

**DATE PRESENTING CLINICAL SIGNS**

10/15/21 Patient has had a history of Vomiting and GI Upset since 2018. He is on Heska immunotherapy allergy injections monthly. This week he has had loose/liquid diarrhea which is green in color.

**PATIENT**

Milo Kellner Current Medications: Heska Immunotherapy injections-1ML SQ Monthly since 2016. Flagyl 50MG- 1 Tablet PO SID. Propectalin Anti Diarrhea Gel- 1CC PO TID.

Benebac- 1ML PO BI

**SPECIES**

Feline

Lab Results: attached - 10/13/21- Lab work- Creat-0.6. Fecal- negative.

Radiographs: Attached

Date of Previous IntraPet Ultrasound: No previous

Sedation: not needed

Stat Report: not requested

**BREED**

DSH

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Neutered Male

**Urinary System**

The urinary bladder is minimally 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. Lack of urine distention hinders evaluation of the urinary bladder.

**AGE**

2004

The left kidney has a normal shape and size (4.68 cm). Overall echogenicity is slightly hyperechoic with poor 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.

**WEIGHT**

8.4 Pounds

The right kidney has a normal shape and size (4.63 cm). Overall echogenicity is slightly hyperechoic with poor 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.

**INTERPRETED BY**

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

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

**HOSPITAL NAME**

Animal Emergency  
Hospital

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 borderline large in size measuring 1.0 cm (normal is <1.0 cm). The spleen echotexture is mildly heterogenous and mottled, 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.

**REFERRING VET**

Dr. Garrett

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**INVOICE**

26339

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. Duodenum wall measured 0.43 cm. Jejunum wall measured 0.31 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. Dilated pancreatic duct is noted at 0.38 cm.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. Mild mesenteric lymphadenopathy noted. Mesenteric lymph nodes measured 0.56 and 0.57 cm. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum appears generally increased in echogenicity.

## **PRIMARY FINDINGS**

- Prominent muscularis layer of the small intestine – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

## **SECONDARY FINDINGS**

- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

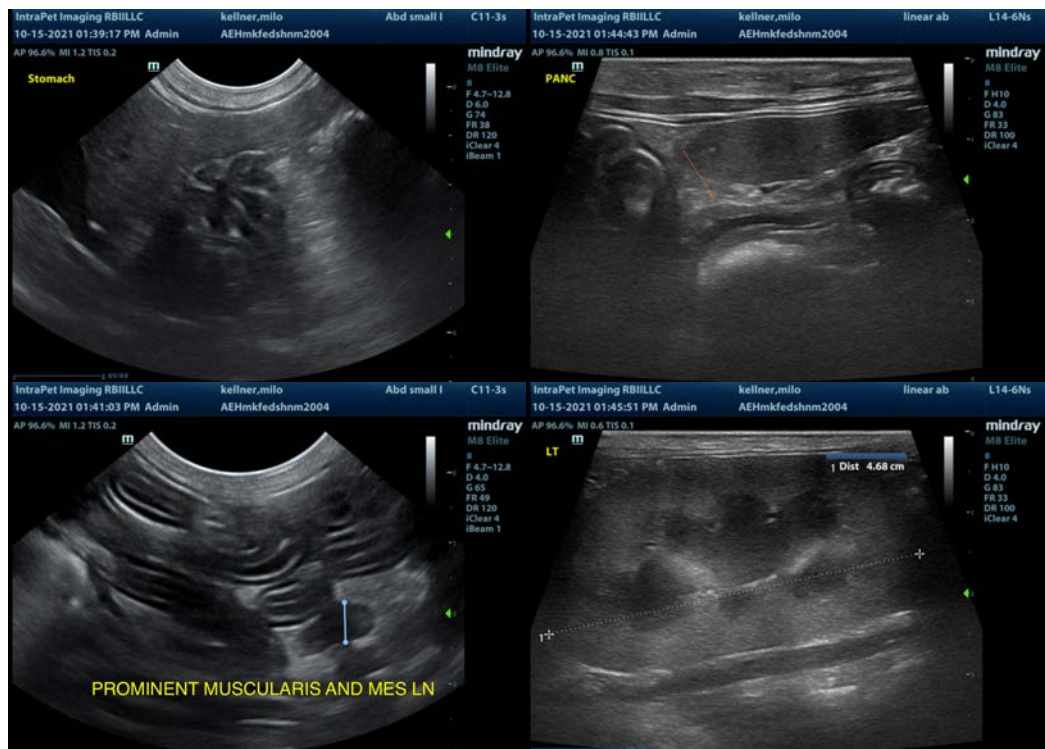
The bowel appears somewhat ropey and thickened, and there are prominent mesenteric lymph nodes. These findings are suggestive of underlying gastrointestinal issue causing the vomiting reported. Recommend GI

