

**DATE PRESENTING CLINICAL SIGNS**

9/10/21 History: Unknown cause of diarrhea and weight loss, WNL blood work with elevated muscle enzymes.  
Current Medications: N/A

**PATIENT** Date of Previous IntraPet Ultrasound: No previous  
Pia Young Sedation: Not needed.  
Stat Report: Not requested.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

2007

**WEIGHT**

6 Pounds

**INTERPRETED BY**

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

**HOSPITAL NAME**

Aberdeen Vet Clinic

**REFERRING VET**

Dr. Fritz

**INVOICE**

25327

**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 (3.6 cm) with mild pyelectasia of 0.16 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 (3.68 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.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.32 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 0.35 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 0.17, 0.22 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. \*\*Sonographer notes atypical location of the ileocecal junction, possibly indicating a short colon.

### ***Pancreas***

The pancreas is normal and isoechoic to surrounding 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. There is a mild lymphadenomegaly present. Mesenteric lymph nodes measured 0.85 cm, 0.6 cm, and 0.44 cm. The omentum is of normal uniform echogenicity.

## **PRIMARY FINDINGS**

- Prominent muscularis layer to 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. This is mild and noted in some areas.
- Decreased corticomedullary distinction in both kidneys with mild left-sided pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## **SECONDARY FINDINGS**

- Mildly echogenic urine in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Subjectively shortened colon – This could be due to anatomic variation.

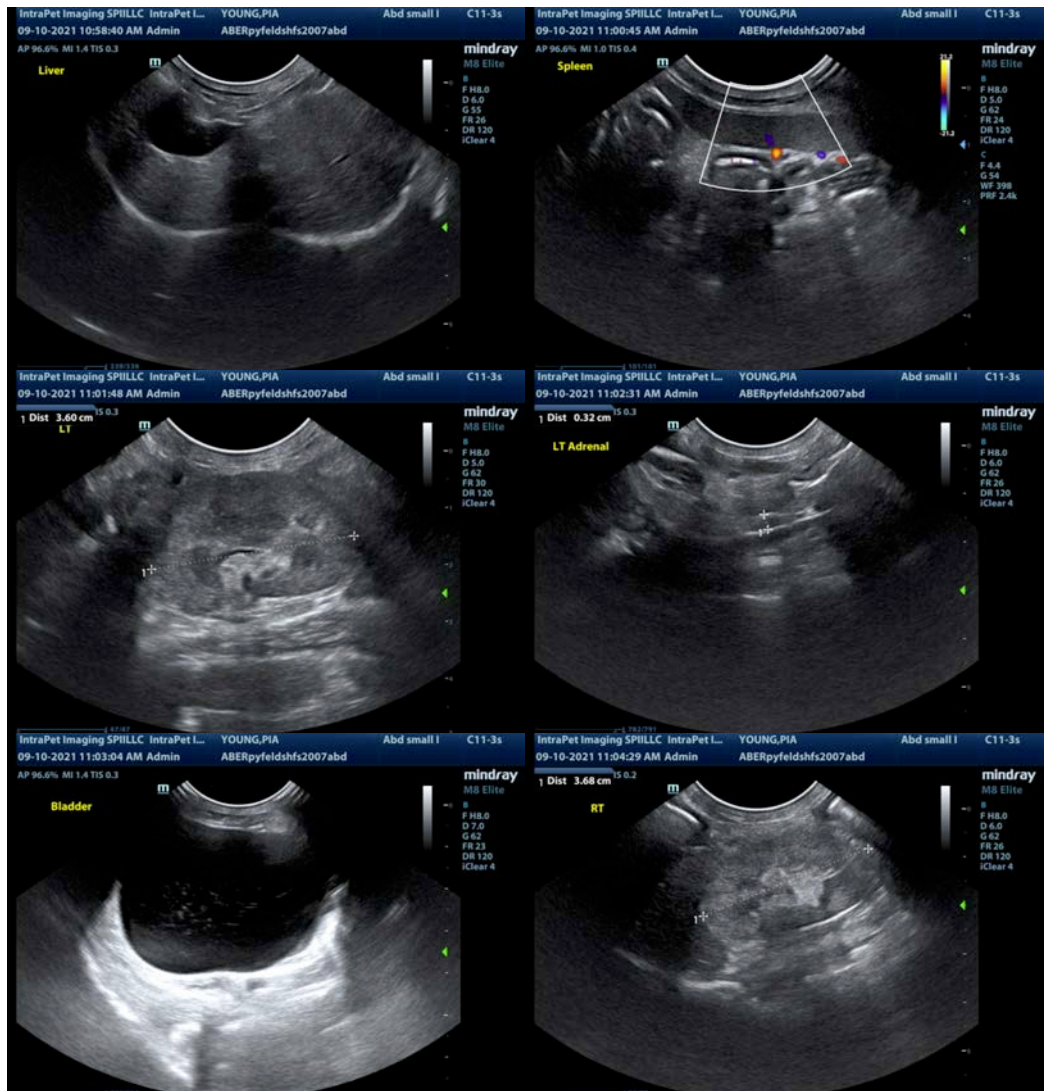
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

