

PATIENT PRESENTING CLINICAL SIGNS

Pearlita Naeckel Elevated liver values; otherwise doing well clinically. AST 75; ALT 410. On Denamarin SID. *Sedated with torbugesic/midazolam

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

BREED The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of – 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.

Chihuahua

SEX Normal size and margination was 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 minor loss of corticomedullary symmetry and definition expected for the age of the patient. Pinpoint medullary mineral noted in both kidneys. Scant pyelectasia noted in the left kidney. The left kidney measured 3.7 cm. The right kidney measured 3.2 cm.

Spayed Female

AGE **Adrenal Glands**

8 Years

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.36 cm at the cranial pole and 0.47 cm at the caudal pole. The right adrenal gland measured 0.36 cm at the cranial pole and 0.42 cm at the caudal pole.

WEIGHT **Spleen**

11 Pounds

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. A solitary non-expansive, non-disruptive, mildly non-homogeneous noted in the mid splenic parenchyma measuring 0.39 cm. 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.

INTERPRETED BY

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

IMAGING PERFORMED BY **Liver**

Pamela Harrigan, RDCS

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with primarily anechoic content. Mild, non-dependent yet non-organized, mildly hyperechoic debris present. The cystic duct and common bile ducts were normal without evidence of dilation.

HOSPITAL NAME **Gastrointestinal**

Pine Banks AH

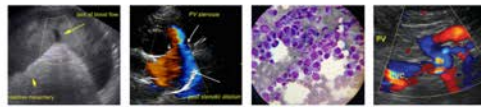
REFERRING VET The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

Dr. Hasan Syed

INVOICE 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.

37104 Normal visible colon wall layers were present with apparent formed feces in lumen.

DATE **Pancreas**
4/25/22 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.



PATIENT

Pearlita Naeckel

SPECIES

Canine

BREED

Chihuahua

SEX

Spayed Female

AGE

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11 Pounds

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy – suspect non-specific inflammatory hepatopathy/hepatitis, given the ALT/AST combination. Immune mediated/infectious hepatopathy, hepatotoxicosis or other hepatopathy possible. No evidence of neoplastic criteria.
- Mild gallbladder debris - The gallbladder debris may be secondary to fasting or indicate nonclinical cholestasis.
- Pinpoint renal medullary mineral – incidental.
- Non-specific yet subjectively benign small splenic nodule – focal hyperplasia, hematopoiesis likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall, sonographically unremarkable hepatic size and structure without evidence of significant hepatic parenchymal changes or pathology. Leptospirosis titers/PCR could be considered if endemic to the area or if potential exposure. Ultrasound guided FNA of the liver (assuming normal clotting status and using 25-gauge needle) could also be considered for screening cytology and potential identification of inflammatory cell type, if present.

Empirically, continued hepatosupportive medications including Denamarin and Ursodiol with continued monitoring of hepatic enzymes would be reasonable. Hepatic core surgical biopsy may be considered for definitive diagnosis via histopathology if persistent/progressive hepatic enzyme elevations. No evidence of a portosystemic shunt.

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 DABVP (Canine and Feline)

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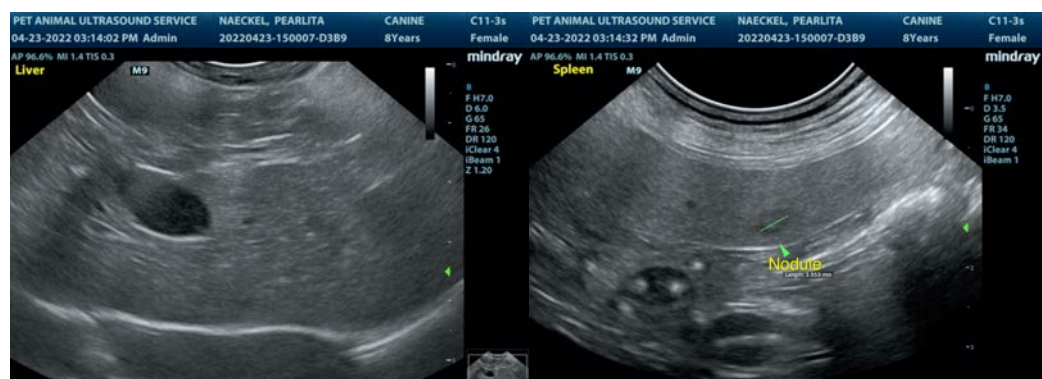
Dr. Hasan Syed

