separately. Fecal with giardia pending.
Radiographs: Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
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 mild primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

The left kidney has a normal shape and size (4.08 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 (4.24 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 0.44 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 region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

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.

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 measures 0.35 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed. There is an extensive area of severely thickened small intestine with decreased distinction of wall layering. In this area, the maximal bowel wall measurement is 0.77 cm. There is hyperechoic mesentery surrounding this abnormal bowel.

The ileocecal junction was visualized with no evidence of a mass effect. For most of the visible areas of colon, the wall appears somewhat thickened and irregular, measuring approximately 0.3 cm, and the lumen is distended with liquid fecal material. There are clusters of mesenteric lymph nodes, particularly around the ileocecal junction.

Pancreas

The pancreas is prominent and hypoechoic as 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 significant mesenteric lymphadenopathy with clusters of mesenteric lymph nodes in the area of the ileocecal junction and abnormal bowel. Lymph nodes in these areas measure 0.7, 0.34, 0.54 cm. The omentum is of increased echogenicity around the clusters of abnormal lymph nodes and abnormal bowel.

PRIMARY FINDINGS

- Severely thickened small intestine with decreased detail of layering and prominent muscularis layer where evident – 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.

- Thickened, irregular colon wall – could be consistent with colitis (inflammatory or infectious) or an underlying neoplastic change.

- Clusters of prominent mesenteric lymph nodes – The moderate mesenteric lymphadenopathy is most 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.

SECONDARY FINDINGS

- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

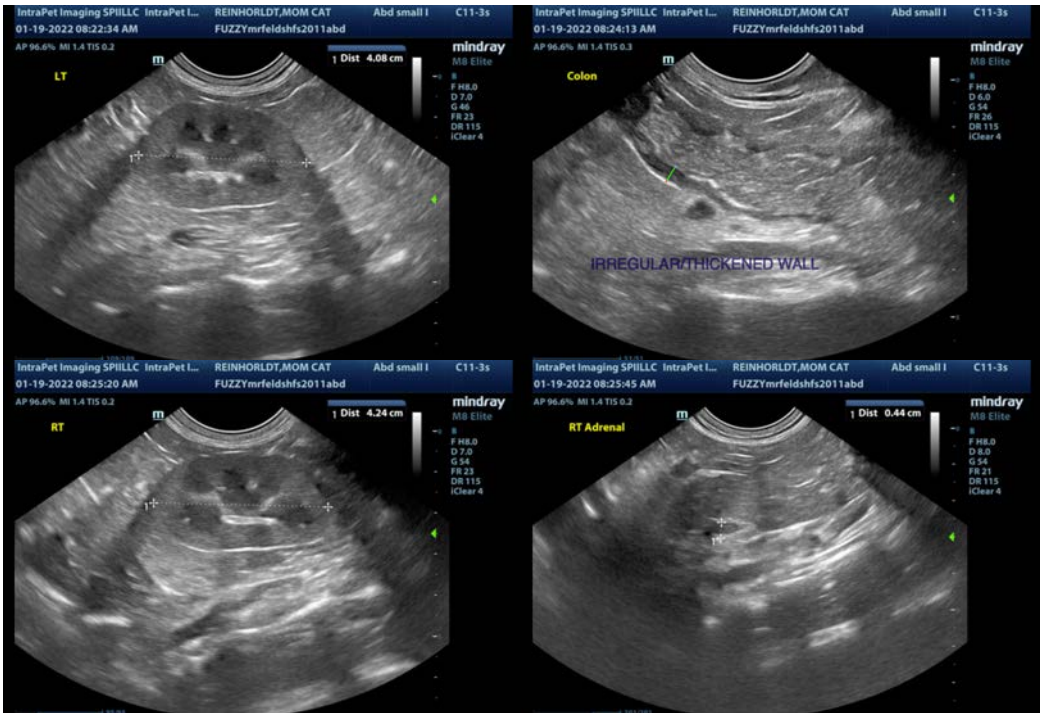
- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.

