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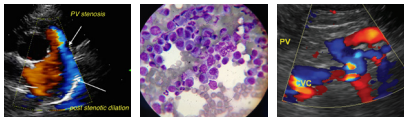

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

4/6/22

PATIENT

Paul Dienlet

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

7/26/13

WEIGHT

22.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Paradise AH

REFERRING VET

Dr. Twardzik

INVOICE

36715

PRESENTING CLINICAL SIGNS

Patient presented on 3/11/22 for seizure activity, vomiting. On exam, patient is obese at 5/5 BCS. An area of pigmentation was noted on the left iris. Mild dental tartar was noted. Patient resists extension of hips bilaterally.

Current Medications: 1/8 tsp Miralaz BID long term. Recently tried starting Keppra- patient would not allow owner to administer. RX: Zonisamide 50mg 1 SID- recommended 3/15/22 and 4/1.
Lab Results: CBC- Elevated Neutrophils, Decreased Eosinophils. Chem- Elevated Glucose 304, Elevated ALT 318, Elevated Lipase 2031. Fructosamine mildly elevated at 359. Spec FPL elevated at 4.2.
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 (3.61 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 pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.22 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 pyelectasia, nephroliths or hydroureter. There are two ill-defined, hyperechoic regions visualized within the renal cortex. These lesions do not appear to deviate the splenic capsule. These are most consistent with acute renal infarcts, but should be monitored, as an underlying neoplastic lesions cannot be exlcluded as a possibility. Renal vasculature is normal.

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.

The right adrenal gland is normal in size measuring 0.45 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 bile duct appears tortuous and mildly dilated at 0.37 cm. No obstruction is visualized.

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 0.34 cm. Visualized peristalsis appears appropriate. While no focal mass lesions are visualized, a large area of the jejunum appears corrugated, most consistent with enteritis.

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

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

PRIMARY FINDINGS

- Decreased corticomedullary distinction in both kidneys with ill-defined hyperechoic lesions visualized in the right kidney – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. The ill-defined hyperechoic lesions in the right kidney could be consistent with acute infarction. Continued monitoring si recommended.

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

- Prominent muscularis layer to the small intestine with some areas of corrugated bowel – The small intestinal wall changes are most consistent with an inflammatory process (i.e., inflammatory bowel disease) with a low possibility of emerging lymphoma. The areas of corrugation are most consistent with irritation and enteritis.

SECONDARY FINDINGS

- Mildly dilated, tortuous 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).

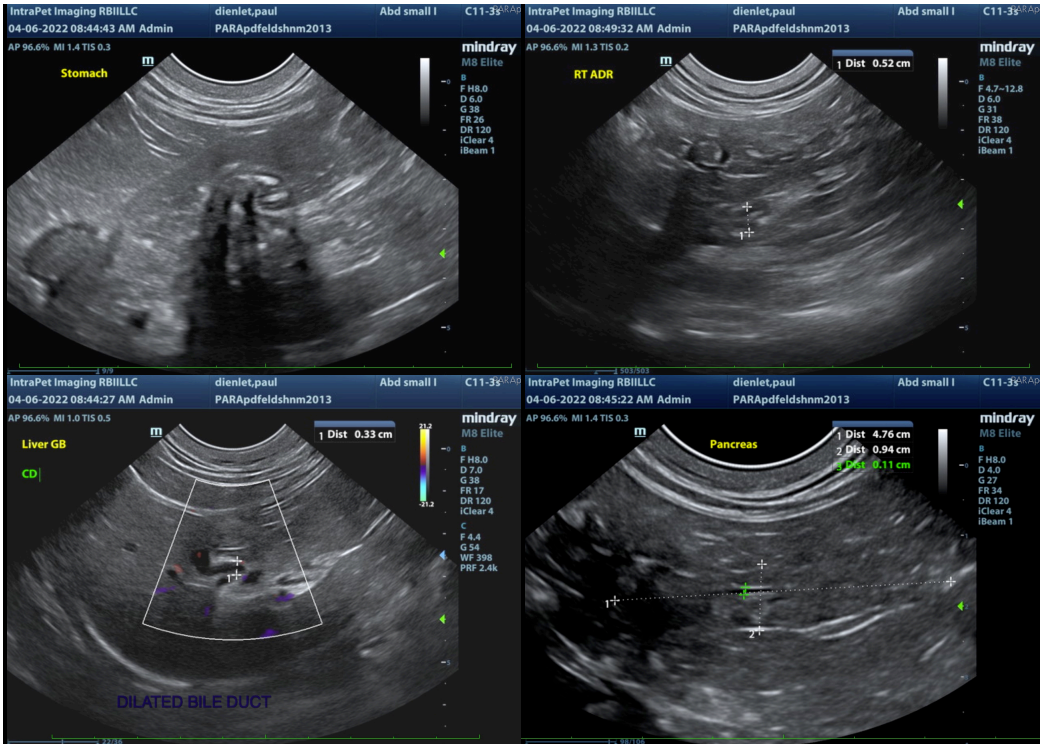
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