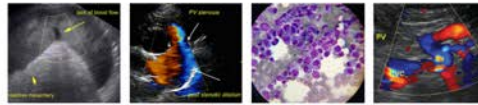
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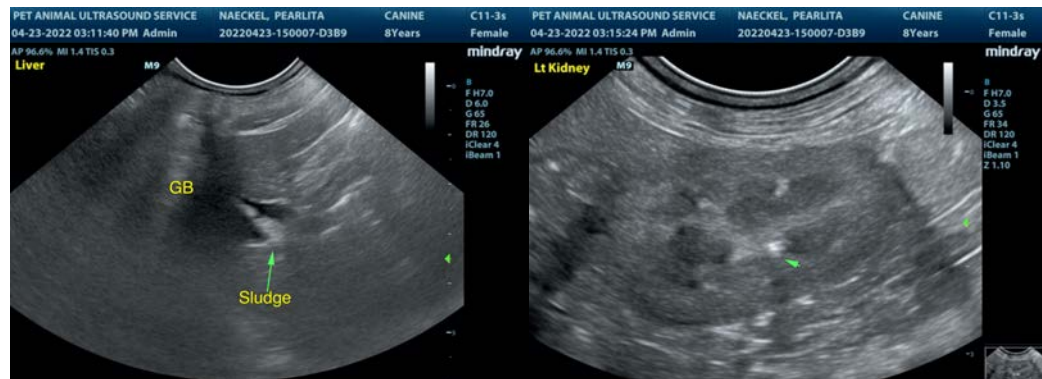
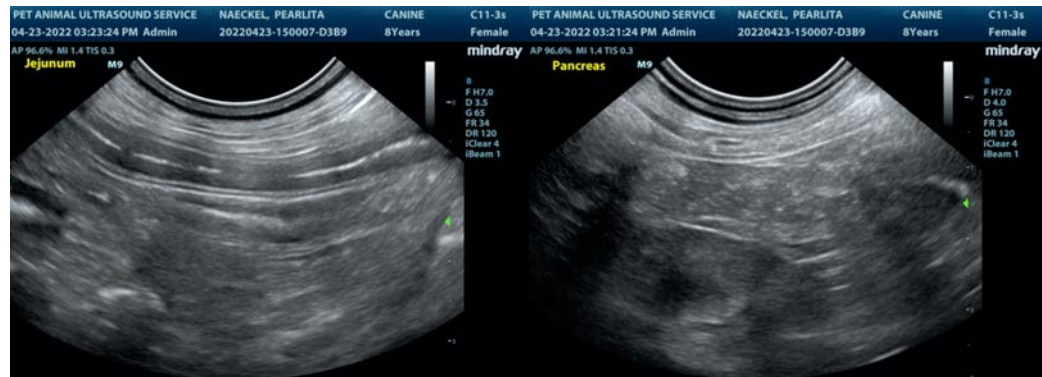
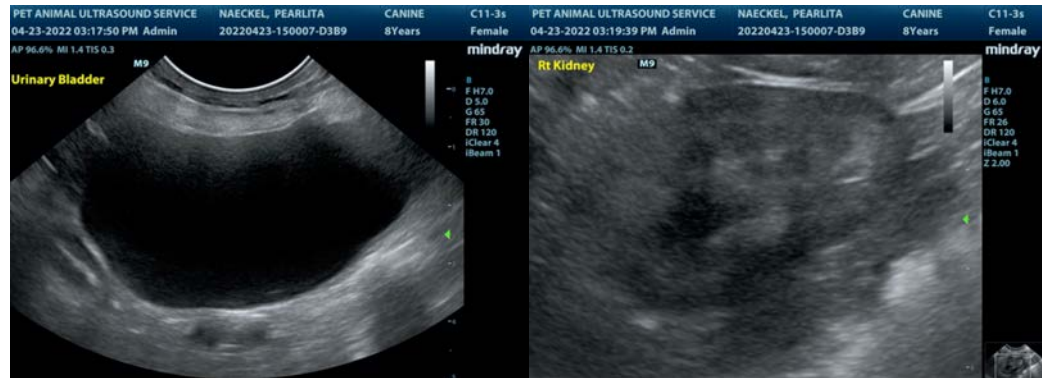
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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