



PATIENT PRESENTING CLINICAL SIGNS

Sadie Palmer
Patient presented for a dental cleaning on 11/15/22, but was found to have elevated ALT and ALKP. Bile Acids check that day was normal. Recommended a course of Metronidazole and VRS Hepato, then recheck liver values in 1 month. On 12/13/22 the ALT was the same, but the ALKP had doubled.

SPECIES

Canine
Abnormal PE/Chem/CBC/UA Results: 11/15/22: ALT 470, ALKP 642. Bile acids pre 17.4 and post 14.6 12/13/22: ALT 484, ALKP 1067 Current Medications VRS Hepato and Proin

BREED

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Doberman Mix

Urinary System

SEX

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 4 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.

FS

AGE

13yr

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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 7.1 cm in length. The right kidney measured 6.6 cm in length.

WEIGHT

39kg

The area of the aortic trifurcation was free of pathology.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.89 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 0.61 cm width at the caudal pole.

IMAGING PERFORMED BY

Sara Hansen

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.

HOSPITAL NAME

Silver Creek Animal Clinic

REFERRING VET

Dr. Tangeman

Liver/Gallbladder

The liver was subjectively mildly enlarged in size with normal structure and contour. Generalized mild non-uniform parenchyma exhibiting moderate coarse echotexture and evidence of remodeling was present. A focal discrete caudal isoechoic nodule measuring ~ 3.2 cm in diameter was present. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with non-organized echogenic debris. No evidence of gallbladder or peripheral gallbladder inflammation was present. The cystic and common bile ducts were normal.

INVOICE

12912ag

DATE

02/06/2023

Gastrointestinal



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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.

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 pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum, likely consistent with age related changes and considered incidental. No signs of active inflammation or neoplasia.

Free Abdomen

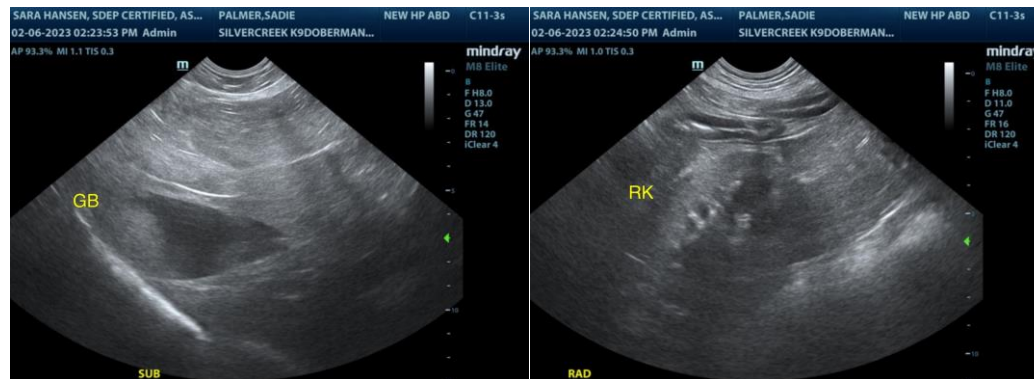
No omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Mild hepatomegaly exhibiting mild irregular nodular parenchyma-vacuolar hepatopathy, chronic inflammatory/immune mediated disease, hematopoiesis, hyperplasia, fibrosis or other hepatopathy possible. Neoplastic criteria considered less likely.
- Gallbladder debris-not consistent with mucocele criteria
- Mild chronic renal changes
- Sonographically unremarkable urinary bladder and visible proximal urethra

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assuming normal clotting status, a hepatic FNA for screening cytology is warranted for further assessment. A leptospirosis titer/PCR may be considered if clinically indicated or if potential exposure/endemic to the area. Hepatic core surgical biopsy is likely required for a definitive diagnosis. Continued hepatosupportive medications such as Denamarin and Ursodiol due to its antioxidant and immunomodulatory effects within the liver may prove beneficial.





