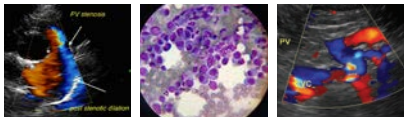
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

4/12/23

PATIENT

Raven Rivera

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12/14/15

WEIGHT

7.96 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Eldersburg Vet

REFERRING VET

Dr. Alper

INVOICE

46602

PRESENTING CLINICAL SIGNS

Pt presented for vomiting & diarrhea. pt has been on/off vomiting for a couple of weeks. pt tends to vomit her food up about 10 minutes after eating in the AM. o believes the wet food seems to be upsetting the stomach, so o has not been giving wet food for the last few days. pt has not seemed to want to eat in the AM the last few days, o believes its due to not getting wet food b/c pt likes wet food better than the dry. pt has been drinking more than normal as well. pt has also been having diarrhea for about a week. pt is not using the liter box, having both diarrhea & urination outside of box. o did notice a red tint to the diarrhea yesterday (3/19). when pt does urinate, it's only small amounts at a time for the last 10 days. o does not think pt ate anything she shouldn't of. pt did drool in the car on the way here today. pt has been slightly lethargic over the last week or so as well. no c/s, pt is indoor/outdoor.

Current Medications: None.
Radiographs: no obvious FB, obstructive pattern or masses noted. slightly mottled appearance noted just caudal to liver. splenomegaly noted on left lateral. gas dilated colon (secondary to loos stool), inflammation in SI? (IBD vs other). incidental small kidney stone (left).
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 (3.94 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.

The right kidney has a normal shape and size (3.26 cm) with a small non-obstructive nephrolith measuring 0.21 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, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.46 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 0.39 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 (0.65 cm in width 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 mild and 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 0.25 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 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. Prominent pancreatic duct noted measuring 0.22 cm.

Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other
Ringdown artifact is visualized at the level of the diaphragm. This could be an indicator of pulmonary parenchymal disease. Consider completing your set of chest radiographs with a third view.

PRIMARY FINDINGS

- Mildly echogenic debris visualized in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Hypoechoic, prominent pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Thickened/ropey small intestine with a prominent muscularis layer – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.

SECONDARY FINDINGS

- Small, non-obstructive nephrolith visualized in the right kidney – This is likely incidental.

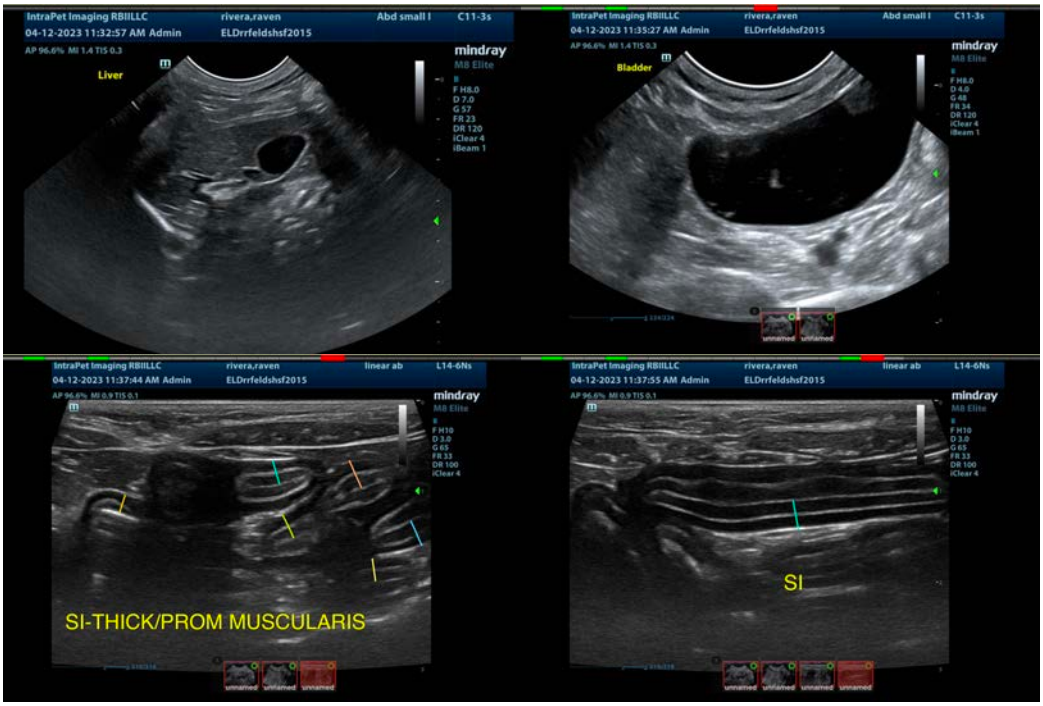
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

