



PATIENT PRESENTING CLINICAL SIGNS

Tucker Wood Elevated liver enzymes, not clinical. Has been on Thyro tabs 0.3mg SID, Zentonil Advanced. History of skin allergies.

SPECIES Abnormal PE/Chem/CBC/UA Results: U/A - WNL Sp. Grav 1.018 CBC normal other than M1 elevation Eosinophils, M1 low platelets. Chem ALT 336(18-121)AST 77(16-55)ALP255(5-160) Total Bili 9.6(0.0-5.2)Bile Acids 59.0(0.0-14.9) T4 normal 4DX negative

Canine

BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

German Shepherd

Urinary System

SEX

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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.

MN

AGE

Normal size and margination was present in the left kidney. 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 7.4 cm in length.

10yr

WEIGHT

The right kidney was indistinctly visualized owing to patient size and conformation with no overt pathology. The right kidney measured 6.9 cm in length.

37kg

The area of the aortic trifurcation was free of pathology.

The area of the residual prostate appeared normal and 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 0.57 cm width at the caudal pole and 0.47 cm width at the cranial pole. The right adrenal gland was indistinctly visualized owing to patient size and conformation with no overt pathology.

IMAGING PERFORMED BY

Crystal Hill

Spleen

The spleen exhibited potential for borderline to mild enlargement with a primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.

HOSPITAL NAME

Hartzel AH

REFERRING VET

Bukovska

Liver/Gallbladder

INVOICE

13745ag

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. Subjective normal to adequate vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with primarily anechoic luminal content and mild non-dependent focally hyperechoic non-organized debris.

DATE

05/08/2023



PATIENT

No evidence of gallbladder or peripheral gallbladder inflammation was present. The cystic and common bile ducts were normal.

Tucker Wood

Gastrointestinal

SPECIES

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.

Canine

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.

BREED

German Shepherd

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

Pancreas

SEX

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.

MN

Free Abdomen

AGE

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

10yr

ULTRASONOGRAPHIC FINDINGS

WEIGHT

- Non-specific hepatopathy-subjectively benign.
- Mild non-organized focally hyperechoic gallbladder debris (non-mucocele).
- Mild heterogenous spleen.
- Mild age related kidneys.

37kg

INTERPRETED BY

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The liver was non-specific yet exhibited normal vascular volume without overt evidence of intrahepatic or extrahepatic macroscopic shunt. Non-specific inflammatory hepatopathy given the primarily elevated ALT/AST combination is suspected with potential primary or concurrent vacuolar hepatopathy, hyperplasia, hematopoiesis or other hepatopathy with infiltrative neoplasia thought less likely.

IMAGING PERFORMED BY

Crystal Hill

Assuming normal clotting status and if accessible a hepatic FNA for screening cytology could be considered for identification of inflammatory cell type if present. A leptospirosis titer/PCR may be considered if clinically indicated or if potential exposure/endemic to the area. However, without a concurrent renal component, leptospirosis is thought less likely. A hepatic core surgical biopsy is required for a definitive diagnosis.

HOSPITAL NAME

Hartzel AH

REFERRING VET

Bukovska

The mild splenic heterogeneity is likely incidental and consistent with patient variant, mild hyperplasia, hematopoiesis with potential for mild breed associated hypersplenism. No evidence of neoplastic criteria. Concurrent screening splenic FNA cytology could be considered if persistent radiographic splenomegaly or evidence of weight loss.

INVOICE

13745ag

Empirically, hepatosupportive medications such as Denamarin and Ursodiol if tolerated may prove beneficial.

