



PATIENT

Hope Andrews

SPECIES

Canine

BREED

Rat Terrier

SEX

SF

AGE

8 years

WEIGHT

12 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Sarah Pender CVT

HOSPITAL NAME

SVS Imaging QC

REFERRING VET

Dr. Rall

INVOICE

16081

DATE

2/9/23

PRESENTING CLINICAL SIGNS

Decreased appetite past week; walks away from food. Regular diet Purina Pro Plan Senior Sensitive Skin and Stomach; tried moistening, also offered canned, added meatballs. Vomited 2nd day of canned food, and this morning white foamy fluid. No known diarrhea. Hiding, not acting herself. No current parasite prevention or other meds. Has not eaten since 8:30p last night and that was small amount of chicken

Abnormal PE/Chem/CBC/UA Results: Very painful abdomen; all else unremarkable. Labs: mild regenerative anemia; elevated WBC, neutrophils, monocytes, ALT (614, N=10-25), ALKP 1553 (N=23-212); SNAP cPL = "mild" abnormal. March 2022 ALKP was 193.

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, sediment, or calculi The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation 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 or pyelectasia. The left kidney measured 5.1 cm in length. The right kidney measured 5.5 cm in length. Pinpoint medullary mineral was noted in both kidneys and incidental.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.0 cm length x 0.52 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.1 cm length x 0.47 cm width 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/ Gallbladder

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The



PATIENT	hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with subtle gallbladder wall edema. Anechoic content was present with very minor, echogenic, non-organized gallbladder debris. The gallbladder wall measured up to 0.14 cm width. The cystic and common bile ducts were normal. No evidence of post hepatic obstructive criteria was noted.
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Gastrointestinal

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Mild retained variably echogenic nonshadowing ingesta / chyme and mild luminal gas was noted. No evidence of mechanical pyloric outflow obstruction was noted.

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 pattern, or intestinal foreign material.

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

Pancreas

The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling. No overt evidence of neoplasia. Peripancreatic to mild mid to cranial abdominal hyperechoic mesentery was present.

Free Abdomen

No omental masses, lymphadenopathy, or evidence of peritoneal free fluid was present.

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy - suspect acute on chronic
- Nondistended gallbladder with subtle wall edema
- Mild pancreatitis
- Mild hypomotile gastritis pattern - no evidence of gastrointestinal mechanical obstruction or foreign material

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver was nonspecific with potential considerations including progressive vacuolar hepatopathy, acute on chronic hepatitis (viral, bacterial, leptospirosis, toxin), hyperplasia, hematopoiesis, nonobstructive hepatic cholestasis, infiltrative neoplasia (less likely), or other hepatopathy.

The subtle gallbladder wall edema may suggest concurrent subtle gallbladder inflammation or edema secondary to hepatopathy with anaphylaxis or infiltrative neoplasia considered less likely.

Further assessment of the liver may include, assuming normal clotting status, screening FNA cytology, +/- Leptospiriosis titers / PCR if endemic to the area or potential exposure. A spec cPL is recommended for further assessment of suspected pancreatitis as a contributing factor. No indication



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for immediate surgical intervention. Empirically, hospitalization with IV fluids, hepatosupportive medications, gastrointestinal support and empirical therapy for pancreatitis with assessment of hepatic and clinical response would be reasonable.

