

**DATE PRESENTING CLINICAL SIGNS**

4/4/23

Intermittent history of diarrhea since January, 2023. Fecal at that time revealed no parasites but did come back with a positive giardia Ag. Treated with metronidazole and panacur at that time. Diarrhea persisted after meds finished, fecal came back completely negative 1-2 weeks later. Continued on probiotic, intermittent diarrhea persisted. Switched to tylosin powder. Continued to have intermittent diarrhea. At Urgent Care for vomiting and diarrhea on 3/14/23 tested positive for Feline Coronavirus (negative fecal). Switched to EN recently. Frequent ocular discharge- diagnosed with chlamydia, calicivirus, herpes, and mycoplasma in 12/2022 and treated with doxy and famcyclovir.

**PATIENT**

Harrison Dean

**SPECIES**

Feline

Current Medications: Previous: metronidazole, tylosin (no longer taking)

Current: Lysine chews daily, Provable daily

**BREED**

Sphynx

Lab Results: 12/22/22: UR PCR-Chlamydia felis PCR- positive

Feline Calicivirus PCR- positive, Feline Herpesvirus 1 PCR- positive

Quantity: 8,000, Fold Difference from Cutoff: 53.46, Mycoplasma felis PCR- positive. 12/26/22: pre neuter bloodwork- CHEM: low creat 0.4, elevated ALKP 139, PCV: 38%, 38%, 38%, 37%, TS: 8.2

**SEX**

Neutered Male

Fecal 1/4/23: No parasites seen, giardia Ag positive- treated with metronidazole and panacur. Fecal 1/11/23: No parasites seen, Ag negative. 3/14/23: Negative Ag fecal, Feline Coronavirus PCR positive

GI profile to Texas pending

Date of Previous IntraPet Ultrasound: No previous.

**AGE**

5/21/22

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

**WEIGHT**

6.2 Pounds

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****INTERPRETED BY**

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

**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 (3.65 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.

**HOSPITAL NAME**

Perry Hall AH

The right kidney has a normal shape and size (3.54 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.

**REFERRING VET**

Dr. Breidenbaugh

**Adrenal Glands****INVOICE**

46368

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 0.32 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 (0.79 cm), 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. Duodenum wall measures 0.35 cm. Jejunum wall measures 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***

There is a scant amount of free abdominal fluid. There are moderately enlarged mesenteric lymph nodes visualized at the root of the mesentery, measuring 1.13, 0.78, and 0.51 cm in diameter. The omentum is generally of normal echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Subjectively thickened small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).
- Moderate mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

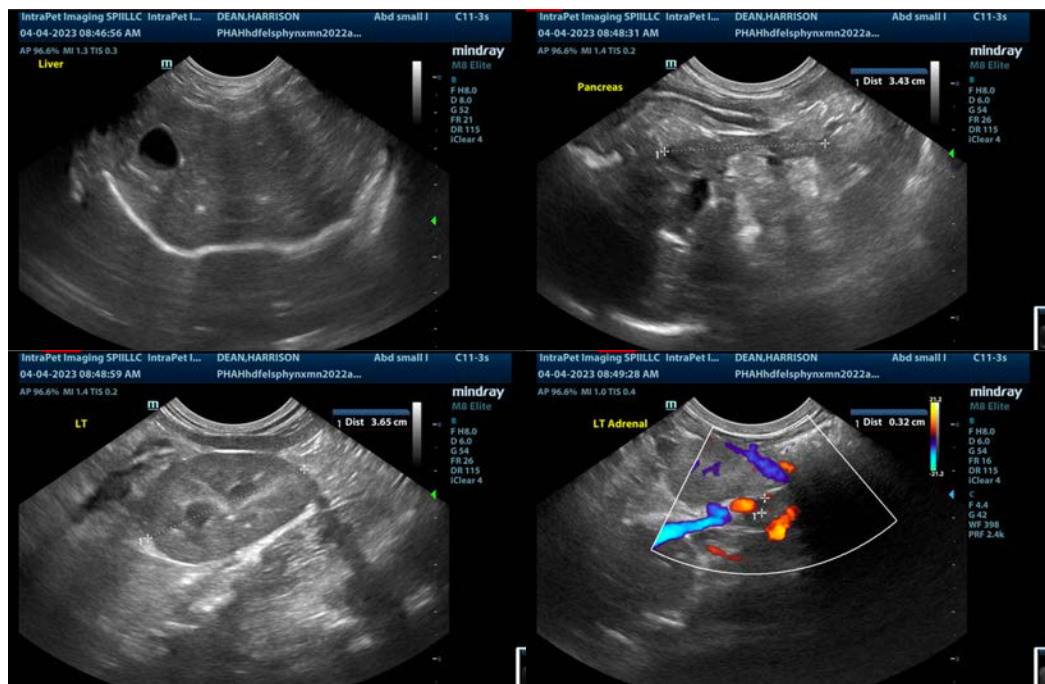
No focal lesions are visualized on today's exam to explain the chronic diarrhea reported. The pancreas does appear somewhat prominent. Correlate these findings with a quantitative fPLI level, as these changes could be consistent with previous episodes of inflammation or mild current inflammation.

