

**DATE PRESENTING CLINICAL SIGNS**

1/10/23 Presented for annual exam and had lost ~ 2 lbs. P also has a history of intermittent vomiting and diarrhea.

**PATIENT** Current Medications: None.

Donnie Bove

Lab Results: PSL 32 (8-26), neutrophilia 9165 (2500-8500), monocytosis 705 (0-600), T4 1.8 (0.8-4.0), FT4 64.1 (10-50).

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES**

Feline

Imaging Performed By: Andi Parkinson, BS, RDMS.

**BREED**

DSH

**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.

**SEX**

Spayed Female

**AGE**

1/1/10

The left kidney has a normal shape and size (3.48 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.

**WEIGHT**

5.06 Pounds

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.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.44 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.

**HOSPITAL NAME**

Charm City VH

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.

**REFERRING VET**

Dr. Eavers

**Spleen**

The spleen is subjectively normal in size (0.86 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.

**INVOICE**

44068

**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 0.33 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The colon has a prominent wall, measuring at a normal thickness of 0.17 cm. The colon is dilated with non-formed fecal material.

### ***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 0.43 cm.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are prominent, hypoechoic, rounded mesenteric lymph nodes visualized. One is noted at 0.51 cm. Another measures 0.43 cm. The omentum is of normal echogenicity.

## **PRIMARY FINDINGS**

- Hypoechoic, prominent pancreas with dilated pancreatic duct – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Thickened small intestine with a prominent muscularis layer – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.
- Fluid dilated colon with a prominent colonic wall – Findings are consistent with the diarrhea reported.
- Hypoechoic, enlarged mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

## **SECONDARY FINDINGS**

- Mildly echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.

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

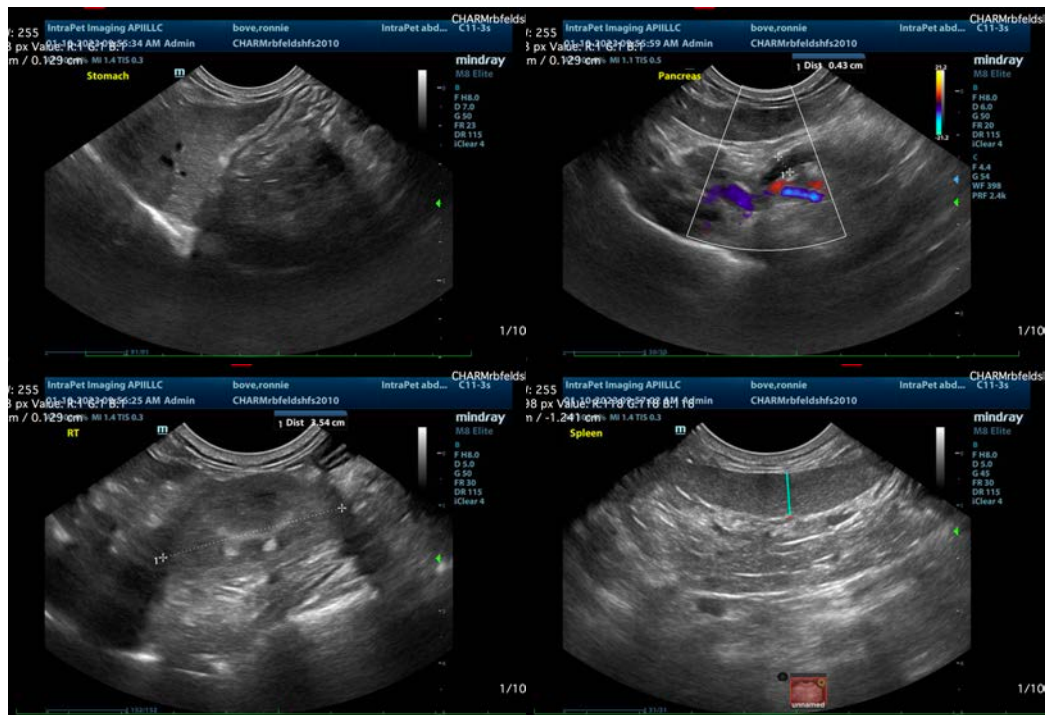
The small intestine appears thickened and somewhat “fuzzy” with some reduced distinction of wall layering and a very prominent muscularis layer. Findings are concerning for a primary gastrointestinal disease. Additionally, the colon has a somewhat prominent wall and is distended with fluid, consistent with the diarrhea reported.

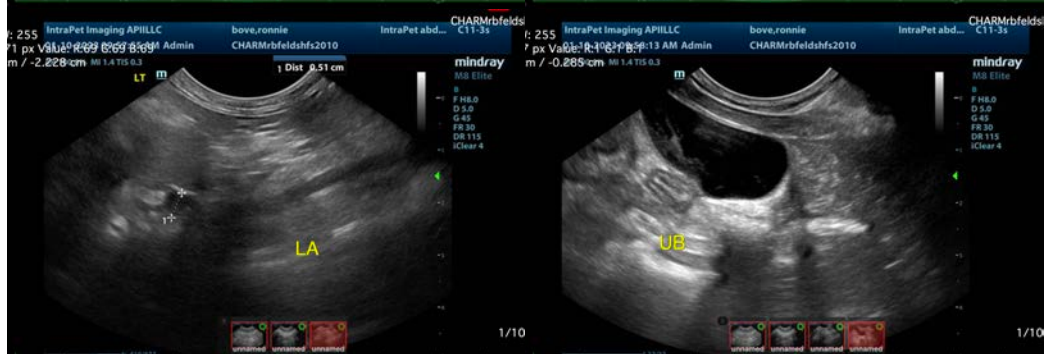
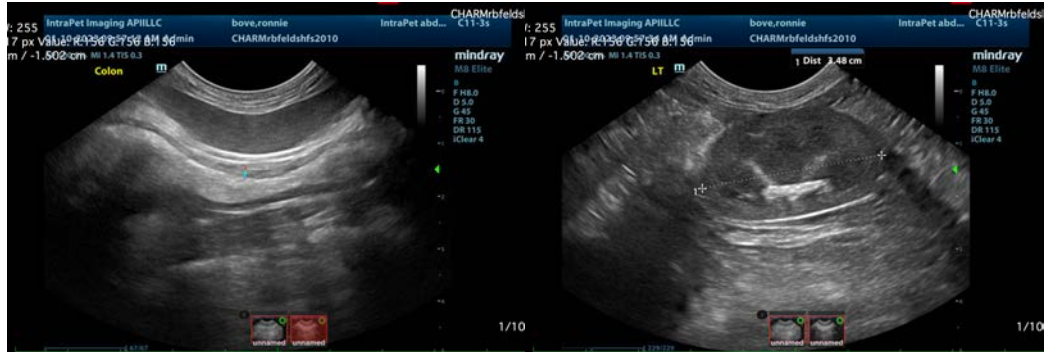
Consider such differentials as food allergy/dietary intolerance, GI parasitism, pancreatitis, dysbiosis, recurrent dietary indiscretion, IBD and less likely neoplasia, etc....

- 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.
- Recommend chronic probiotic therapy.
- Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.
- Consider a fine needle aspirate of a mesenteric lymph node.

If symptoms persist, consider obtaining GI biopsies, as there could be concern for underlying round cell neoplasia with the rounded hypoechoic lymph nodes and wall changes observed.

The pancreas appears somewhat hypoechoic and prominent with a prominent pancreatic duct. These changes are most consistent with chronic mild inflammation or a previous episode of pancreatic inflammation.





**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