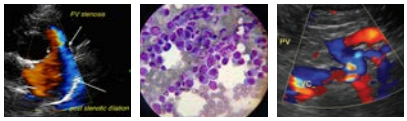
IMAGING PERFORMED BY

IntraPet.com



SonoPath

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DATE

8/31/22

PATIENT

Emerald Heckman

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

9/27/15

WEIGHT

8.75 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Stevenson Village VH

REFERRING VET

Dr. Rathbun

INVOICE

40912

PRESENTING CLINICAL SIGNS

3 month history of vomiting throughout the week that is progressively getting worse and more frequent; slightly reduced appetite. Emerald has hyperthyroidism and has been on treatment with methimazole (gets 3.75 mg in AM and 2.5 mg in PM).

Current Medications: methimazole 3.75 mg PO in AM and 2.5 mg PO in PM.
Lab Results: When Emerald first came in for the GI signs reported on 6/1/22, bloodwork showed that the T4 level was elevated again, so the dose of methimazole was adjusted from 2.5 mg, PO, BID to 3.75 mg, PO, BID, but recheck TT4 was at 0.7 ug/dL (0.8-4.7) 1 month later, so the dose was adjusted to the current dose of 3.75 mg in the AM and 2.5 mg in the PM, the recheck TT4 was at 1.3 ug/dL, but P's GI signs have not improved.
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 (3.4 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 (3.11 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.41 cm at the caudal pole. Small pinpoint mineralizations noted. 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. 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 (0.81 cm in width at 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 normal in size but slightly irregular. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. The left lobe of the liver appears slightly more hyperechoic and rounded in some images. This is most consistent with normal variation, but an indistinct mass effect cannot be ruled out. Recommend continued monitoring.

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 measured 0.23 cm. Duodenum wall measured 0.30 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.

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.

PRIMARY FINDINGS

- Prominent, thickened 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.

- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

SECONDARY FINDINGS

- Pinpoint mineralizations visualized in the left adrenal gland – This is likely an incidental finding.

- Questionable rounding of the left lobe of the liver – I suspect this is normal anatomic variation, but continued monitoring is warranted, as a mass effect cannot be completely ruled out (would be very unlikely to be causing vomiting).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

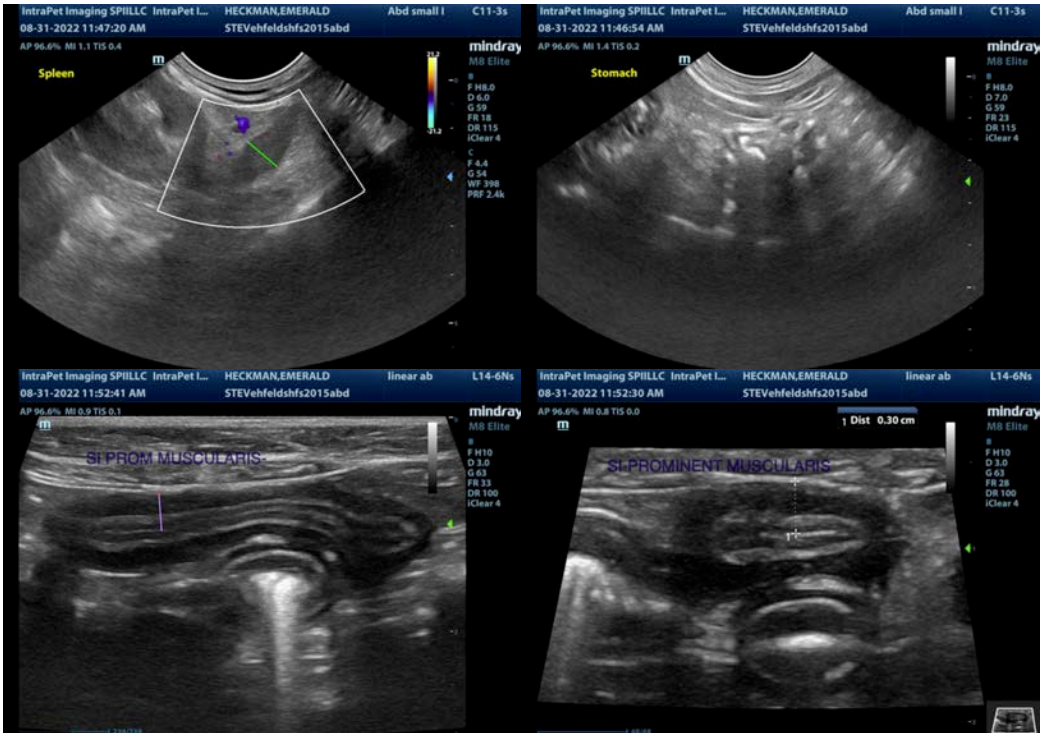
The changes observed in some sections of the small intestine are significant. There is subjective thickening of the bowel and a very prominent muscularis layer. These findings would be most consistent with primary GI disease.

