**DATE PRESENTING CLINICAL SIGNS**

6/15/22

Pet presented on 6/1/22 for prolonged weight loss and vomiting. Owner reports this has been going on for several months. Pet will vomit multiple times per week. Pet's appetite has decreased over this time as well. Pet has a history of urinary blockage, was put on a veterinary urinary diet but owner switched him off of that some time ago. Currently managed on OTC Purina Urinary/Hairball formula. On PE pet weight 6.4lbs with a BCS of 3.5-4/9. Adequately hydrated; mm pink, moist; many missing teeth with mild to moderate tartar on remaining teeth. Moderate muscle loss appreciated over pet's entire body. Bloodwork was recommended (results below). Based on this information imaging was recommended, owner opts for abdominal US.

PATIENT

Midnight Martin

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

12/9/10

WEIGHT

6.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brillhart RDMS

HOSPITAL NAME

Westminster VH

REFERRING VET

Dr. Hall

INVOICE

38733

Current Medications: None. Gabapentin 50mg upon arrival.

Lab Results: 6/1/22: CBC: WBC: 30.4K/uL(3.9-19); Neutrophils: 25.536K/uL (2.62-15.17); Monocytes: 1.824K/uL (0.04-0.53); Neutrophils appear slightly toxic. Chemistry: No abnormalities. UA: SG: 1.054; pH: 6.5; Protein 1+.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**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 (3.68 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.

The right kidney has a normal shape and size (3.83 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.40 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 0.40 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 0.32 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 large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis.

Free Abdomen

There is a scant amount of free abdominal fluid. There is a mild mesenteric lymphadenopathy noted with lymph nodes measuring 0.52 cm and 0.42 cm. The omentum is slightly of increased echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Prominent, hypoechoic pancreas with surrounding hyperechoic mesentery and corrugated bowel adjacent to the pancreas – The pancreatic changes are most consistent with moderate pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Mildly thickened small intestine with prominent muscularis layer – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma.
- Mildly enlarged mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

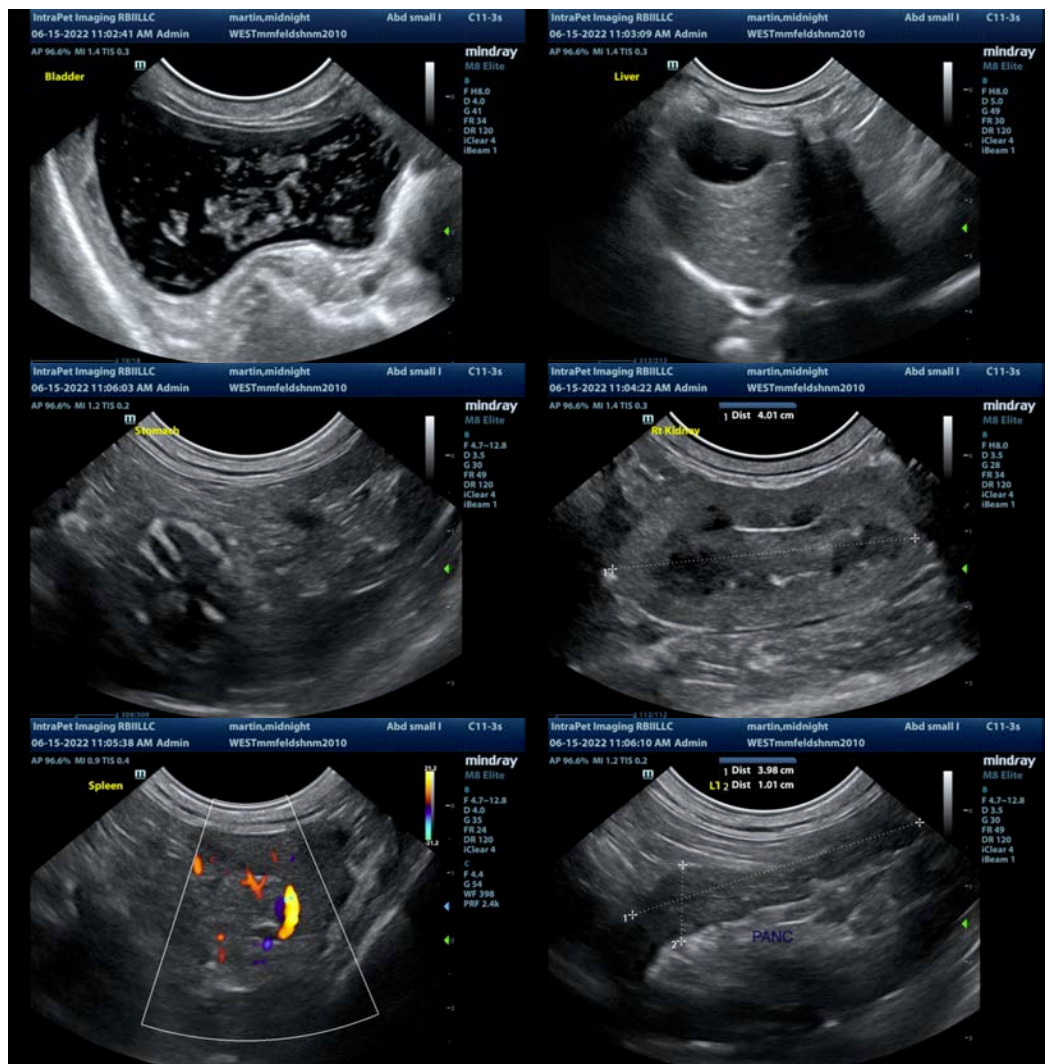
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

