**DATE PRESENTING CLINICAL SIGNS**

8/17/22

Acute on chronic vomiting. Has escalated in past 24 hours. Anorexia since yesterday. Defecating and urinating in undesirable locations; intercat conflict especially with newer younger cat.

PATIENT

Chloe McCollough

Current Medications: Maropitant injection 08-16-2022 10 am

Lab Results: Pending.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**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

The left kidney has a normal shape and size (3.1 cm). Overall echogenicity is normal with adequate 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.

AGE

8/9/12

WEIGHT

7.94 Pounds

The right kidney has a normal shape and size (3.22 cm). Overall echogenicity is normal with adequate 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.

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.

IMAGING PERFORMED BY

Stephanie Warga
RDCS, RVT

The right adrenal gland is normal in size measuring 0.46 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.

HOSPITAL NAME

Cat Hospital at Towson

Spleen

The spleen is subjectively normal in size (0.68 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.

REFERRING VET

Dr. Brunt

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.

INVOICE

40544

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 0.21 cm. Visualized peristalsis appears appropriate. There is a focal section of small intestine that appears more thickened than the rest of the small intestine, measuring at 0.25 cm with reduced distinction of wall layering, surrounding inflammation, and lymph nodes.

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. There is a significant lymphadenopathy present with a sublumbar lymph node measuring 0.60, and mesenteric lymph nodes measuring 0.67 cm and 0.43 cm. The omentum is hyperechoic around the enlarged lymph nodes.

ULTRASONOGRAPHIC FINDINGS

- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- 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.
- Prominent muscularis layer of 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.
- Focal section of small bowel with increased thickness and reduced distinction of wall layering – This section of bowel is concerning for focal inflammation or possible emerging round cell neoplasia.
- Moderate mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

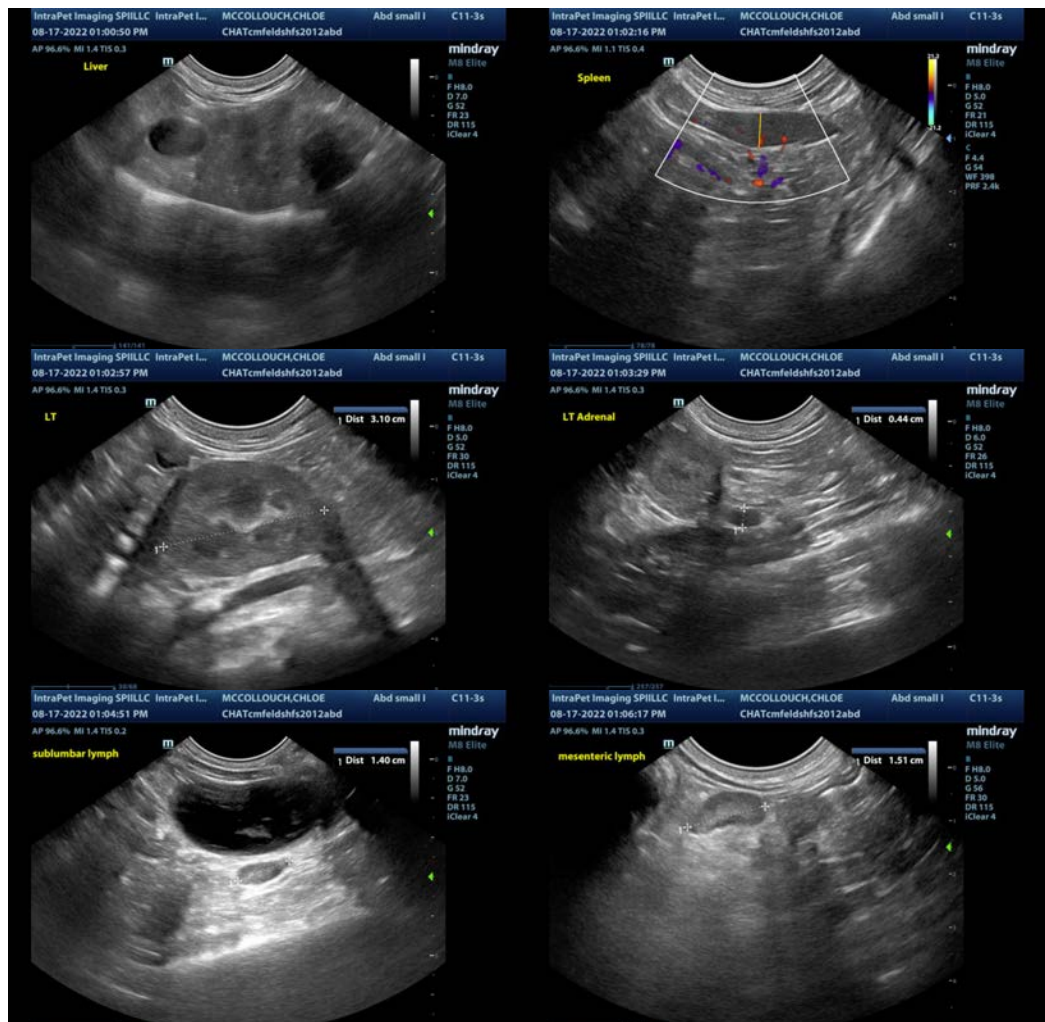
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

