



PATIENT

Scout Guzman

SPECIES

Canine

BREED

Chihuahua

SEX

Spayed Female

AGE

12 Years

WEIGHT

8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Eastham VH

REFERRING VET

Dr. Heidi Howell,
DVM

INVOICE

13626

DATE

1/31/22

PRESENTING CLINICAL SIGNS

History: Progressively increasing liver enzymes: ALP 1363; ALT 230; AST 55. Was on Denamarin, Clavamox and Metronidazole in December.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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. Aortic trifurcation was normal.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Mild nonuniform cortex echogenicity and echotexture with pinpoint hyperechoic cortical foci, which may indicate pinpoint areas of mineralization, fibrosis or microinfarction. Pinpoint areas of medullary mineral were also present. A small cortical cyst was present in the right kidney. Pyelectasia was noted in the left kidney. The left kidney measured 3.8 cm in length. The right kidney measured 3.8 cm in length.

Adrenal Glands

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.48 cm width in the cranial pole and 0.45 cm width in the caudal pole. The right adrenal gland measured 0.38 cm width in the cranial pole and 0.37 cm width in the caudal pole. No evidence of adrenal hyperplasia or tumor.

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 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 hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non distended in size with moderate congealed to nondependent yet nonorganized nonmineralized gallbladder debris. The gallbladder walls were sonographically normal without evidence of inflammatory changes. Overall, the gallbladder was nondistended without evidence of peripheral inflammation. The cystic duct and common bile ducts were normal without evidence of dilation.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.



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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.

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

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Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

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Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

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ULTRASONOGRAPHIC FINDINGS

- Bilateral chronic renal changes, exhibiting suspected pinpoint corticomedullary mineralization with minor left kidney pyelectasia and small right kidney cortical cysts
- Hepatopathy- subjectively benign
- Moderate congealed to nondependent yet nonorganized gallbladder debris (non-mucocele)
- Heterogeneous pancreas- suspect age-related pancreatic changes and likely incidental

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

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The appearance of the liver was nonspecific but most consistent with benign hepatopathy. Considerations for the liver may include benign vacuolar hepatopathy and cholestasis in light of the elevated ALP with potential for nonspecific hepatitis/cholangiohepatitis given the ALT/AST combination and presence of gallbladder debris. No overt evidence of hepatic neoplasia which is considered a less likely differential diagnosis. Ultrasound guided FNA of the liver using a 25-gauge needle and assuming normal coagulation parameters would be warranted for screening cytology, primarily to assess for evidence of inflammatory cells and to rule out unlikely neoplasia.

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Hepatosupportive medications such as Denamarin or Vitamin E as well as Ursodiol due to its antioxidant and immunomodulatory effects within the liver would be warranted, although these medications may not result in decreased hepatic enzyme levels. Leptospirosis titers / PCR may be considered if clinically indicated. No overt indication of underlying endocrinopathy given the adrenal appearance and lack of reported clinical signs. Sonographic monitoring of the gallbladder warranted, especially if evidence of cranial abdominal/subxiphoid discomfort on palpation or if increasing evidence of cholestasis.

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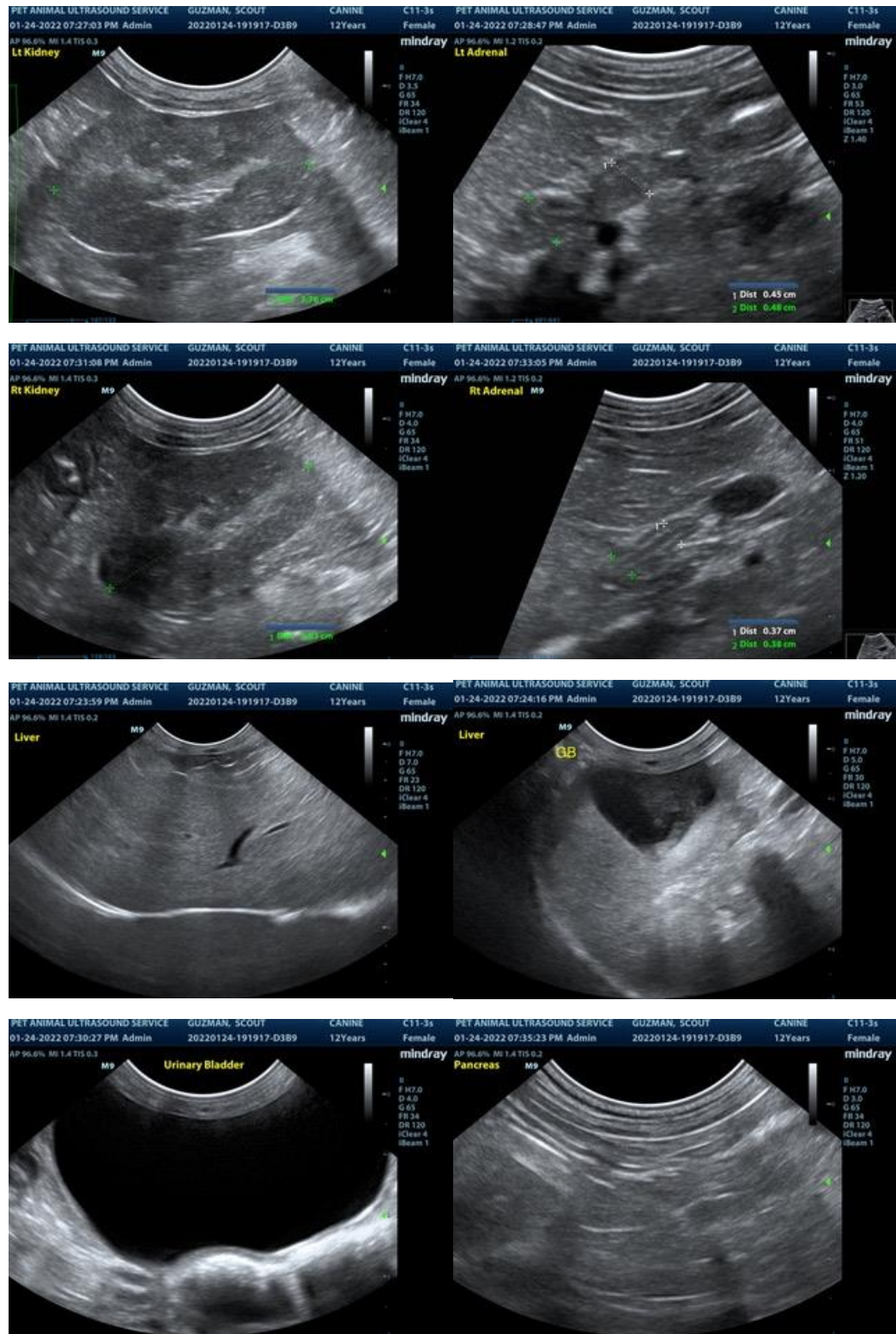
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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info@SonoPath.com

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