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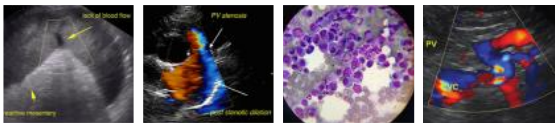


ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Ginger Horton

SPECIES

Canine

BREED

Min Pin

SEX

SF

AGE

4 years

WEIGHT

28 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Q Street AH

REFERRING VET

Dr. Cone

INVOICE

13815

DATE

5/5/22

PRESENTING CLINICAL SIGNS

Presented for dental cleaning. Elevated liver values discovered on pre-anesthetic bloodwork. No symptoms noted at home. Overweight; otherwise normal physical exam.
Abnormal PE/Chem/CBC/UA Results: ALT 423 (n=10-118), ALP 163 (n=20-150), Glucose 130 (n=60-110). Current Medications Finished a 10 day course of Prednisone for skin 2 months ago. Started Denamarin today.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4.0 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 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. The left kidney measured 4.5 cm in length. The right kidney measured 5.1 cm in length.

Adrenal Glands

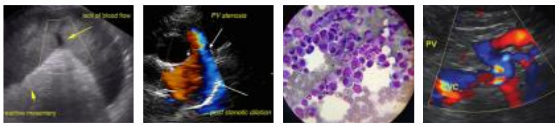
The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.0 cm length x 0.60 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.8 cm length x 0.44 cm width at the caudal pole. No evidence of adrenal hyperplasia or neoplastic criteria was noted.

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 mild to moderately 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



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congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

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

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.

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 were evident.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Benign hepatopathy

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The overall appearance of the liver was nonspecific with considerations including metabolic, vacuolar, reactive, inflammatory / immune-mediated disease, hepatotoxicosis i.e., copper hepatopathy, or other hepatopathies without evidence of neoplastic criteria. Assuming normal clotting status, ultrasound-guided FNA of the liver could be considered for screening cytology and potential identification of inflammatory cells if present. Hepatic core surgical biopsy is likely required for a definitive diagnosis via histopathology +/- copper staining or quantification.

Leptospirosis titers/ PCR could be considered if endemic to the area or potential exposure. However, given the lack of clinical signs in this patient, clinical hepatic disease is considered unlikely. Hepatosupportive medications Including Denamarin and Ursodiol may prove beneficial. No overt anesthetic contraindications, assuming normal BUN, glucose, albumin, and cholesterol levels.

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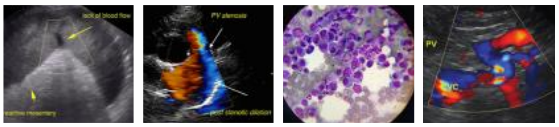

