

**DATE PRESENTING CLINICAL SIGNS**

6/15/22

Presented for senior annual-weight loss, Pu/PD, normal appetite, intermittent chronic vomiting; indoor/outdoor cat; Examination: Cachexia, weight loss, prolonged skin tent. Nov. 2021: presented for ADR after being missing for 1-2 days; indoor/outdoor cat; flea indication- treated with Bravecto; anemia on CBC; treated with Prednisone/Doxycycline trial

**PATIENT**

Gray 2 Evergates

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

5/7/09

**WEIGHT**

7.25 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**

Airpark AH

**REFERRING VET**

Dr. Marciszewski

**INVOICE**

38731

Current Medications: None.

Lab Results: November 2021: Mild anemia, FELV/FIV negative; USG 1.040, hematuria, cocci +rods (non clinical for FLUTD)- sample via cystocentesis. June 2022: Anemia, SDMA 22, Creatinine 2.5; BUN WNL; pro BNP 233, TT4 + FT4 WNL; FELV/FIV negative

Radiographs: (Nov-21): unremarkable study.

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 (3.97 cm) with mild pyelectasia at 0.32 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 nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.77 cm) with mild pyelectasia at 0.24 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 nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.36 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 0.40 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, 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 measured 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 at 0.29 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.

## **ULTRASONOGRAPHIC FINDINGS**

- Moderate small intestinal thickening with a prominent muscularis layer – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Decreased corticomedullary distinction in both kidneys with mild pyelectasia – The bilateral renal findings are consistent with age-related change. Pyelectasia of the left/right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.
- 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.

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

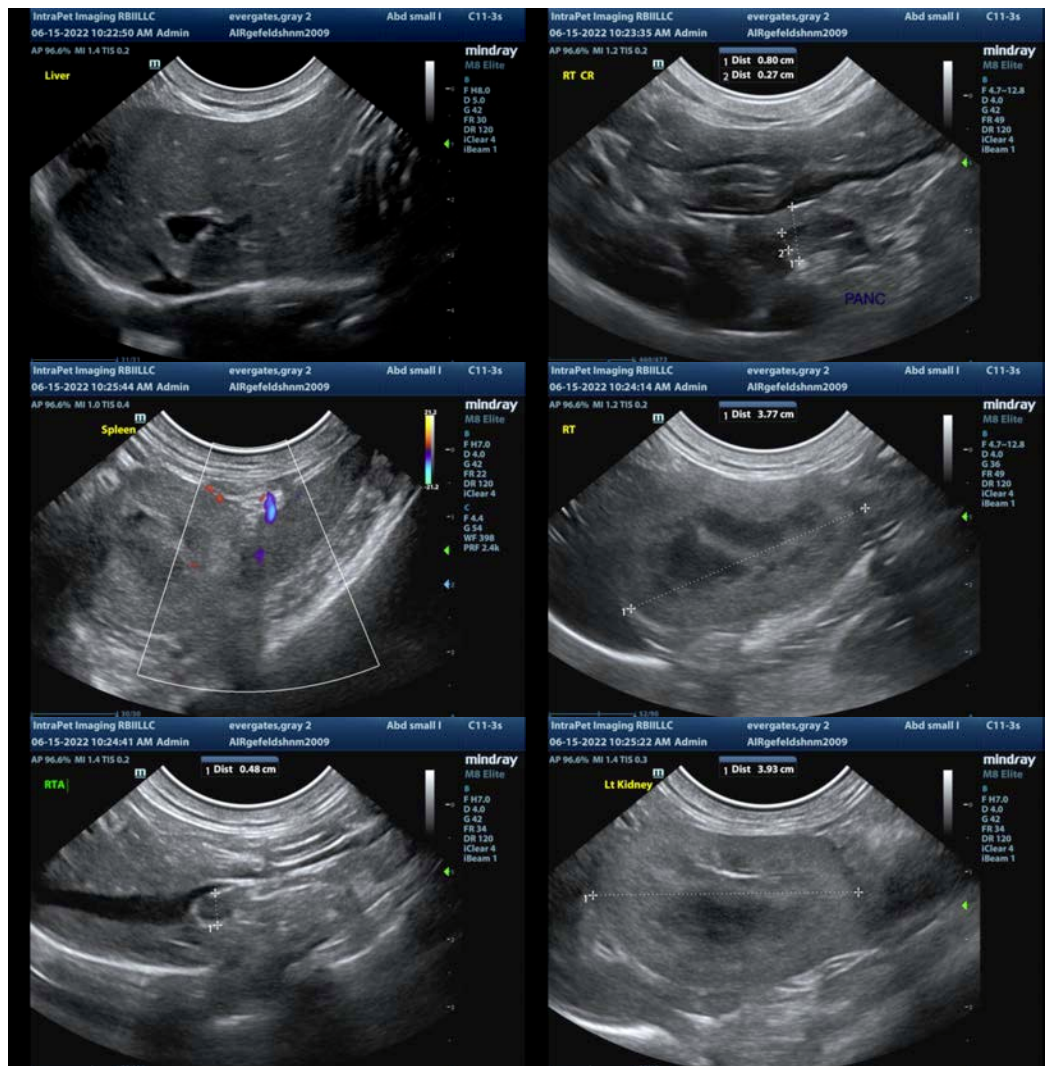
The small intestine appears thickened and prominent. Additionally, there is a prominent muscularis layer. Based on the history reported, I suspect there could be some element of small intestinal disease present.

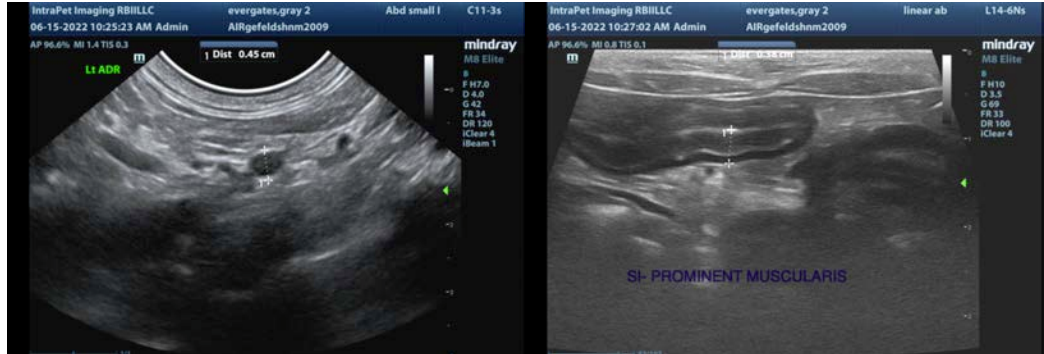
- Consider a novel protein/hydrolyzed protein prescription diet.
- Consider GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.

- Recommend chronic probiotic therapy.
- If symptoms are not improving, recommend GI biopsies, as this may be necessary to further define and treat this appropriately.

The pancreatic changes are relatively mild. If the fPLI is elevated, then consider symptomatic treatment for mild pancreatitis. The renal changes are consistent with chronic renal disease. Consider a urinalysis, culture and blood pressure.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





**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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