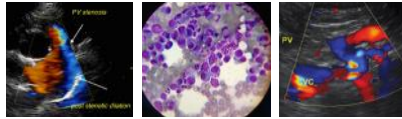
IMAGING PERFORMED BY

IntraPet.com



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DATE

8.10.2023

PATIENT

Kylie Ruskey

SPECIES

Feline

BREED

DLH

SEX

Female Spayed

AGE

8/31/2010

WEIGHT

8.3 lbs

INTERPRETED BY

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

HOSPITAL NAME

Everhart VH

REFERRING VET

Dr. Farris

INVOICE

14012

PRESENTING CLINICAL SIGNS

Acute on chronic vomiting. Pet's access to plastic like in plastic bags is limited.

Current Medications: Cerenia 16mg tablet - hard for owners to administer 8/3/2023
Cerenia Injection 10mg/mL 8/3/2023
Lab Results: senior lab-work overall unremarkable last week
Date of Previous IntraPet Ultrasound: No previous.
Sedation: DKT IM.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT

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 2 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (3.36 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 (3.47 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 (0.34 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 (0.36 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 (1.00 cm), 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 gall bladder 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 bile duct appears slightly dilated and tortuous (measuring 0.33 cm at the level of the duodenal papilla).

Gastrointestinal
The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7 cm 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. The duodenum measured as normal (0.29 cm) and the jejunum measured as normal (0.23 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 and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas
The pancreas is large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis in the left and right rim, with a prominent pancreatic duct (measuring 0.38 cm).

Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of free fluid. There are clusters of prominent lymph nodes, particularly near the mesenteric root (examples measuring 0.60, 0.49 and 0.46 cm). The omentum is hyperechoic in the region around the pancreas in the prominent mesenteric lymph nodes.

ULTRASONOGRAPHIC FINDINGS

Findings

- Prominent hypoechoic large pancreas, with prominent pancreatic duct and mildly reactive mesentery surrounding - The pancreatic changes are most consistent with (mild/mod/severe) pancreatitis/pancreatic infiltration. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.

- Mildly dilated/prominent bile duct - Dilation of the common bile duct could be consistent with a functional obstruction (i.e. primary hepatic disease resulting in hepatocellular swelling) or with an extrahepatic bile duct obstruction (ie. choledocholith, bile duct tumor, pancreatic disease, other).

- Diffusely thickened small intestine with a prominent muscularis layer – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.

- Large hypoechoic rounded mesenteric lymph nodes at the level of the mesenteric root - 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

The small intestine is diffusely thickened with a very prominent muscularis layer. These findings are concerning for a primary enteropathy. Additionally, both limbs of the pancreas are enlarged, with a prominent pancreatic duct. There is mildly reactive mesentery surrounding, possibly consistent with active mild pancreatitis or previous episodes of pancreatitis. Correlate these findings with a quantitative fPLI level. Recommend empirical treatment for pancreatitis.

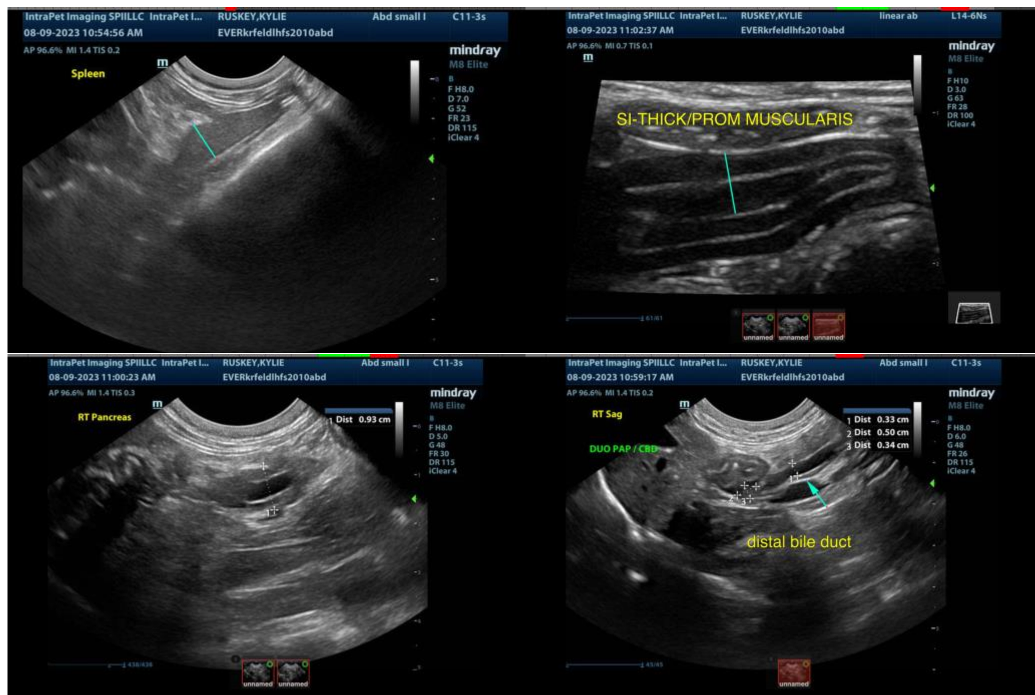
The changes observed in the small bowel are likely chronic in nature. Consider such differentials as IBD, infiltrative disease, food allergy, etc. Consider the following:

