



PATIENT PRESENTING CLINICAL SIGNS

Patron Vasil History: Elevated liver values, recent echo done (attached) Pimobendan, Benazepril, Spironolactone, CBC wnl, BUN 35 CREAT 1.1 ALT 750 ALP 153 GGT 17 TBIL 0.4

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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.

BREED

Terrier X

SEX

Neutered male

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 moderately increased echogenicity and moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Areas of pinpoint medullary mineral were observed. No evidence of pelvic dilation was present. The left kidney measured 3.4 cm in length. The right kidney measured 3.5 cm in length.

AGE

14 years

The area of the aortic trifurcation was free of pathology.

WEIGHT

13.5

No pathology in the area of the residual prostate.

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 0.49 cm width at the cranial pole. The right adrenal gland was indistinctly visualized yet without overt pathology and measured 0.62 cm width at the caudal pole.

INTERPRETED BY

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

Spleen

The spleen exhibited 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.

IMAGING PERFORMED BY

Rebekah Jakum, CVT
 ARDMS/RVT

Liver

The liver presented mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver exhibited mild parenchyma remodeling 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 mild to moderate nondependent yet nonorganized gallbladder debris and was otherwise normal without evidence of gallbladder or peripheral gallbladder inflammation. The cystic duct and common bile ducts were normal without evidence of dilation.

HOSPITAL NAME

Alburtis Animal
 Hospital

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PATIENT *Gastrointestinal*

Patron Vasil 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.

SPECIES 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.

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

BREED *Pancreas*

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

SEX *Free Abdomen*

Neutered male No overt lymphadenopathy or peritoneal effusion was present.

AGE

14 years

ULTRASONOGRAPHIC FINDINGS

WEIGHT

13.5

- Moderate chronic renal changes with pinpoint medullary mineral.
- Benign hepatopathy.
- Mild to moderate gallbladder debris-possible very early mucocele.
- Mild pancreatic remodeling-likely age-related pancreatic changes and incidental.

INTERPRETED BY

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall, the appearance of the liver is consistent with benign hepatopathy. Primary considerations include nonspecific inflammatory parenchyma or hepatobiliary process such as cholangiohepatitis given the ALT elevation and presence of concurrent gallbladder debris, vacuolar hepatopathy and non-clinical cholestasis.

IMAGING PERFORMED BY

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Assuming normal clotting status a hepatic FNA could be considered for screening cytology primarily to assess for and identify inflammatory cell type. Empirically hepatosupportive medications such as Denamarin and ursodiol +/- antibiotic trial if evidence of inflammatory cells on cytology and continued monitoring of hepatic enzymes would be reasonable.

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Sonographic reassessment of the gallbladder would be indicated if progressive evidence of cholestasis or cranial abdominal or subxiphoid discomfort on palpation.

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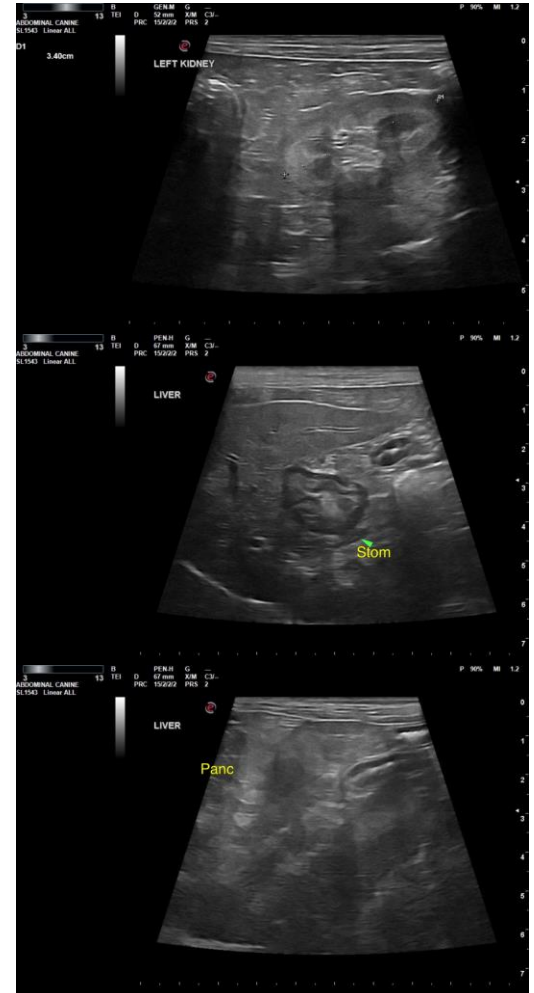
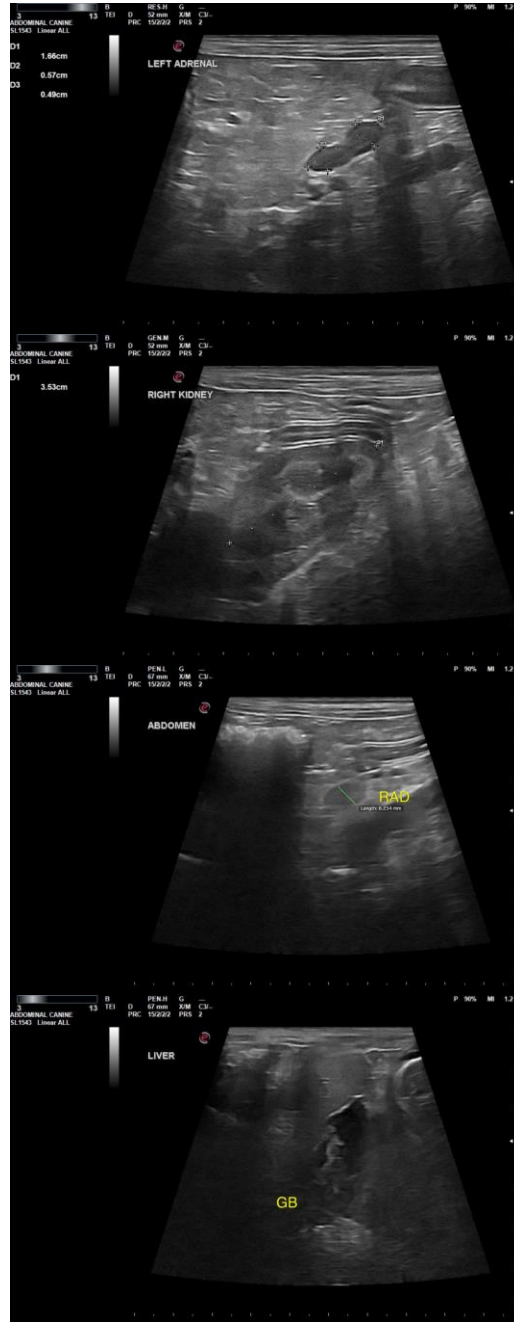
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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



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BREED

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SEX

Neutered male

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WEIGHT

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