DATE

05/08/2023



PATIENT

Tucker Wood

SPECIES

Canine

BREED

German Shepherd

SEX

MN

AGE

10yr

WEIGHT

37kg

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Crystal Hill

HOSPITAL NAME

Hartzel AH

REFERRING VET

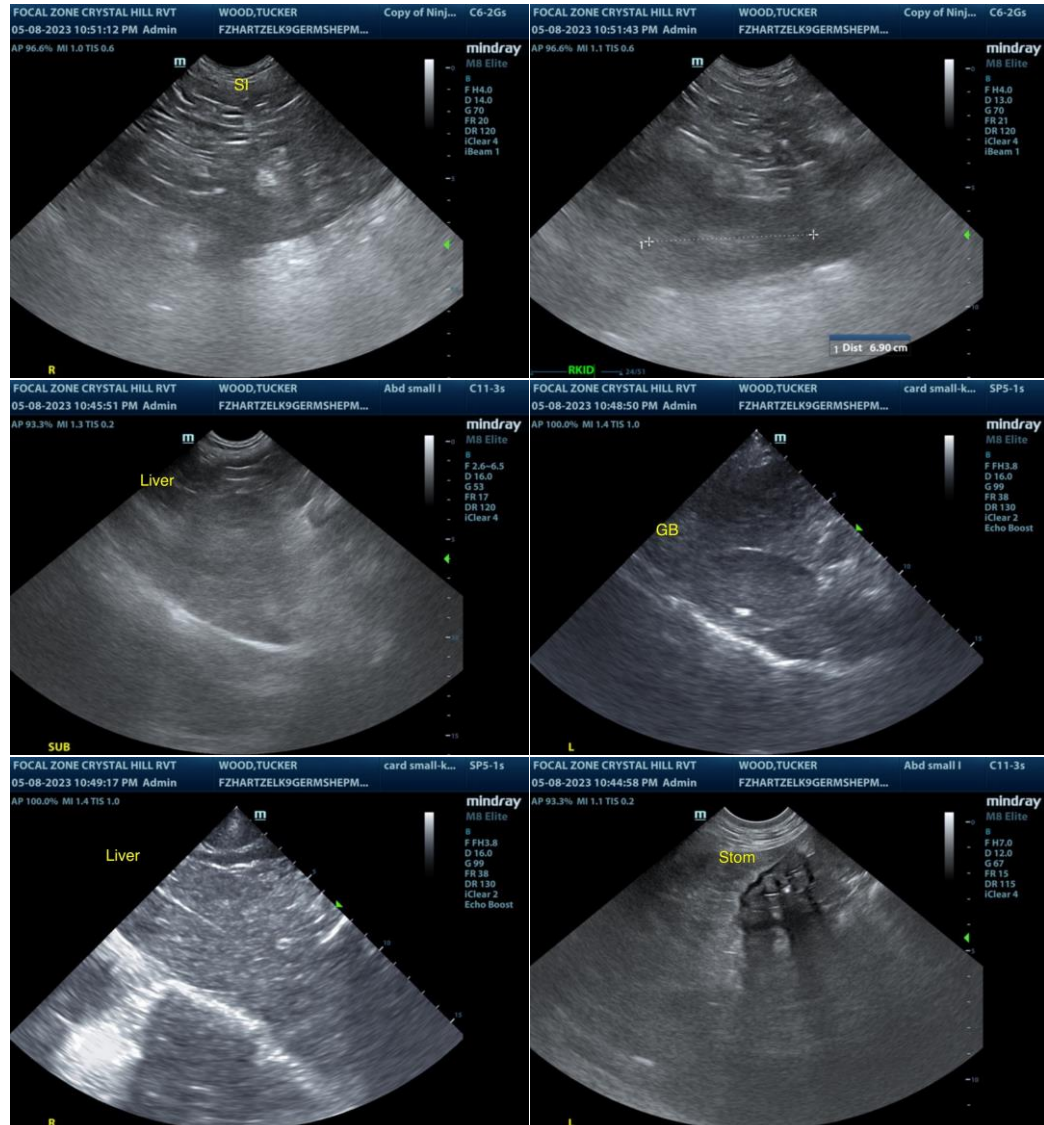
Bukovska

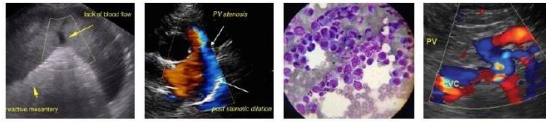
INVOICE

13745ag

DATE

05/08/2023





PATIENT

Tucker Wood

SPECIES

Canine

BREED

German Shepherd

SEX

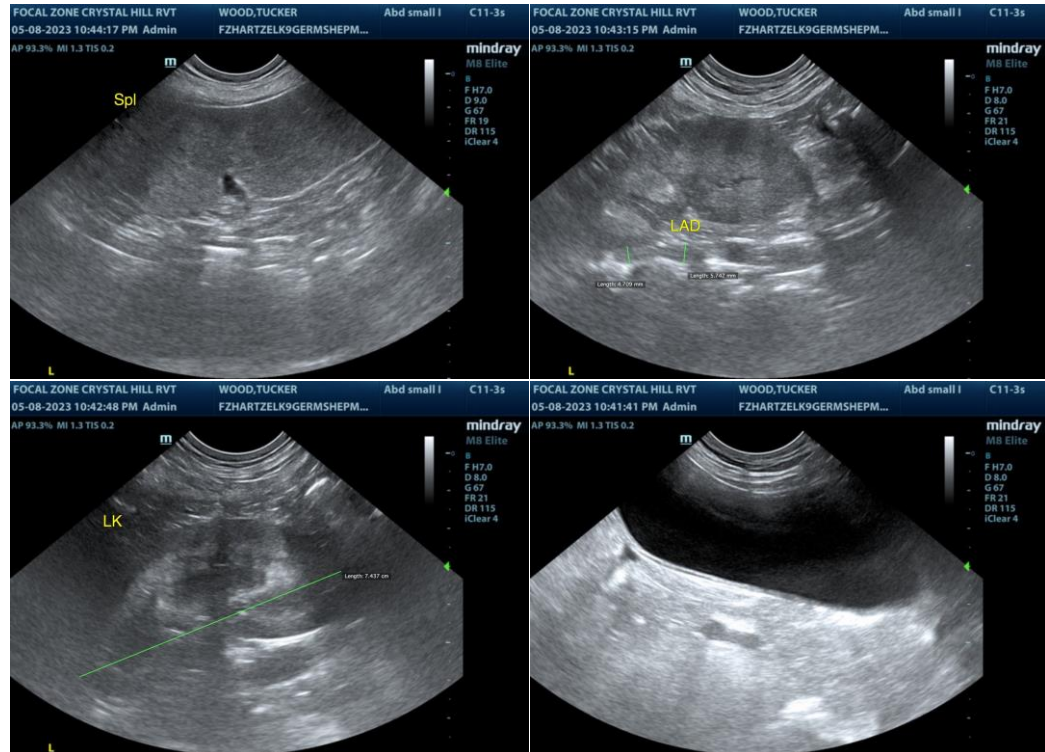
MN

AGE

10yr

WEIGHT

37kg



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

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Hartzel AH

REFERRING VET

Bukovska

INVOICE

13745ag

DATE

05/08/2023