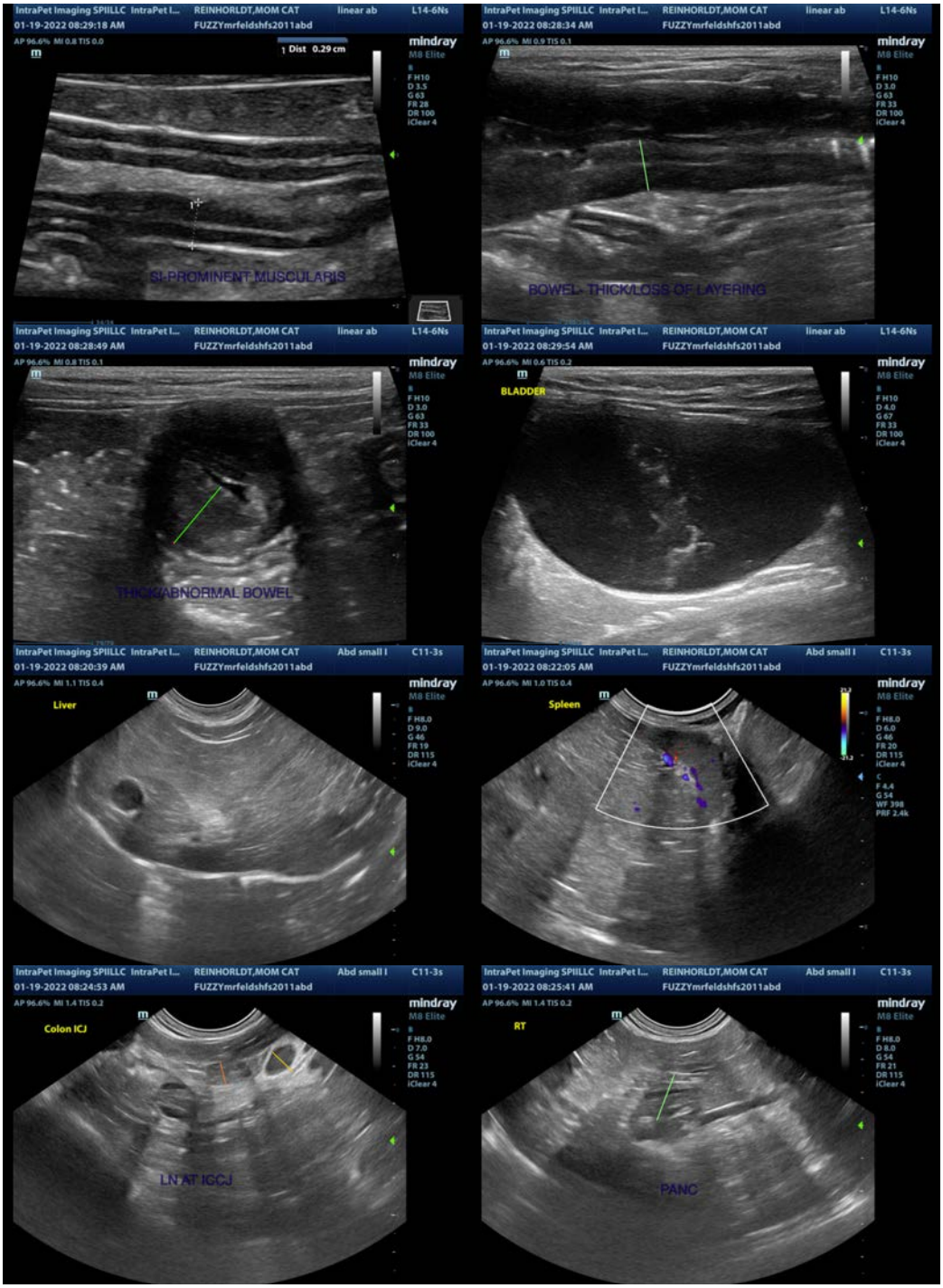
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The bowel appears diffusely abnormal, but there are some focal areas with severe thickening and loss of layering. Additionally, there are prominent mesenteric lymph nodes in these areas. Concern is high for severe enteritis/IBD as well as the possibility of infiltrative disease such as lymphoma, FIP, etc. Recommend GI biopsies to obtain a diagnosis.

- Consider fine needle aspirate of a prominent mesenteric lymph node.
- Consider GI panel with qualitative fPLI, TLI, cobalamin and folate (to Texas A&M)
- Recommend 3-view thoracic radiographs (ideally surgical with lymph node sampling as well if cytology is not diagnostic)
- Recommend urinalysis and culture due to the echogenic debris in the urinary bladder.

I suspect this a chronic progressive problem, and unfortunately there has been acute exacerbation with the diarrhea recently. This could be due to secondary dysbiosis, infection, etc., or the chronic disease has reached a tipping point where symptoms are more prominent.

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BOWEL- THICK/LOSS OF LAYERING
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Liver
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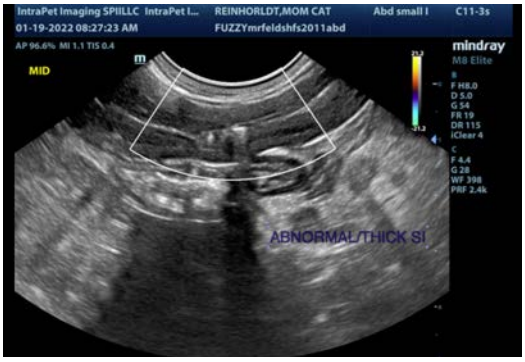

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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