

**DATE PRESENTING CLINICAL SIGNS**

1/31/23

Poppy was first seen on 1/11/2023 for an exam and vaccines. She had an history of ongoing, uncontrollable diarrhea since 10/7/2021. Her previous veterinarian started Poppy on Purina ProPlan Vet. Diet HA at that time. She has continued to eat the HA diet and will also occasionally be fed canned EN. The frequency of her diarrhea has decreased slightly since being on that diet, however, the consistency of her stool is still liquid. On physical exam Poppy had a BCS of 3/9. Otherwise, her PE was unremarkable.

**PATIENT**

Poppy Hodshon

**SPECIES**

Feline

Current Medications: Metronidazole and probiotics were prescribed for 14 days starting 3/5/2022 with no effect.

Lab Results: Feline GI Parasite PCR Panel, Feline GI (infectious) Panel, Folate, Cobalamin and TLI all negative/normal.

**BREED**

DSH

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System****AGE**

9/22/19

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.

**WEIGHT**

5.3 Pounds

The left kidney has a normal shape and size (3.16 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.

**INTERPRETED BY**

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

The right kidney has a normal shape and size (3.56 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**

Bel Air Vet Hospital

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.56 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.

**REFERRING VET**

Dr. Young

The right adrenal gland is normal in size measuring 0.37 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.

**INVOICE**

44621

**Spleen**

The spleen is subjectively normal in size (0.56 cm in width at the level of 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 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. Jejunum wall measures 0.24 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 mottled 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.

## **ULTRASONOGRAPHIC FINDINGS**

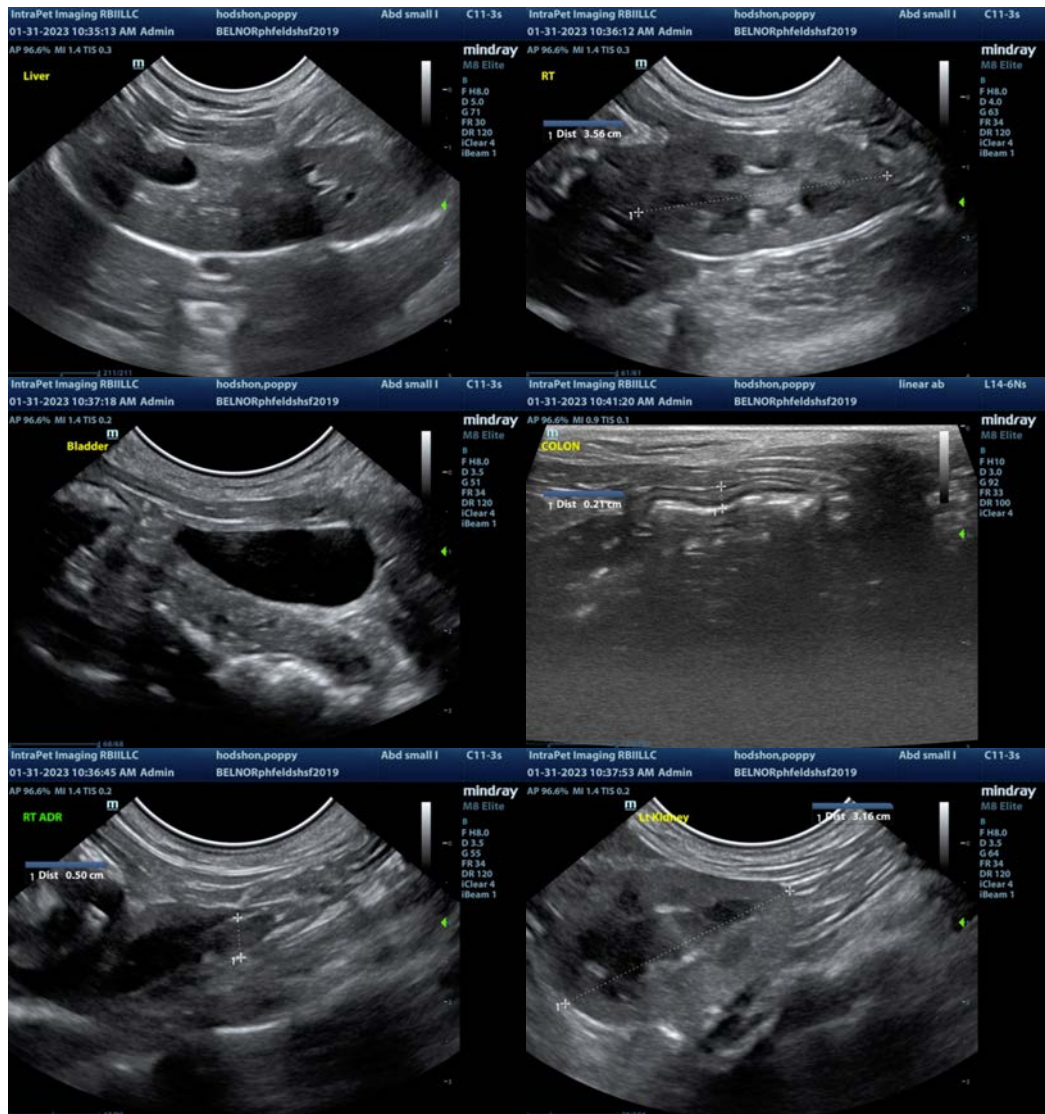
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Mildly prominent muscularis layer of the small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.

