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DATE PRESENTING CLINICAL SIGNS

8/11/22 HX: one bout of pancreatitis a few months ago. CC: not eating and vomiting. PE: painful in abdomen, dehydrated.

PATIENT

Checkers Weinstein

Current Medications: Cerenia given 8/5 and SQ fluids.
Lab Results: Mildly elevated fPL, mildly azotemic (likely secondary to dehydration). USG 1.015.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Patient sedated with Dexdomitor.
Stat Report: Not requested.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

DSH

SEX

Neutered Male

AGE

6/9/13

WEIGHT

11 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Harborside Mobile VC

REFERRING VET

Dr. Hawkins

INVOICE

40354

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 is normal in size (3.12 cm), but is irregular in shape with pinpoint non-obstructive nephroliths and mild pyelectasia at 0.20 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 is normal in size (3.3 cm), but is irregular in shape with pinpoint non-obstructive nephroliths and mild pyelectasia at 0.21 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.50 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 0.56 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 (0.98 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. There is an accumulation of dependent debris and dilation and mild tortuosity of the proximal bile duct, measuring at 0.32 cm. It is visualized more distally at 0.25 cm.

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 0.22 cm. Duodenum wall measured 0.25 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. Prominent pancreatic duct noted.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are occasional prominent mesenteric lymph nodes. One is measured at 0.41 cm near the ileocecal junction. There is a larger lymph node mid abdomen measuring 0.68 cm x 1.94 cm. The omentum is slightly hyperechoic around these lymph nodes.

ULTRASONOGRAPHIC FINDINGS

- Bilaterally irregular kidneys with decreased corticomedullary distinction, pinpoint non-obstructive nephroliths, and mild pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis.
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Moderate gallbladder debris with mild bile duct dilation – Dilation of the common bile duct could be consistent with a functional obstruction (i.e. primary hepatic disease resulting in hepatocellular swelling) or with an extrahepatic bile duct obstruction (ie. choledocholith, bile duct tumor, pancreatic disease, other).
- Prominent muscularis layer to 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.
- Prominent 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

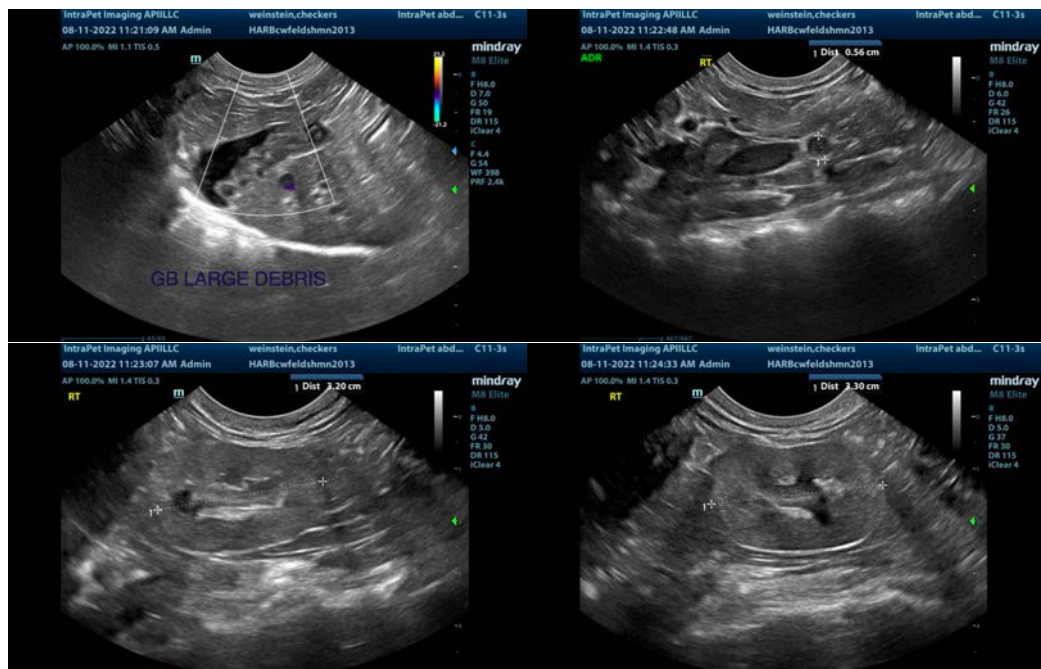
The bowel appears somewhat “ropey” and thickened with a prominent muscularis layer. This can be an indicator of underlying small intestinal disease. Additionally, there are prominent mesenteric lymph nodes, and the pancreas appears prominent.

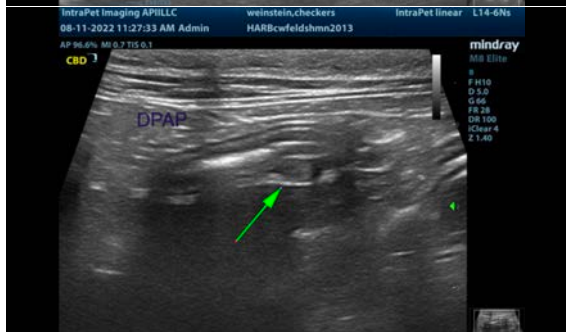
The gallbladder has a large amount of debris for a cat, and there is some dilation of the bile duct visualized. With this combination of biliary, pancreatic and small intestinal signs, I would be concerned about possible Triaditis, but other differentials are possible.

- Recommend a novel protein/hydrolyzed protein prescription diet.
- Recommend Ursodiol therapy.
- If liver enzyme elevations are present, then consider a course of antibiotics (Clavamox is a good choice).
- Recommend treatment for pancreatitis.
- Recommend chronic probiotic therapy.
- Recommend a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.
- Consider a fine needle aspirate of a mesenteric lymph node.
- If symptoms persist, recommend obtaining GI biopsies.
- If liver enzyme elevations progress or develop, recommend reimaging of the biliary tract.

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

Both kidneys are irregular with decreased corticomedullary distinction and small non-obstructive nephroliths. These changes are consistent with chronic renal disease. Recommend a blood pressure, urinalysis and urine 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