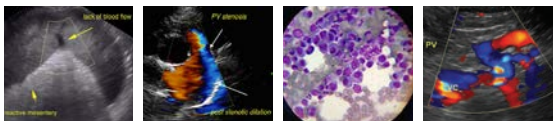

PATIENT

Milkey Tarbutton

SPECIES

Canine

BREED

Terrier X

SEX

Neutered Male

AGE

7 Years

WEIGHT

24.39

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

VCA Salem AH

REFERRING VET

Dr. Giambuzzi

INVOICE

25961

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9/30/21

PRESENTING CLINICAL SIGNS

Patient presented to the ER for being lethargic since Tuesday morning. O switched to new food on Monday and P seemed to get sick after food switch. O made bland diet with white rice and P kept it down after eating breakfast on Tuesday, but did get sick next day. Not able to keep any food down but is drinking lots of water. Likes to eat things outside - dog or cat poop no diarrhea with the vomit, not eating but is drinking Additional history: P is known to have seizures and has not had one since 2-3 weeks ago, also know to have liver issues and was on a special liver kibble but P started to refuse food so they switched diets Had a seizure 3 weeks - more often than any other time in his life. Adopted 3 years ago and the seizures started soon thereafter Travel history: None Behavior or change to energy level: Seems lethargic and not as active as usual Current diet: Blue Buffalo Kibble - Dad switched food 2-3 times recently Current medications/supplements (dose and frequency): 400mg KBr once daily Abnormal PE/Chem/CBC/UA Results: Leukocytosis 21.35, Neutrophil 19.17 ALT 1739 ALP 735 AST 293 K 3.3

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

The residual prostate was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The right kidney measured 4.9 cm. The left kidney measured 5.1 cm.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

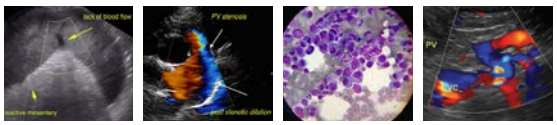
The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.67 cm at the cranial pole and 0.66 cm at the caudal pole. The left adrenal gland measured 0.47 cm at the cranial pole and 0.40 cm at the caudal pole.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver presented normal in size and contour with moderate coarse echotexture. Generalized mild hypoechoic hepatic parenchyma noted. Mild echogenic yet indistinct portal vascular borders noted with intermittent areas of non-obstructive biliary tree mineralization. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The hepatic and portal vasculature were



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normal in appearance. The gallbladder was non-distended in size with moderate mineralized debris to cholelithiasis. The common bile duct was normal. No evidence of definitive post-hepatic obstruction.

Gastrointestinal

The stomach presented intact, sonographically unremarkable wall layering with mild to moderate retained echogenic ingesta and fluid. Gastric body wall measured 0.45 cm.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. Duodenum wall measured 0.43 cm. Jejunum wall measured 0.40 cm.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Acute on chronic cholangiohepatitis pattern with intermittent biliary tree mineralization and subjectively non-obstructive cholelithiasis
- Gastric stasis, likely gastritis
- Sonographically unremarkable small bowel

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver exhibited changes consistent with acute on chronic hepatopathy given the presence of biliary tree and gallbladder mineral/cholelithiasis. Although not definitive, acute on chronic cholangiohepatitis is likely given the significantly elevated ALT/AST combination with potential for some degree of non-obstructive cholestasis and/or vacuolar hepatic changes given the ALP elevation. Without overt evidence of significant gastrointestinal pathology, the liver is suspected to be the primary contributor to the patient's clinical signs. Some degree of likely gastritis and metabolic gastric stasis is present.

Empirically, aggressive therapy for acute on chronic cholangiohepatitis, which may include antibiotic and hepatosupportive therapy with as-needed gastrointestinal support, would be appropriate. Leptospirosis titers/PCR could be considered if clinically indicated. Hepatic biopsy as well as bile culture and sensitivity is likely required for definitive diagnosis. Fasting and post-prandial bile acids may be considered to assess hepatic functionality given the seizure activity.

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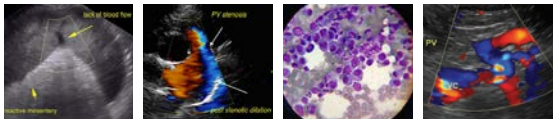

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MOBILE VETERINARY ULTRASOUND
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AnimalSoundsNW.com 541-357-9423