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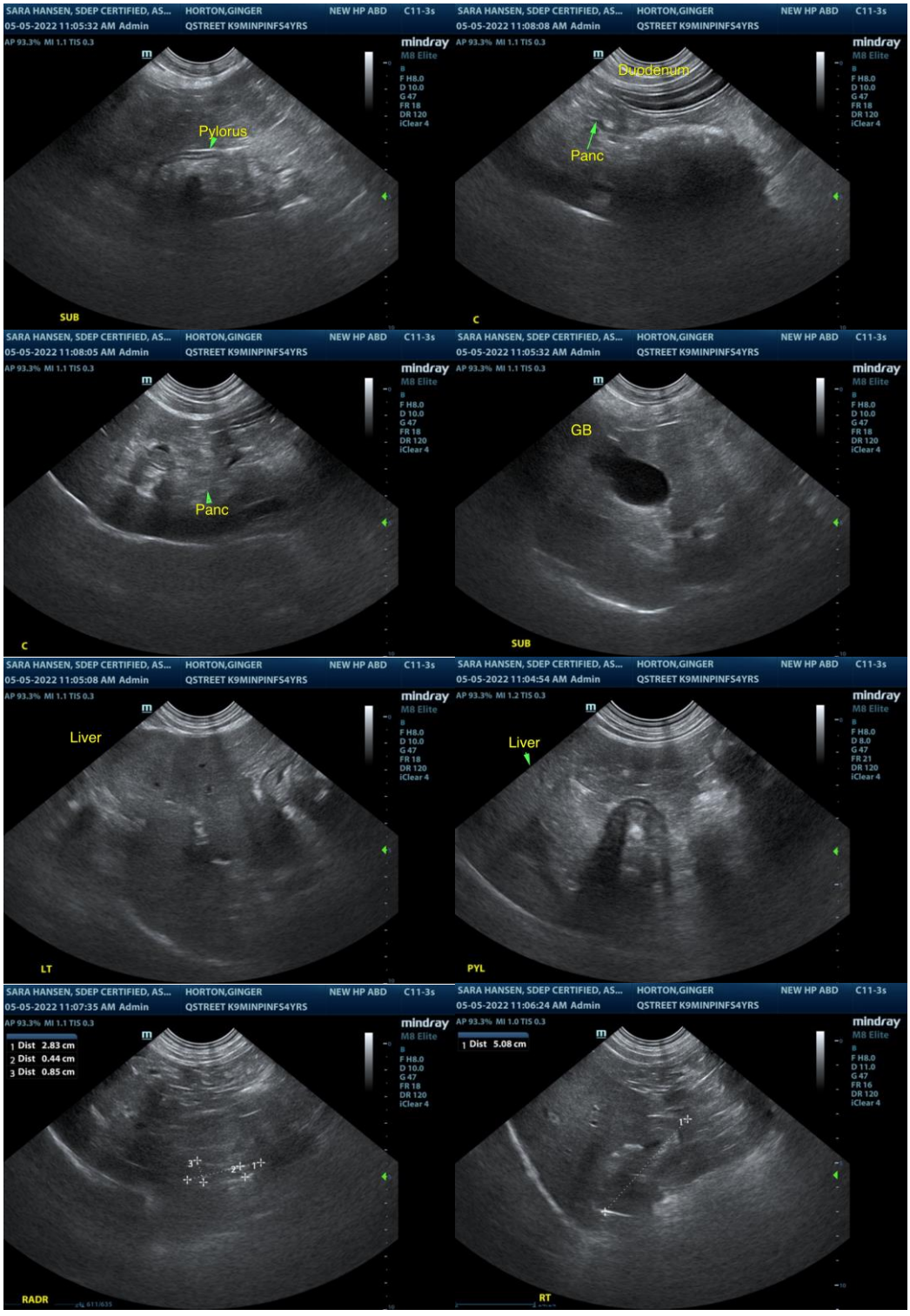

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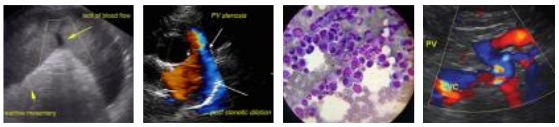

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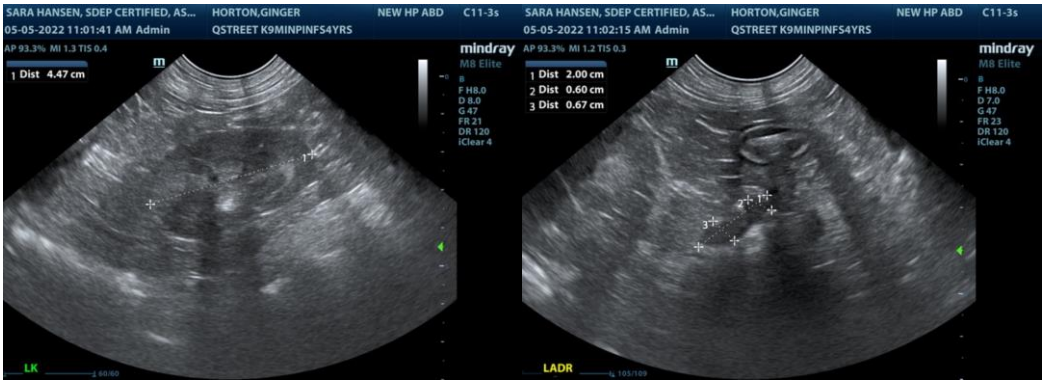

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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