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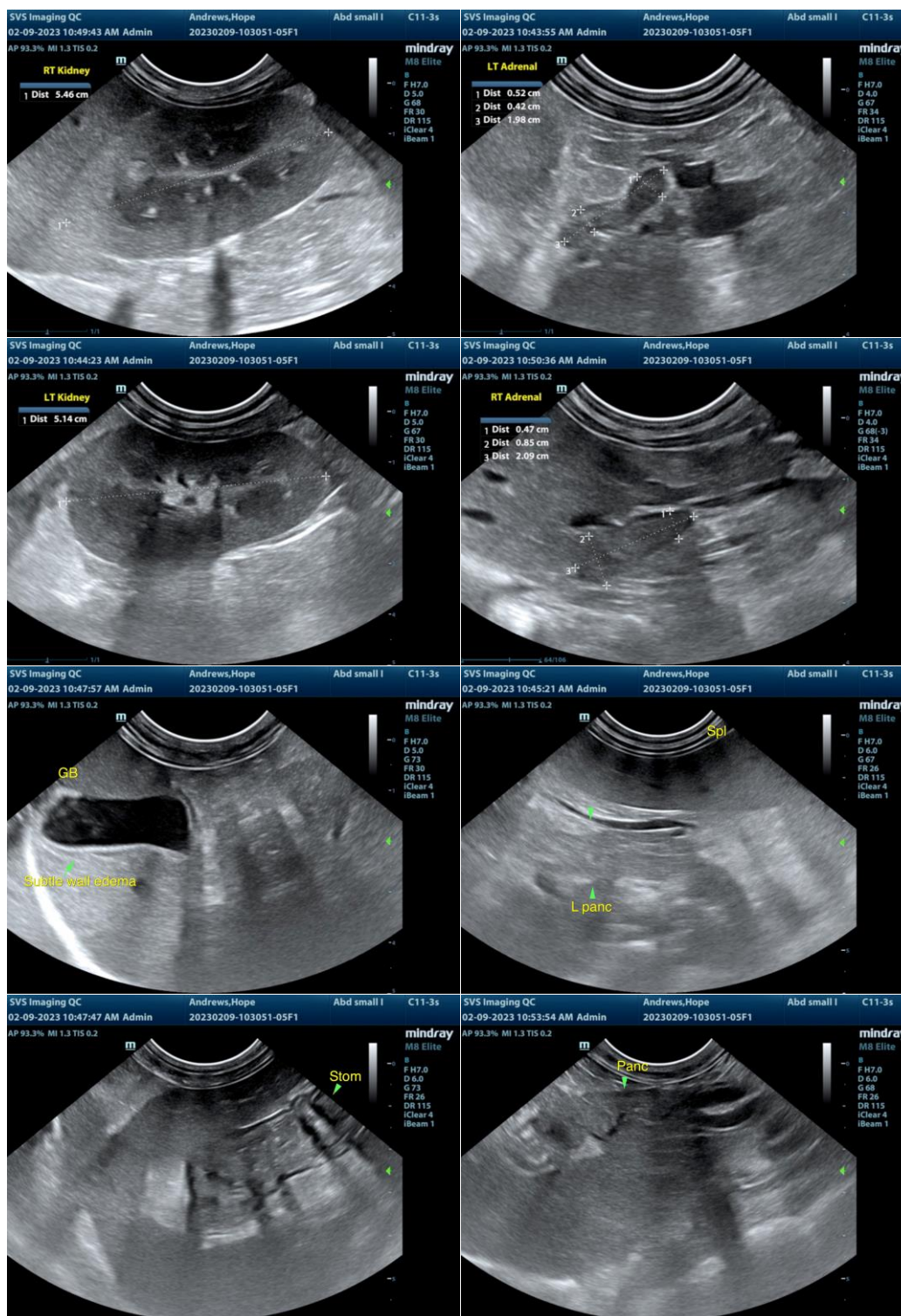
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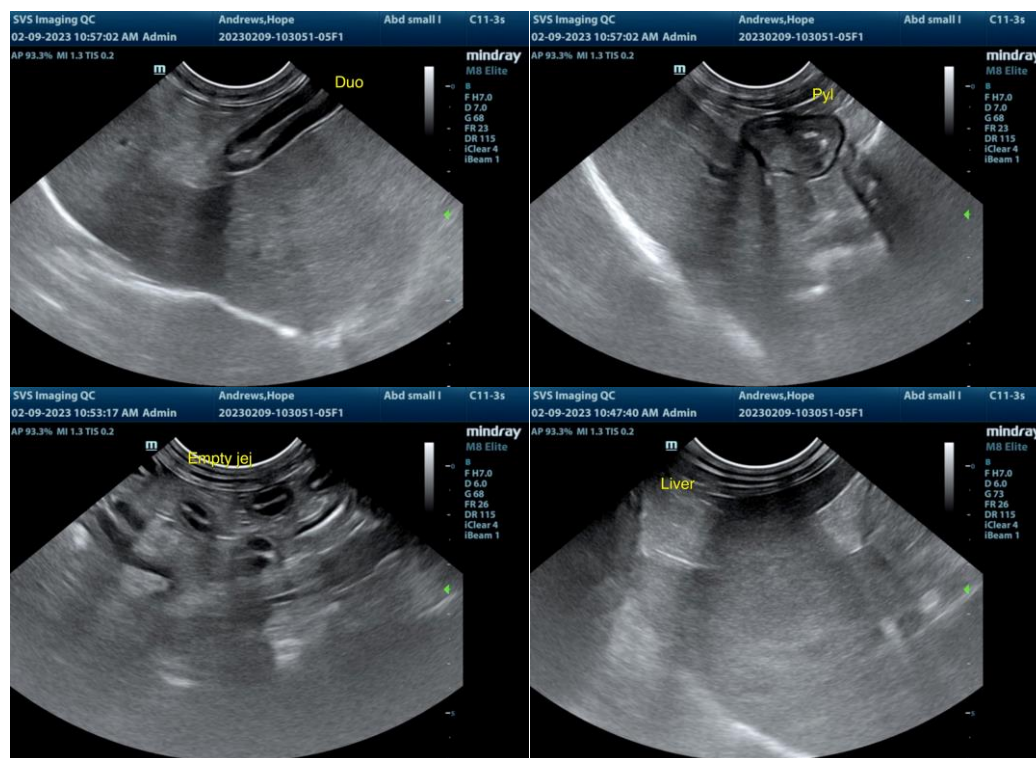
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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