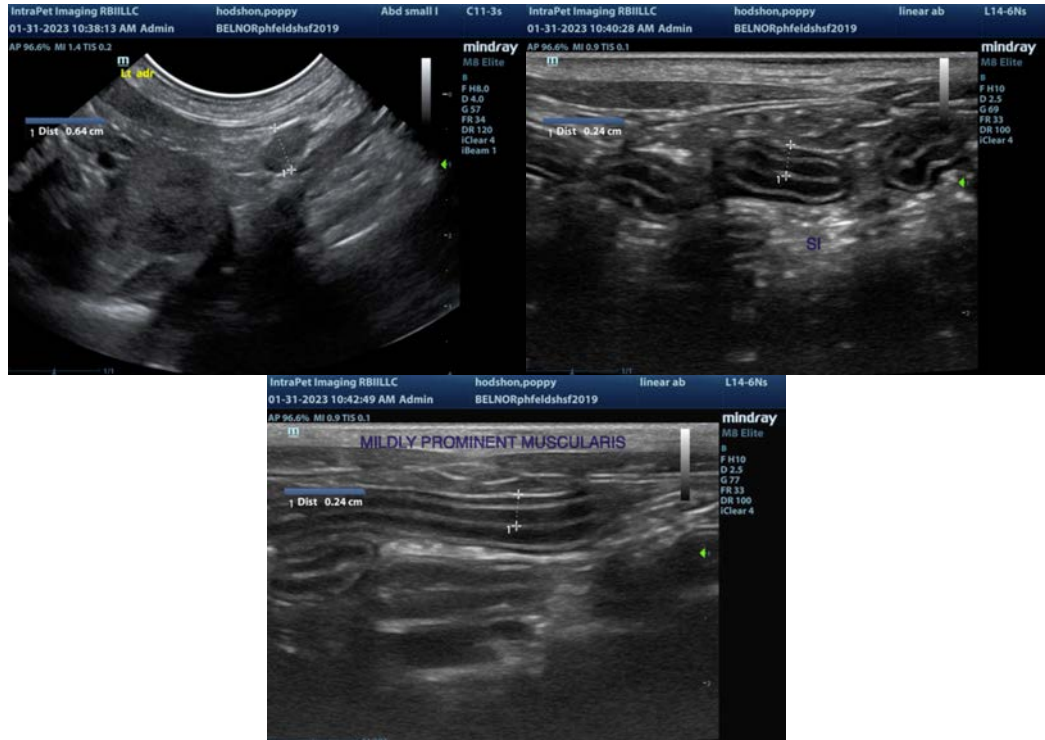
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Today's scan is relatively normal. There is questionable mild prominence of the muscularis layer, but no focal lesions visualized. In a young cat, the primary differentials for chronic diarrhea would include dietary intolerance/food allergy, GI parasitism, chronic pancreatic disease, dysbiosis, IBD, and less likely intestinal neoplasia. You've done a nice job evaluating for much of this with a dietary change, a GI panel with normal values, and a trial on probiotic therapy as well as screening for GI parasites. Based on today's exam, underlying neoplasia seems much less likely, as there is no significant lymphadenopathy or wall thickening (but this cannot be definitively ruled out).

At this point, I might try a different hypoallergenic or novel protein diet such as Royal Canin hydrolyzed z/d, etc. Additionally, I would try fiber supplementation, as this can make some patients better or worse with diarrhea, and I would also consider dysbiosis if there has been a history of broad-spectrum antibiotic use. Some patients can benefit from a fecal transplant. If symptoms persist despite taking these measures, GI biopsies would be the next step.

Recommend three view thoracic radiographs to evaluate for possible 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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