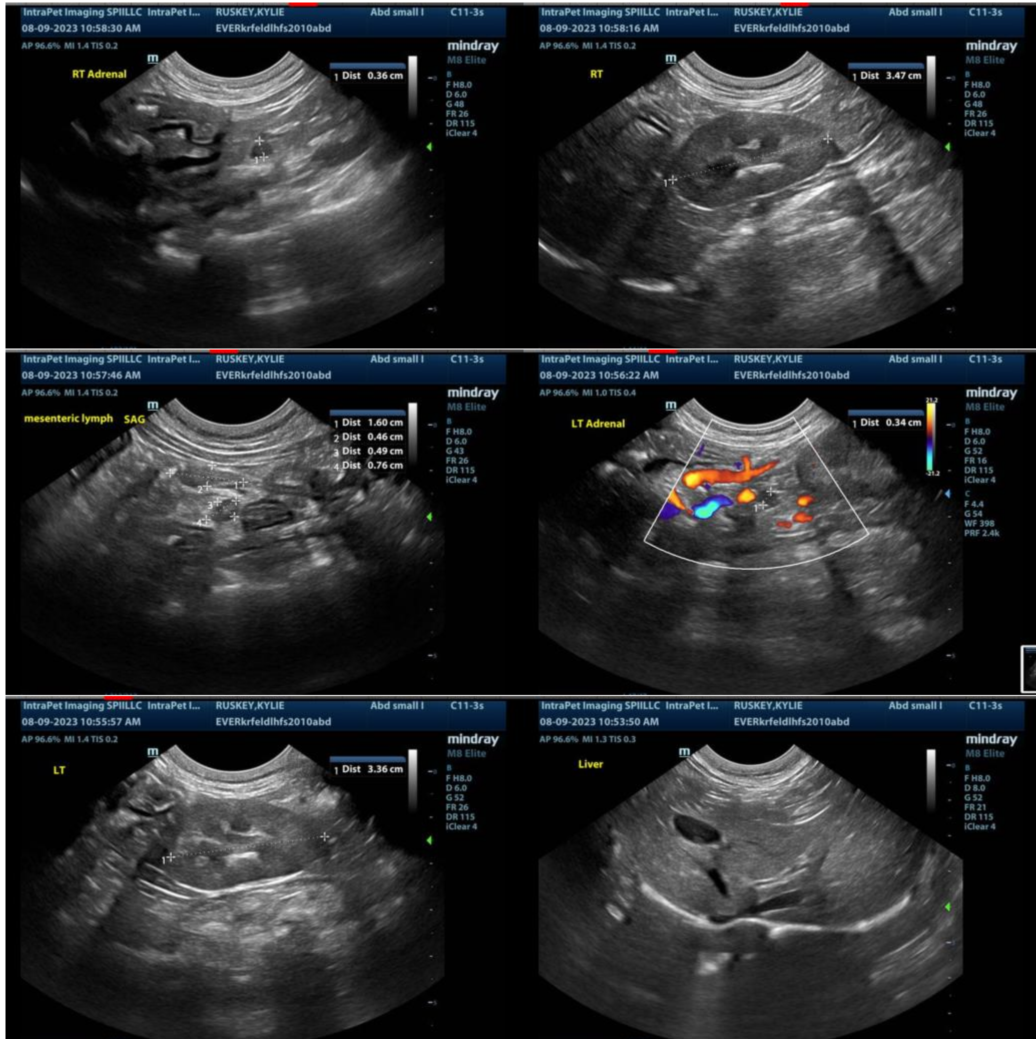
- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks).
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy
- If symptoms are persistent despite dietary changes and treatment for pancreatitis, consider obtaining GI biopsies.

The bile duct appears somewhat dilated. There are prominent duodenal papillae. The pancreatic changes combined with the small bowel changes and the prominent bile duct could be indicative of mild “"triaditis.” Correlate these findings with lab-work values.

There are some clusters of prominent mesenteric lymph nodes in the abdomen. A fine-needle aspirate could be attempted prior to obtaining GI biopsies.

Recommend three-view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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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