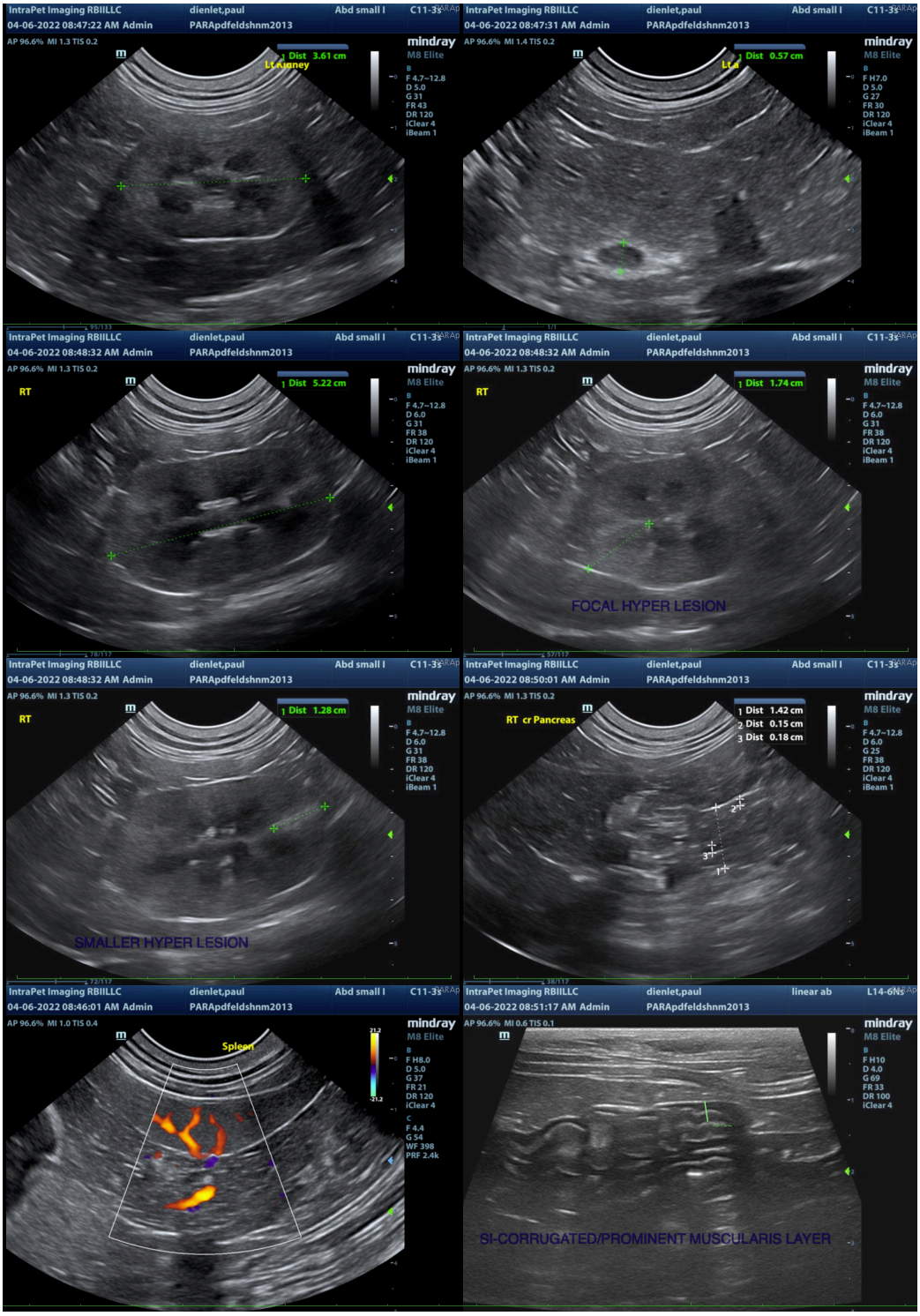
The kidneys appear bright with reduced corticomedullary distinction, and some focal lesions are visualized within the right kidney. I suspect these lesions are most consistent with infarction and chronic renal disease. Recommend urinalysis, culture and blood pressure evaluation. Hypertension should be a differential for the seizures observed.

The pancreas appears hypoechoic and prominent, and the muscularis layer to the small intestine is prominent as well. Consider a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine. Based on the corrugation of the small bowel observed, there is likely some component of GI upset contributing to the vomiting reported.

No focal lesions are visualized associated with the liver. The ALT elevation could be a primary hepatopathy, or may be secondary to the inflamed pancreas, etc. Consider a liver function test and a fine needle aspirate of the liver if there is continued concern. Recommend treatment for pancreatitis.

Based on the history, this patient could be a borderline diabetic. Consider periodic urine glucose monitoring at home to look for evidence of glucosuria. Additionally, weight management is paramount. A novel protein/hydrolyzed protein prescription diet can be considered once the pancreatitis is improving. If not already done, recommend consultation with a veterinary neurologist regarding the seizures reported and options for treatment. Additionally, recommend 3-view thoracic radiographs.

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RT cr Pancreas
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2 Dist 0.15 cm
3 Dist 0.18 cm
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M8 Elite
IntraPet Imaging RBIILLC
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SI-CORRUGATED/PROMINENT MUSCULARIS LAYER
mindray
M8 Elite

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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