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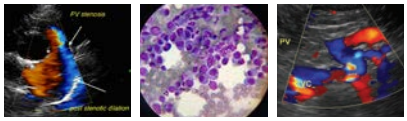

SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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DATE

8/25/22

PATIENT

Moby Nguyen

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

12/22/06

WEIGHT

7.19 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Bay Country VH

REFERRING VET

Dr. Sabella

INVOICE

40760

PRESENTING CLINICAL SIGNS

Presented 8/11/22 for weight loss, weakness, poor appetite, progressive over 3-4 months. PE: cachexia, dehydration, abd "doughy" with thickened loops of intestines palpated mid-abd.

Current Medications: initially tx'd with sqf, cerenia, convenia on 8/11/22
started cerenia 8 mg PO q 24 hrs on 8/15/22
Lab Results: Cbc – wnl. Chem - elevated SDMA, BUN, ALP, GGT, tbili, t4 - low normal. UA - usg 1.014, pH 6, proteinuria, hematuria.
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 (2.62 cm) with rare non-obstructive nephroliths. 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.

The right kidney has a normal shape and size (4.13 cm) with pyelectasia at 0.41 cm and a 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 infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.33 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 0.42 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.

Spleen

The spleen is large, hypoechoic, mottled, and irregular. It measures at 1.3 cm in width at the level of the hilus. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is large, hypoechoic, and heterogeneous. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

Two gallbladder lumens are visualized on today's exam, consistent with a bilobed gallbladder. Both of these structures have moderate intraluminal echogenic debris with no evidence of significant gallbladder wall thickening. The cystic and common bile ducts appear prominent and somewhat tortuous, measuring 0.41 cm proximally and 0.21 cm at the level of the duodenal papillae.

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 0.27 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 a 1.55 cm x 1.0 cm hypoechoic structure associated with the pancreas. This has the appearance most consistent with a pancreatic cyst, although a hypoechoic nodule could be a possibility. There is no evidence of regional mesenteric inflammation or fluid. Prominent pancreatic duct noted measuring 0.30 cm.

Free Abdomen

There is a small amount of free abdominal fluid. There is a significant mesenteric lymphadenopathy present with a cluster of mesenteric lymph nodes visualized at the mesenteric root measuring 0.86 cm and 0.65 cm in diameter. The omentum is diffusely hyperechoic.

ULTRASONOGRAPHIC FINDINGS

- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths and right-sided pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the right kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

- Hypoechoic, large, irregular, mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Hypoechoic, prominent pancreas with suspected pancreatic cyst – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

- Large, hypoechoic, heterogeneous liver – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.

- Bilobed gallbladder with a mildly dilated common 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).

- Prominent “ropey” small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

- Moderate mesenteric lymphadenopathy – 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.

- Small volume free abdominal fluid – Recommend fluid analysis and cytology.

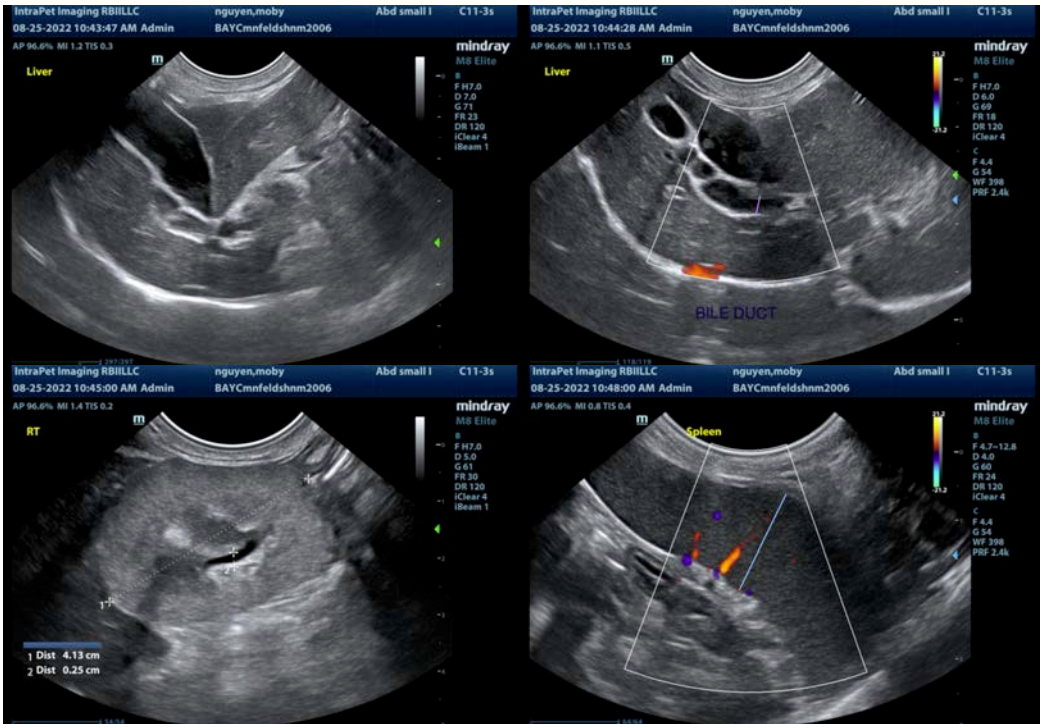
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