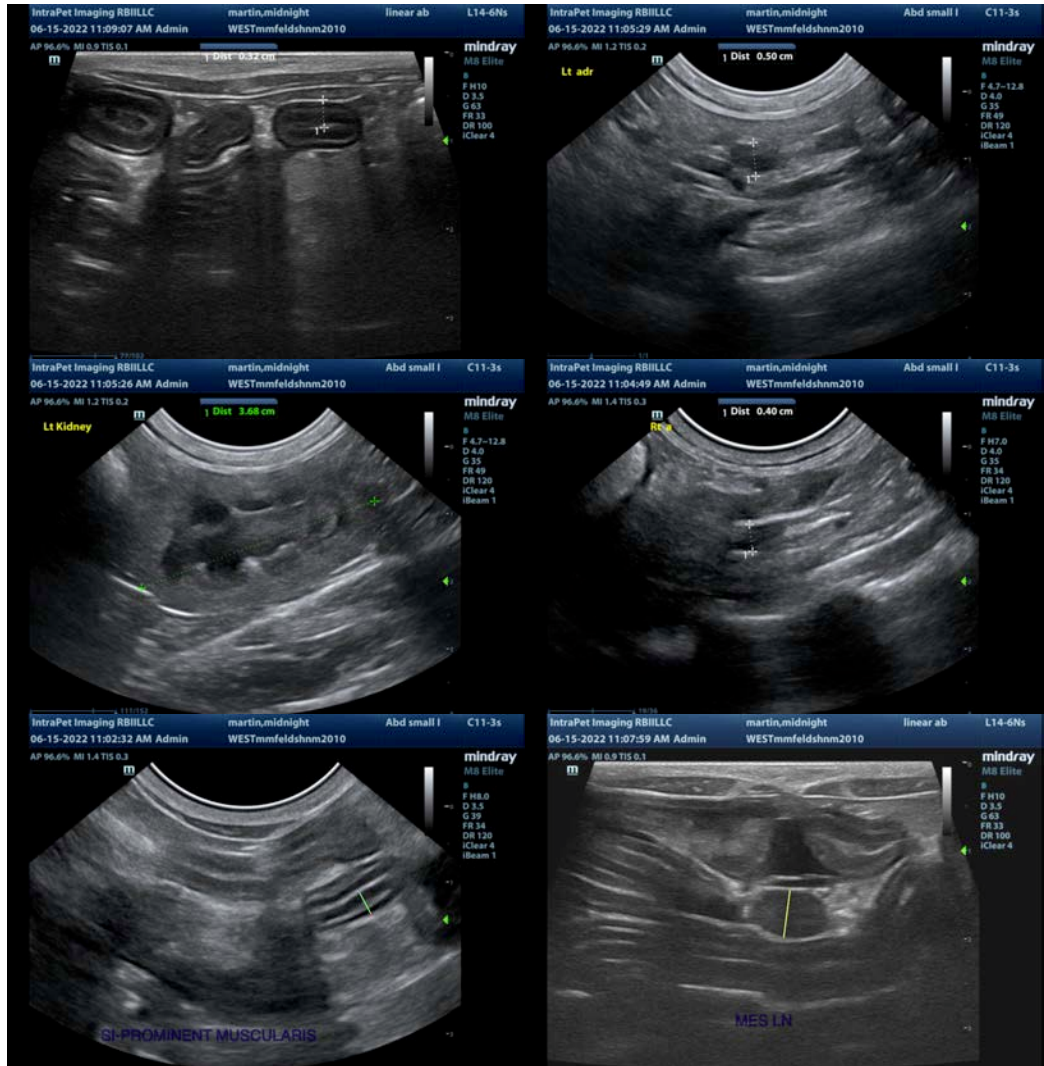
The small intestine appears generally thickened, and there are enlarged mesenteric lymph nodes throughout the caudal abdomen, indicating inflammation or less likely neoplastic change.

- Consider a fine needle aspirate of a mesenteric lymph node.
- Consider a GI panel to Texas A&M with a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.
- Consider a novel protein/hydrolyzed protein prescription diet.
- If symptoms persist, recommend GI biopsies.

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

There is a moderate amount of echogenic debris visualized within the urinary bladder. Recommend 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