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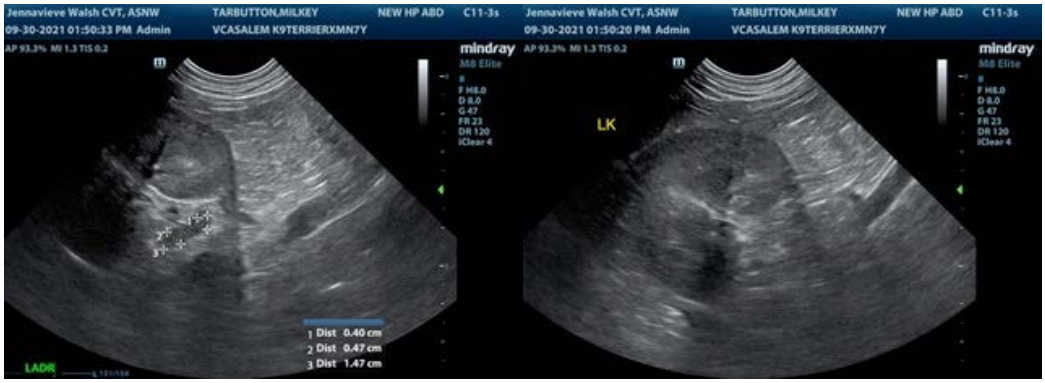

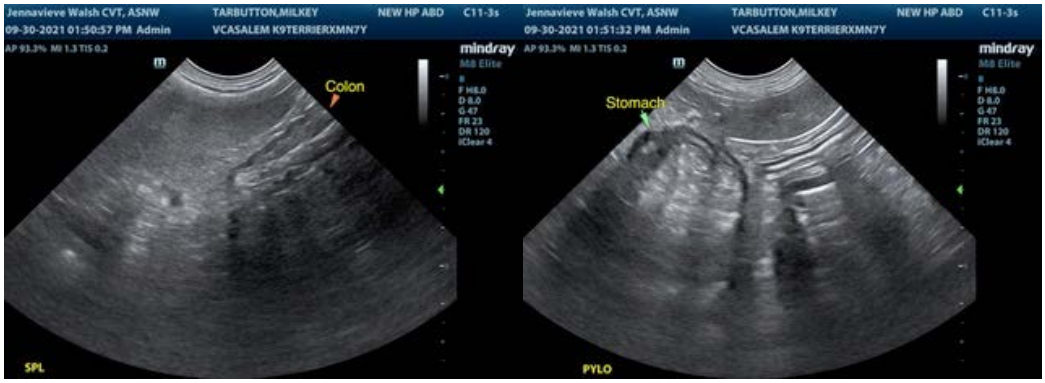

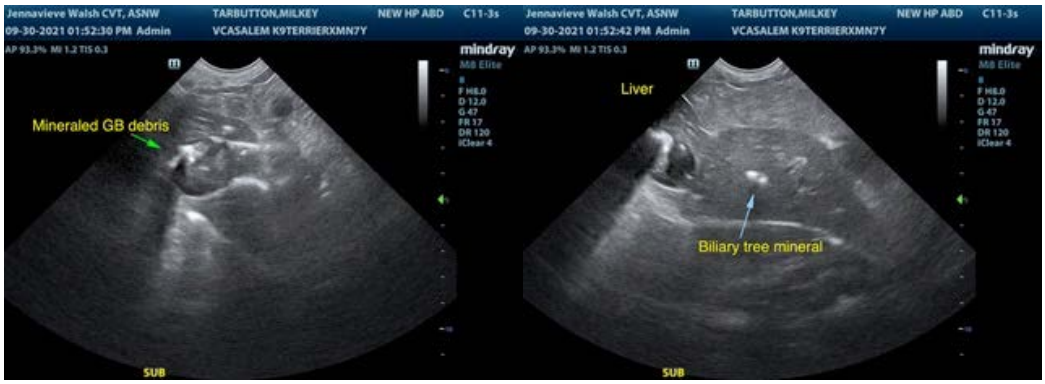

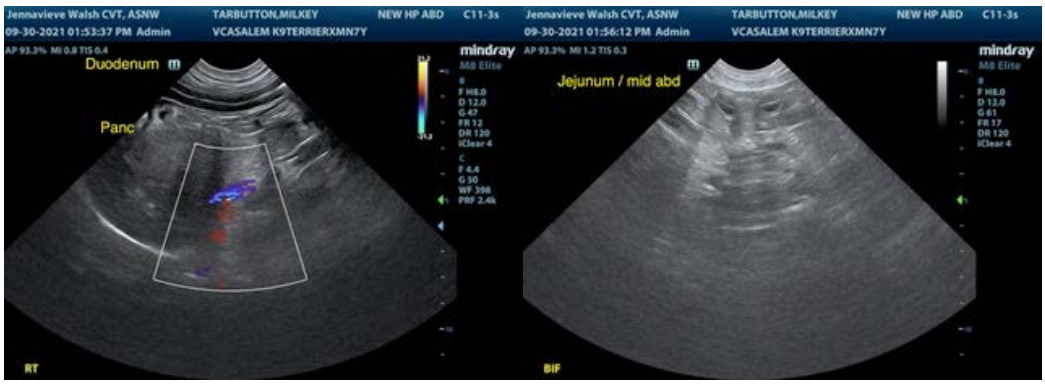

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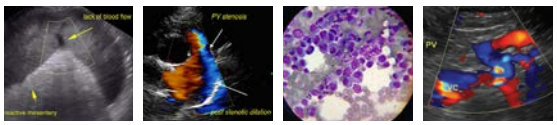

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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com