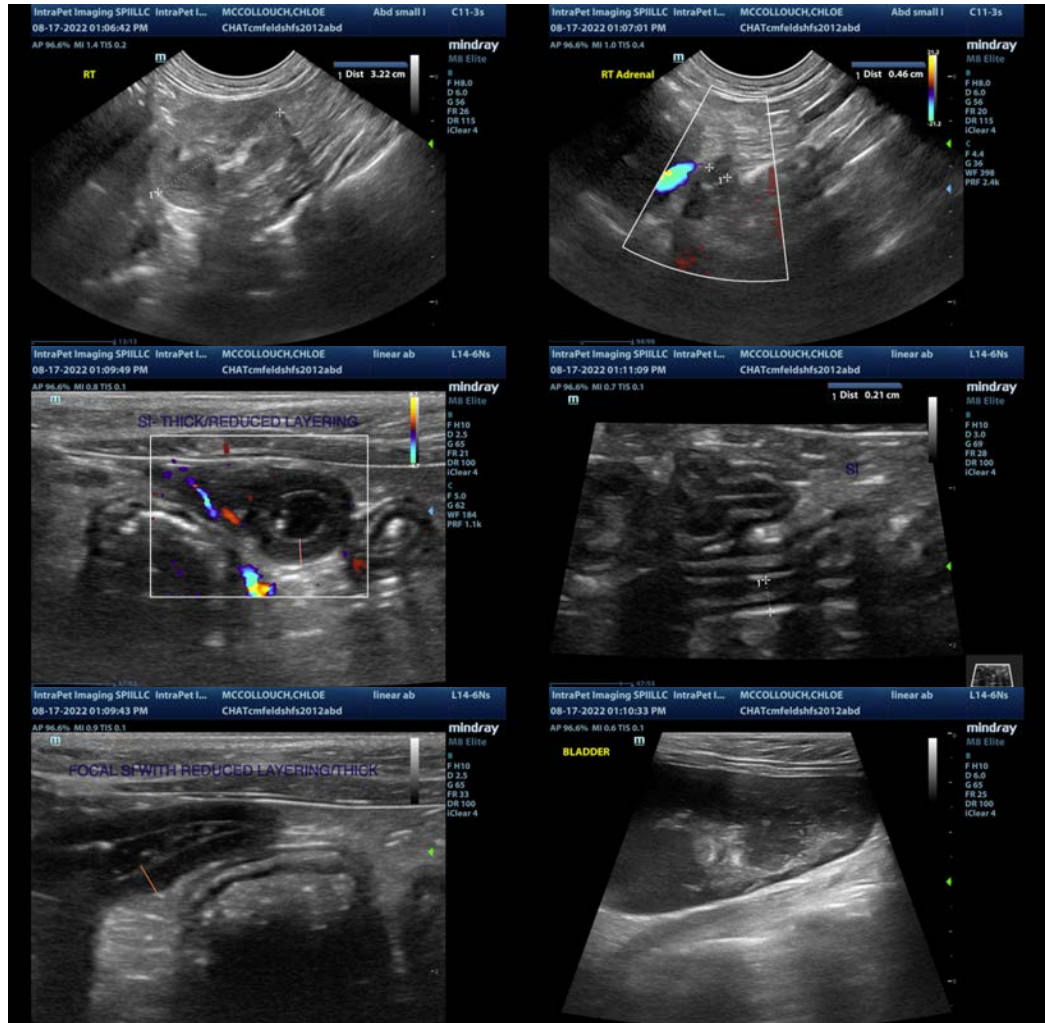
Generally, the bowel appears somewhat “ropey” in appearance. There are prominent mesenteric lymph nodes scattered throughout the abdomen that are slightly rounded and hypoechoic. There is a focal section of small intestine that is more pronounced with a “fuzzy” wall, reduced detail of layering, and it appears more thickening with surrounding inflammation and lymph nodes. Consider a fine needle aspirate of an enlarged mesenteric lymph node and treatment for acute gastroenteritis.

- Consider a novel protein/hydrolyzed protein prescription diet.
- Recommend anti-nausea therapy.
- Recommend chronic probiotic therapy.
- Consider a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.
- If symptoms persist, consider obtaining surgical biopsies of this section of small bowel.
- If surgical biopsies are not an option, then consider repeat ultrasound to see if the wall thickening has progressed to a point where the bowel wall could be aspirated.

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

There is echogenic debris visualized in the urinary bladder. Recommend a urinalysis and culture.





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