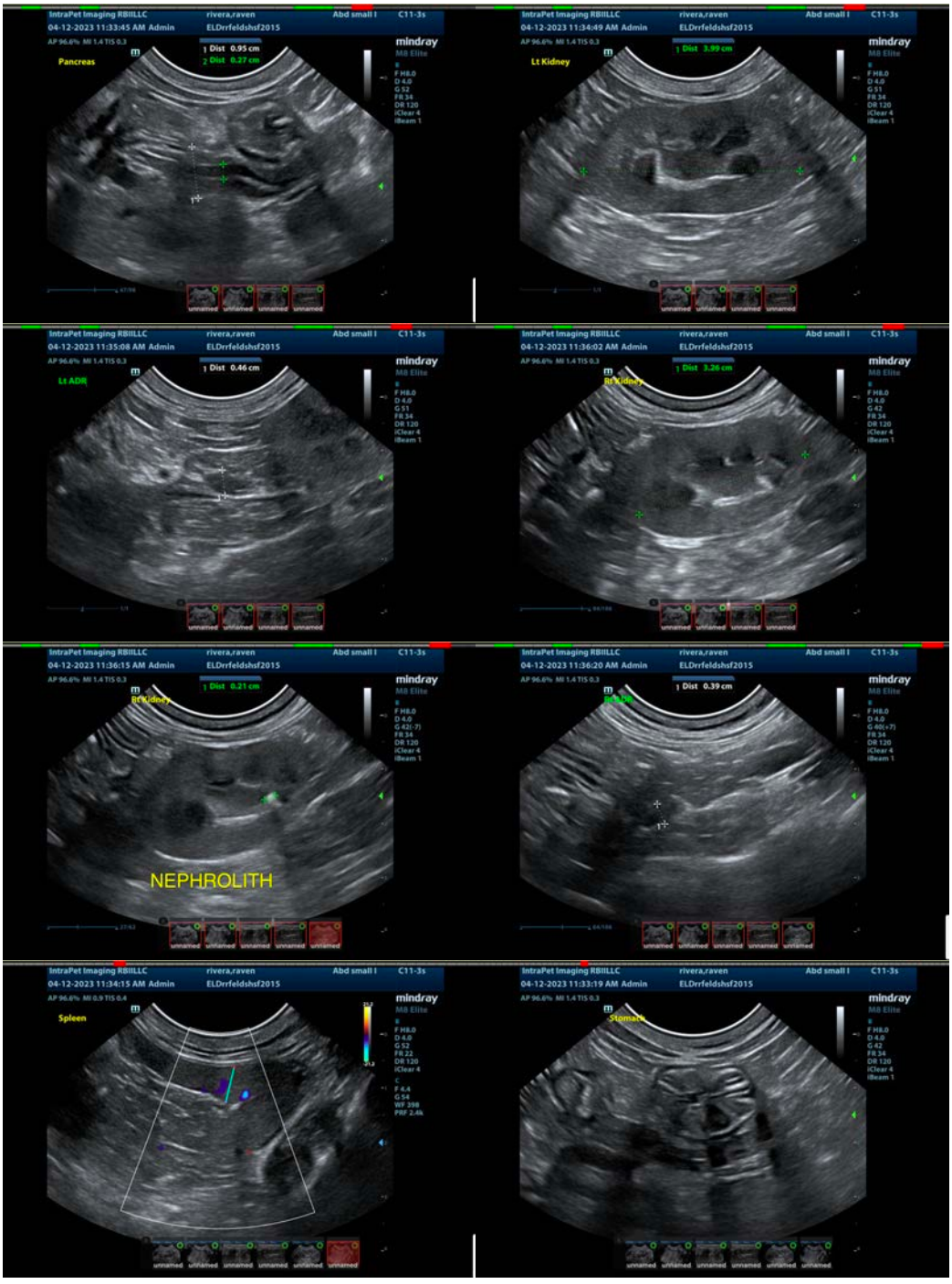
No focal lesions are visualized associated with the gastrointestinal tract to explain the GI signs reported. Provided routine lab work is normal and metabolic disease is thought unlikely, the presence of the thickened bowel and prominent muscularis could be indicative of a primary enteropathy.

Consider such differentials as food allergy/dietary intolerance, GI parasitism, pancreatitis, dysbiosis, recurrent dietary indiscretion, IBD and less likely neoplasia, etc.…

- 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 persist despite these measures, consider obtaining GI biopsies.

The pancreas is somewhat prominent with a prominent pancreatic duct. This could be an indicator of previous pancreatic inflammation or current mild inflammation. Correlate these findings with a quantitative fPLI (this is on the GI panel recommended above), and consider empirical treatment for pancreatitis.

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Pancreas
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Spleen
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Stomach

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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