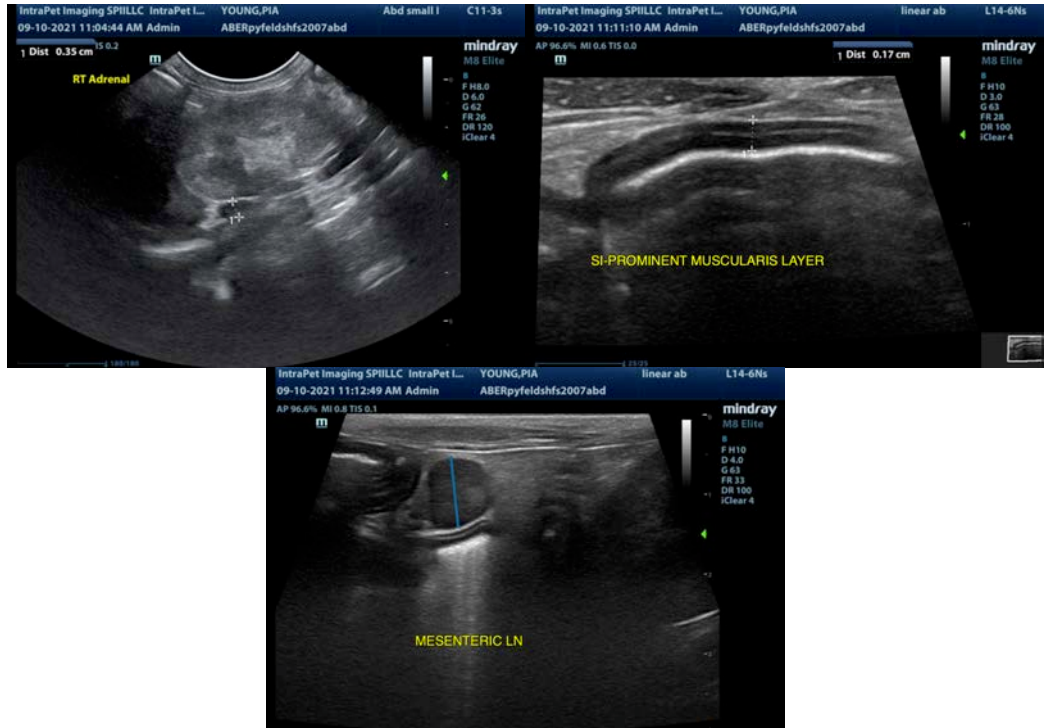
The lesions observed on today's scan were relatively mild for this age of a cat, and can very well be within normal limits. The mesenteric lymph nodes are prominent, and a fine needle aspirate could be considered. Additionally, in some areas of small intestine the muscularis is prominent. This can be a normal finding in some older cats, but considering the history of diarrhea, I recommend a GI panel with a quantitative fPLI, B12 and folate level to further evaluate the pancreas and small intestine. Your initial workup makes metabolic causes of diarrhea much less likely, so consider primary causes such as GI parasitism, mild pancreatitis, bacterial dysbiosis, food allergy, and less likely intestinal neoplasia.

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)
- If symptoms are progressing consider obtaining GI biopsies

The sonographer notes a possible short colon. This can be seen as a congenital change in some pets, and is often asymptomatic. It could contribute to the likelihood of diarrhea due to reduced ability to absorb water from the feces, but large bowel disease should not cause weight loss.





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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