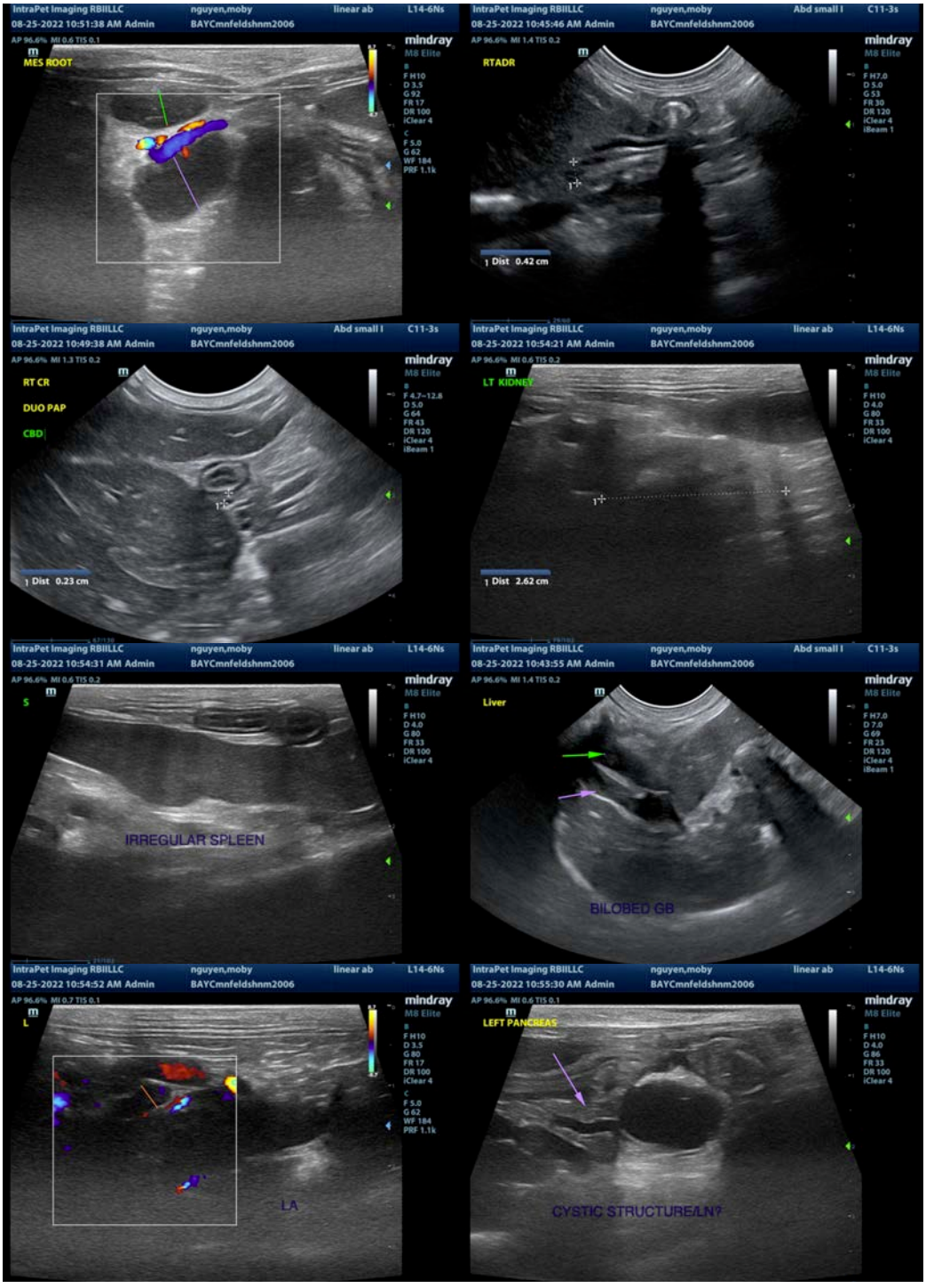
The combination of the large liver and spleen and the mesenteric lymphadenopathy are somewhat concerning for possible round cell neoplasia. Recommend a fine needle aspirate of a mesenteric lymph node, spleen, and liver. Recommend 3-view thoracic radiographs.

The elevation in bilirubin and ALP is likely associated with a primary hepatopathy, but there are some mild biliary changes observed. If a cytologic diagnosis cannot be obtained, consider treatment for cholecystitis (antibiotics, fluids, Ursodiol, etc.). Additionally, there are some changes to the pancreas and small intestine, therefore mild Triaditis is possible.

There is a hypoechoic rounded structure associated with the pancreas that is most suggestive of a pancreatic cyst. Aspiration or drainage of this structure could be considered.

The changes observed in the kidneys are consistent with chronic progressive renal disease. Recommend a blood pressure, urinalysis and culture.

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LEFT PANCREAS
CYSTIC STRUCTURE/LN?
mindray
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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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