

**DATE PRESENTING CLINICAL SIGNS**

10/26/21

Since the previous ultrasound, patient's appetite has been variable and has had sporadic vomit episodes. Diarrhea resolved. Patient admitted to the ER over the past weekend due to anorexia and icterus. Surgery had been scheduled for Oct. 25th to take samples of intestinal walls and stomach, reactive lymph nodes. This was cancelled due to patient's condition. New murmur ausculted over the weekend.

PATIENT

Pickett Woolford

SPECIES

Feline

Current Medications: Ampicillin - 150 mg IV BID began on 10/23, Enrofloxacin - 15 mg IV QD began on 10/23, Maropitant 0.7 ml SQ QD began on 10/25, IV LRS at 25 mls per hour (1 1/2 times maintenance) Syringe feeding 4 times a day.

Lab Results: Bilirubinemia 3.7 mg/dl. ALT on 10/24 greater than 1000, repeated 10/25 - 872 U/l. CBC - within normal limits, fPLI - normal.

BREED

DSH

Radiographs: Not provided by the veterinarian.

Date of Previous IntraPet Ultrasound: 9-24-21

Sedation: Sedation not required for scan.

Stat Report: STAT report not requested by the veterinarian.

SEX

Neutered Male

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.

AGE

10/1/10

WEIGHT

15 Pounds

The left kidney has a normal shape and size (4.54 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,
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The right kidney has a normal shape and size (4.7 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.

HOSPITAL NAME

Chadwell AH

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.

REFERRING VET

Dr. Schaupp

The right adrenal gland is normal in size measuring 0.42 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.

INVOICE

26656

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 mildly heterogenous in echotexture with subtle, indistinct focal mottling. 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 moderate amount of non-organized echogenic debris. The cystic and common bile ducts appear mildly/moderately dilated and have a tortuous path. No discrete obstruction is noted.

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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) Jejunum wall measured 0.19 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

Scant anechoic free fluid is present. A mild mesenteric lymphadenopathy is noted around the ileocecal junction with lymph nodes measuring 0.26 and 0.28 cm. The omentum is generally of normal echogenicity, but is hyperechoic surrounding the ileocecal junction.

PRIMARY FINDINGS

- Hypoechoic, prominent pancreas with very mild surrounding hyperechoic mesentery – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation. This appears stable to slightly improved from the previous scan on 9/24/21.
- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Mild gallbladder sludge and dilated bile duct – 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). No clear obstruction is noted.

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.
- Scant free fluid in the abdomen

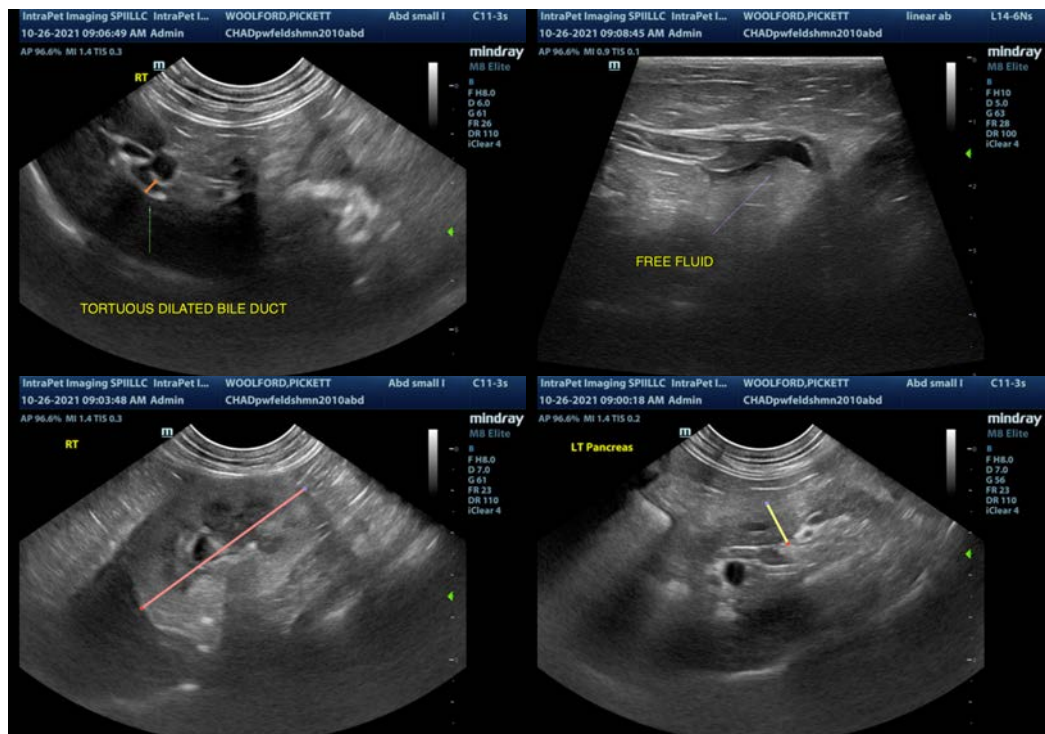
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