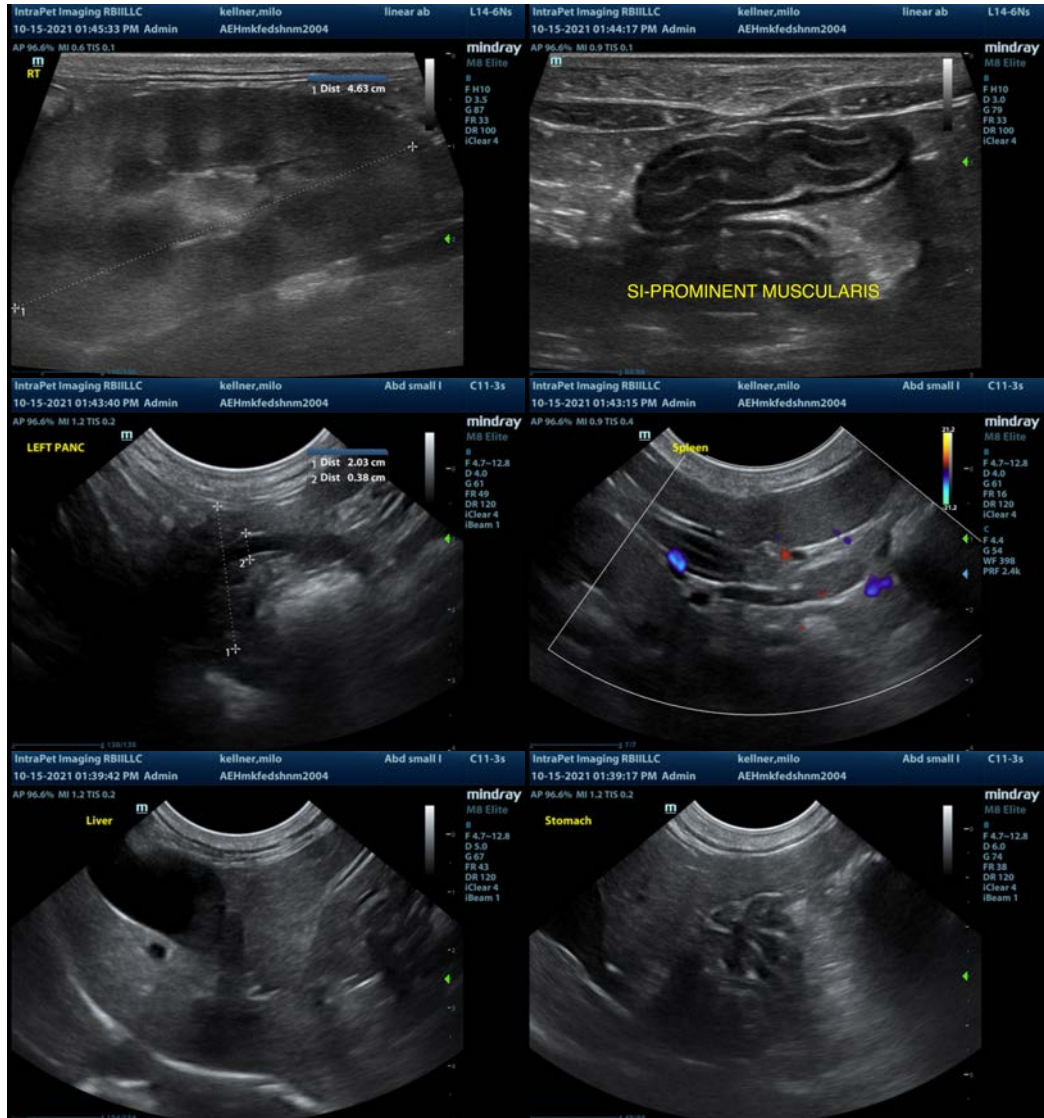
panel through Texas A&M for quantitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine. If not already done, recommend metabolic workup for causes of GI signs including a thyroid evaluation. If metabolic workup is relatively normal, then primary gastrointestinal disease is most likely.

In older patients with more chronic symptoms, I would most strongly consider food allergy, IBD, and intestinal neoplasia.

- 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)
- Recommend starting a probiotic
- If symptoms are progressing consider obtaining GI biopsies

Additionally, the spleen and liver are somewhat mottled/heterogeneous. In light of normal liver values on bloodwork, this may be an age related change. This could consider fine needle aspirate of the liver and spleen if round cell neoplasia is suspected.





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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