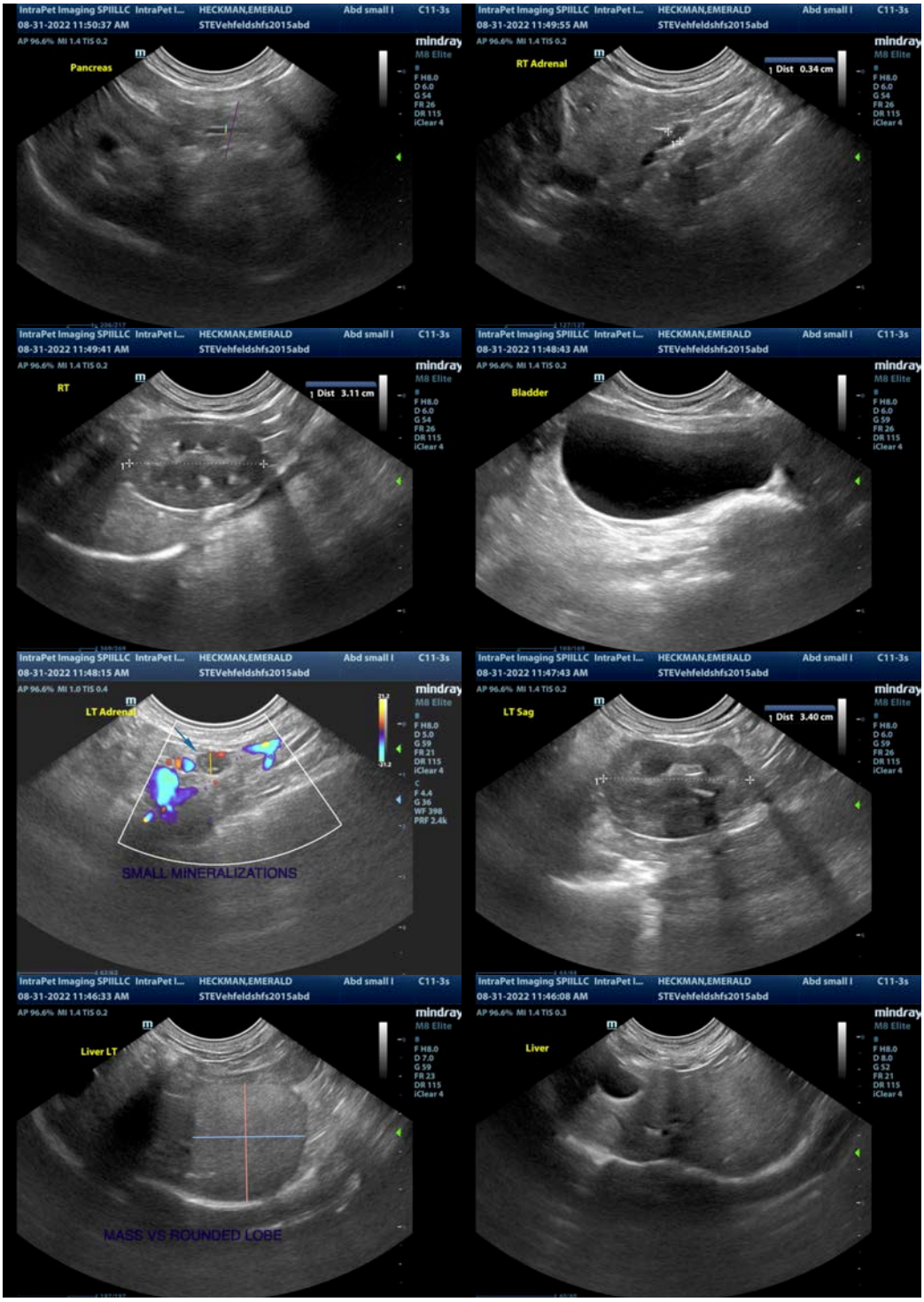
- Consider primary GI causes: Gi parasitism, dietary indiscretion, mild pancreatitis, bacterial dysbiosis, food allergy, IBD and less likely intestinal neoplasia.

In older patients with more chronic symptoms, I would most strongly consider differentials such as food allergy, IBD, and intestinal neoplasia (but also consider dysbiosis, chronic pancreatitis etc..)

- Recommend diet trial with a novel protein/hydrolyzed prescription diet
- Recommend Gi panel for evaluation of B12 levels etc.. (start empirical B12 while waiting for results)- this will provide additional information regarding possible pancreatic and small intestinal disease.
- Recommend chronic probiotic therapy.
- Consider symptomatic treatment for pancreatitis.
- If symptoms are progressing consider obtaining GI biopsies

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

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Pancreas
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RT Adrenal
Dist 0.34 cm
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RT
Dist 3.11 cm
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Bladder
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LT Adrenal
SMALL MINERALIZATIONS
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LT Sag
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08-31-2022 11:46:33 AM STEVehfeldshfs2015abd
Liver LT
MASS VS ROUNDED LOBE
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Liver
mindray
M8 Elite

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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