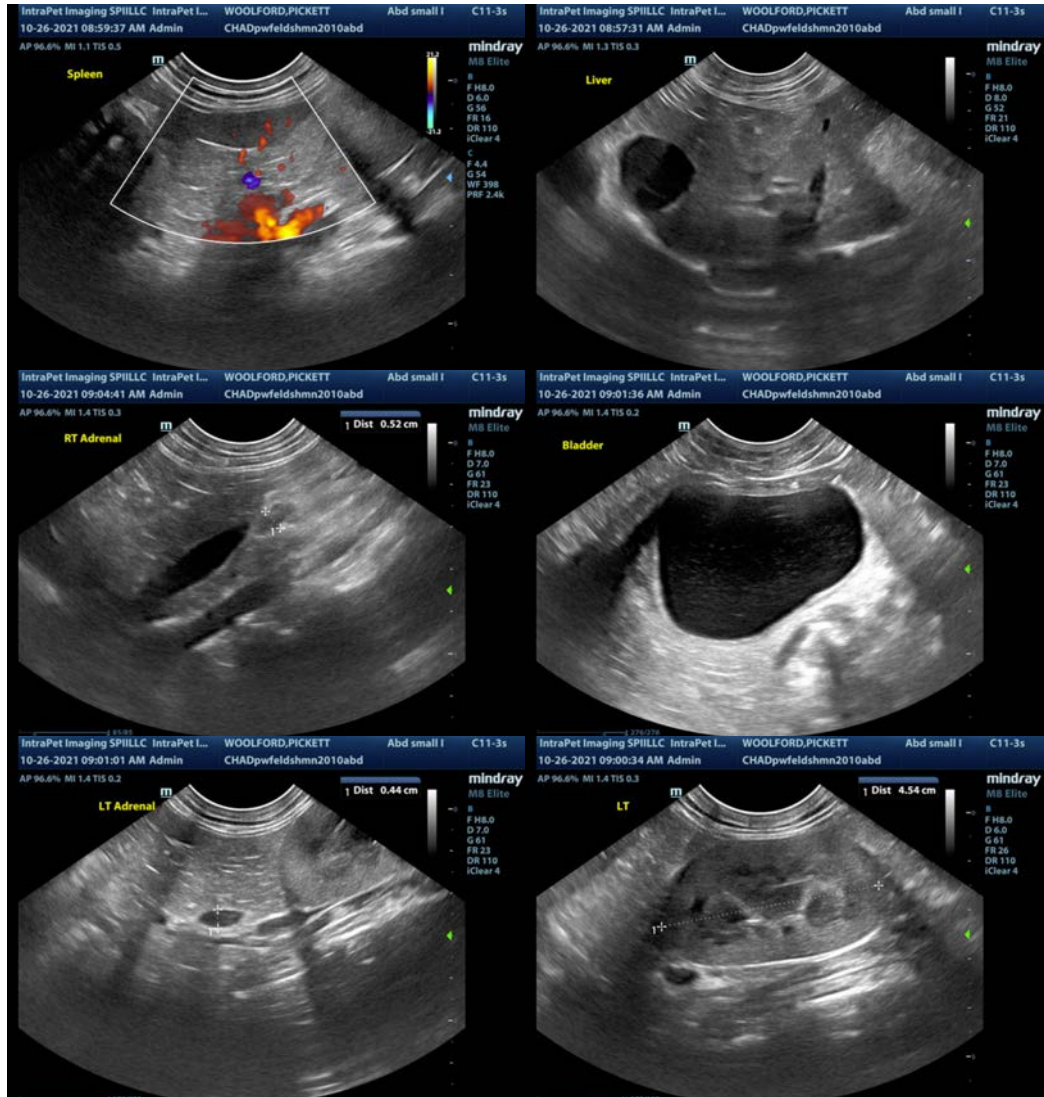
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The ultrasonographic changes are not dramatic. There is a small amount of free fluid in the abdomen today, which was not previously evident. The pancreas appears prominent, but has not significantly changed or gotten worse. The gallbladder has some sludge in it and some dilation of the bile duct, but a clear obstruction is not observed. Based on the lab work changes reported, there is more hepatobiliary involvement at this time. I do think Triaditis would be a strong differential, but surgical biopsies would be necessary to confirm.

Depending on the clinical stability of your patient, if you did go to surgery, I would be prepared to place a feeding tube, biopsy liver for culture and histopathology, and culture bile, and be prepared to evaluate the biliary tract for obstruction, etc. Additionally, these patients can have coagulation difficulties, so coagulation parameters would need to be evaluated with possible access to plasma/blood, etc. This would be the ideal scenario, but if the patient is not stable or these necessary steps are not possible, then I would consider a fine needle aspirate of the liver (provided coagulation is ok) +/- possible esophogastomy tube and treatment for Triaditis including an anti-inflammatory dose of Prednisolone (0.5 mg/kg per day) with the understanding that without a diagnosis, the prognosis may be guarded. Also consider adding in Ursodiol.

Based on the progression of this disease process, there appears to be involvement of more than the just the GI tract/pancreas at this time. Recommend 3-view thoracic radiographs and a GI panel if this has not already been done.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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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