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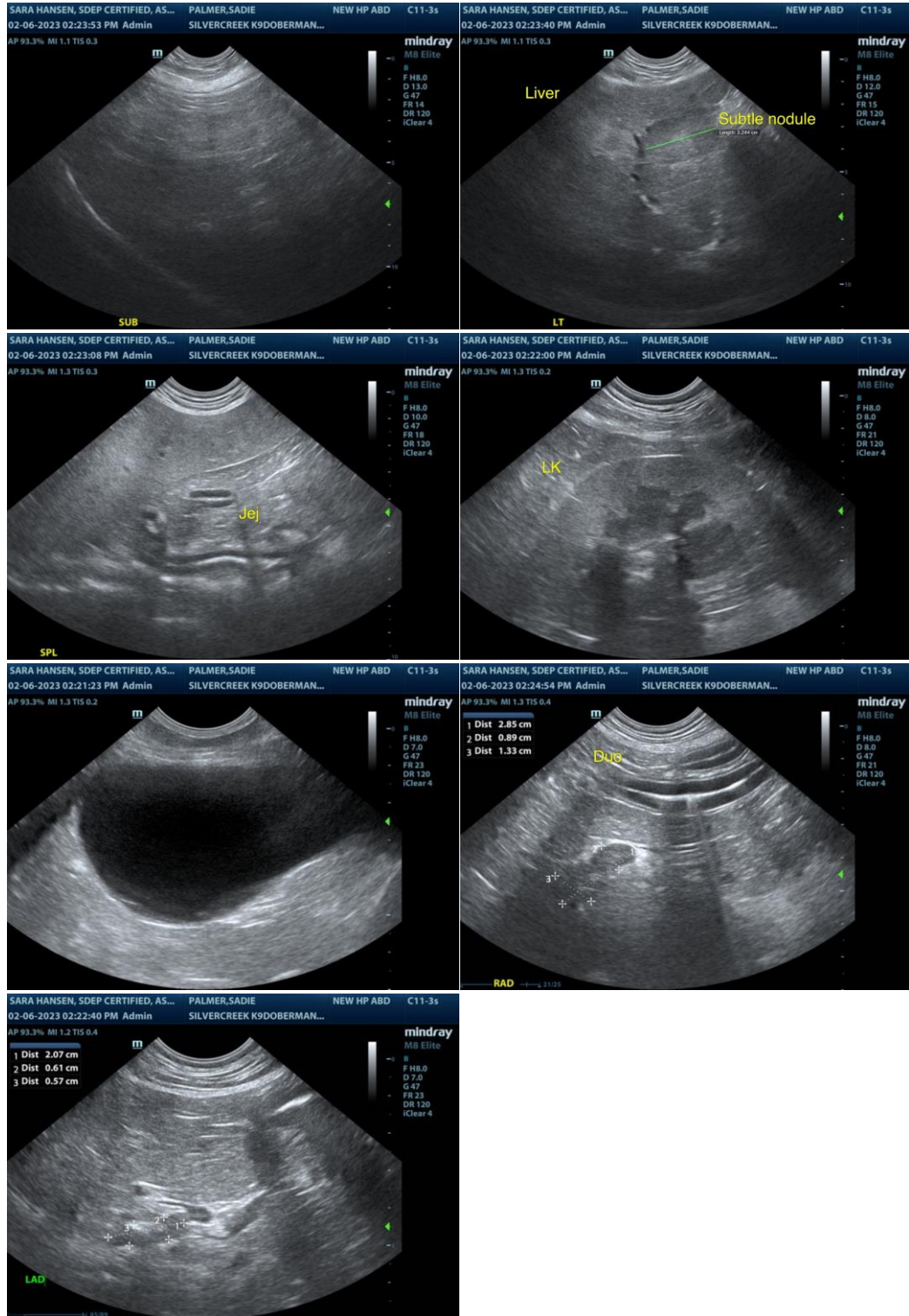
Dr. Tangeman

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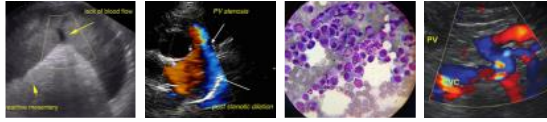
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not



PATIENT visible in the image/video clips provided.

Sadie Palmer 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.

SPECIES R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

Canine info@SonoPath.com

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