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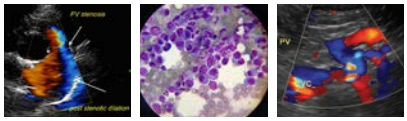

SonoPath
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DATE

8/9/22

PATIENT

Bear Malkowski

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

6/27/12

WEIGHT

15.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Essex Middle River VC

REFERRING VET

Dr. Franchini

INVOICE

40257

PRESENTING CLINICAL SIGNS

Pet presented on 7/18/2022 as a new pet exam for vomiting and diarrhea for about 3 months with weight loss. Owner said pet was 26 lbs 3 months ago.
Vomits daily and has soft stools. PE reveals some dental disease, mass on head and gassy loops of intestines on abdominal palpation.

Current Medications: Metronidazole course done twice - 100 mg BID (10 days first time and 14 days second time), Cerenia inj.
Lab Results: BW: T4 0.7, Chol 75, WBC 21.6 - Neutros 17712, Monos 1037. ProBNP 119, UA – RBCs, Fecal - neg .

Radiographs: Rads - kidney stones, thickened intestinal loops, bone opacity in intestines.
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 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 (4.13 cm) with intrapelvic mineralization/stones measuring approximately 0.45 cm. The renal pelvis is mildly dilated at 0.24 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.01 cm) with a 0.41 cm non-obstructive nephrolith. Overall echogenicity is slightly hyperechoic with poor 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, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.49 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 0.43 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 gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild amount of non-organized echogenic debris. 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 0.33 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 small amount of free abdominal fluid. There are significantly enlarged mesenteric lymph nodes, the largest of which measures 1.2 cm x 4.0 cm. The omentum is hyperechoic around the enlarged lymph nodes.

ULTRASONOGRAPHIC FINDINGS

- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Some of the mineralization/nephroliths in the left kidney appear situated in the renal pelvis, but no obvious obstruction is present at this time.

- Hypoechoic, prominent pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- Mild gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

- 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.

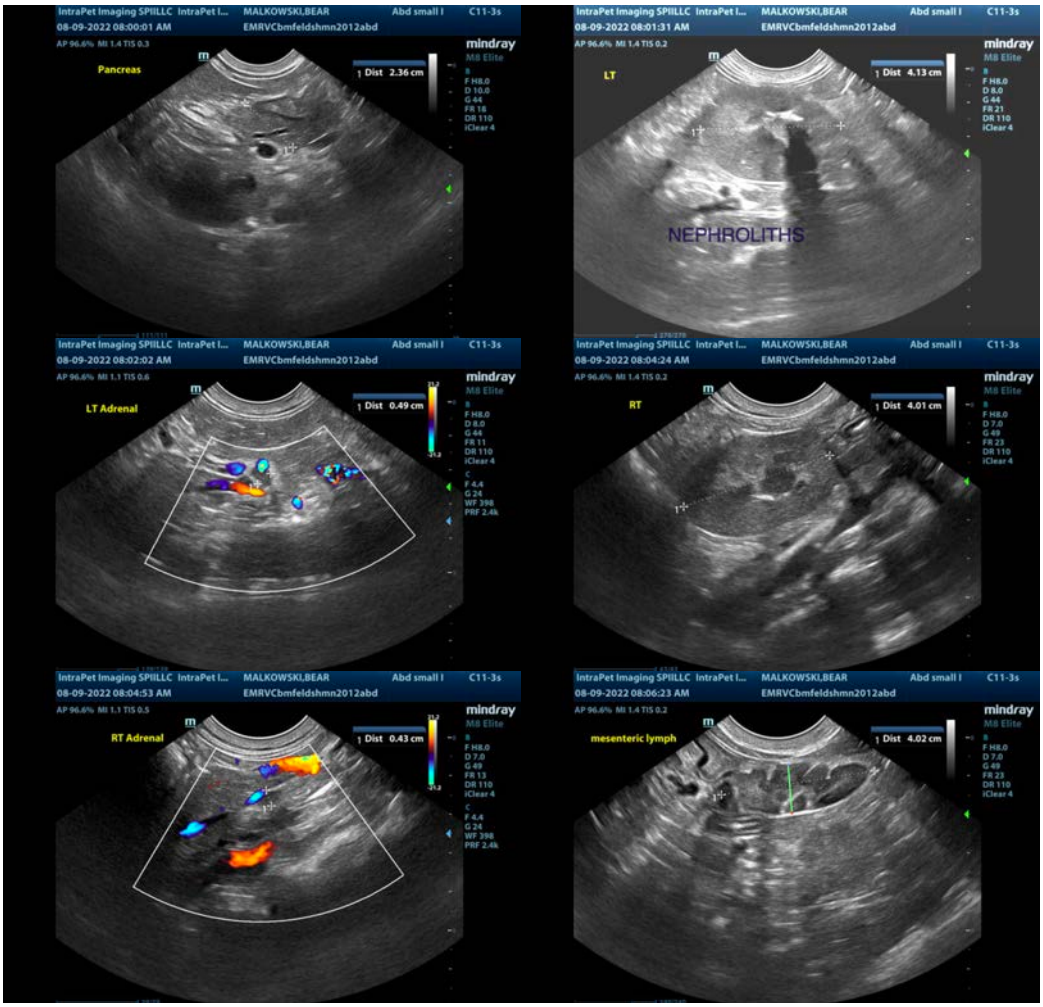
- Enlarged mesenteric lymph nodes – The moderate mesenteric lymphadenopathy could be consistent with a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease(tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

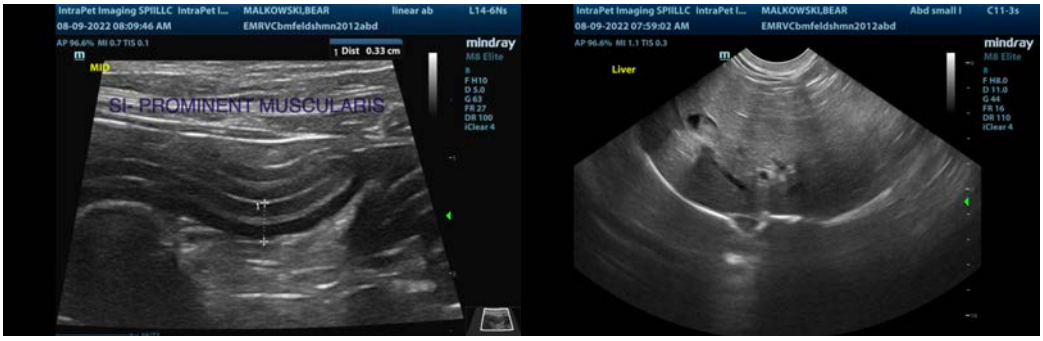
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Based on the history provided, I suspect the most significant lesion observed is the subjectively thickened small intestine with prominent muscularis layer. Additionally, there are enlarged mesenteric lymph nodes surrounding these areas of abnormal bowel. Recommend a fine needle aspirate of a mesenteric lymph nodes. These findings are suggestive of primary gastrointestinal disease.

- Consider a novel protein/hydrolyzed protein prescription diet.
- Recommend chronic probiotic therapy.
- Recommend a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate.
- Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.
- If a cytologic diagnosis cannot be obtained based on lymph node aspirate, recommend obtaining GI biopsies.

There are renal changes consistent with chronic renal disease and non-obstructive nephroliths present. Recommend blood pressure evaluation, urinalysis and culture and continued monitoring.





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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