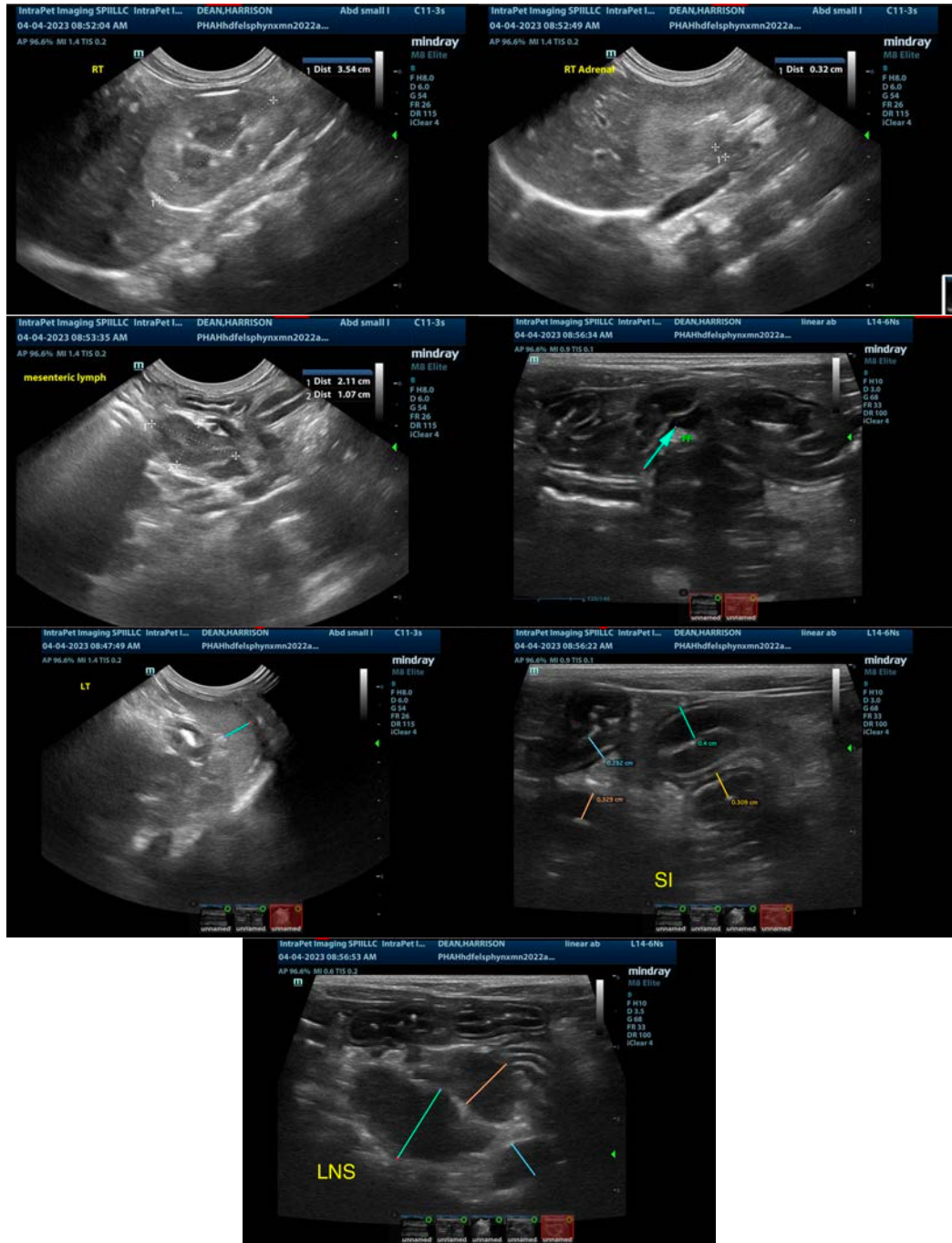
Additionally, the small bowel appears subjectively thickened. This is a somewhat non-specific finding. Additionally, there are prominent mesenteric lymph nodes. This can be a common finding in some younger normal animals, and is most likely consistent with reactive lymph nodes, although a fine needle aspirate could be considered.

The most common differentials for chronic diarrhea in a very young cat would include food allergy/dietary intolerance, chronic pancreatitis, dysbiosis, GI parasitism, possibly infectious disease, less likely IBD or neoplasia. Consider the following:

- 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. (I believe this is currently pending)
- Recommend chronic probiotic therapy.
- If dysbiosis is strongly suspected and there is minimal response to probiotics, you could consider a fecal transplant.

If there is no response to treatment and symptoms are persisting, you could consider a fine needle aspirate of a mesenteric lymph node.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
 kathleen.sennello@sonopath.com