



**PATIENT PRESENTING CLINICAL SIGNS**

Roscoe Merkle History of epilepsy, ear tip vasculitis, arthritis, recent/recurrent eye ulcer, PU/PD, elevated liver values  
 Phenobarbital, Ursodial, Denamarin, Tobramycin, Carprofen

**SPECIES** CBC- Platelets 626

Canine Chemistry Panel - ALP 513, AST 90, Na/K Ratio 24

**BREED** Urinalysis- Specific gravity 1.013, negative protein and glucose

Dachshund

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**SEX** The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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.

MN

**AGE** No evidence of pathology was noted in the area of the residual prostate.

2007

The area of the aortic trifurcation was free of pathology.

**WEIGHT**

9 kg

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. Mild nonuniform cortex echogenicity with subjective mild increased medullary echogenicity were noted. A mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient was present. Pinpoint areas of nonobstructive medullary mineral were noted. Multiple variably sized cortical cysts were present in both kidneys. No evidence of pelvic dilation was present. The left kidney measured 4.8 cm in length. The right kidney measured 5.1 cm in length.

**INTERPRETED BY**

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

**Adrenal Glands**

**IMAGING**

**PERFORMED BY**  
 Rebekah Jakum, CVT  
 ARDMS/RVT

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 0.56 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 1.9 cm length x 0.60 cm width at the caudal pole.

**HOSPITAL NAME**

Abby Road VH

**Spleen**

**REFERRING VET**

Dr. Gerenser

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.

**INVOICE**

14672

**Liver/ Gallbladder**

**DATE**  
 8/23/22

The liver was enlarged with a primarily maintained symmetrical capsule contour. Generalized moderate to severe nonhomogeneous irregular to nodular parenchyma was present. The gallbladder was non-distended in size containing a moderate amount of congealed, uniform, hyperechoic luminal



**PATIENT**

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

Roscoe Merkle

**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

**BREED**

The small intestine presented intact yet generalized prominent wall layering owing to propensity for generalized prominent mucosa. The duodenum wall measured 0.54 cm width. The jejunum wall measured 0.43 cm width.

Dachshund

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

**SEX**

**Pancreas**

MN

The pancreas was normal in size and contour with heterogeneous to mildly hyperechoic parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia. Minor pancreatic duct dilation was present.

**AGE**

**Free Abdomen**

2007

No overt lymphadenopathy or peritoneal effusion was present.

**WEIGHT**

**ULTRASONOGRAPHIC FINDINGS**

9 kg

- Chronic renal changes with focal nonobstructive medullary mineral and multiple cortical cysts
- Hepatomegaly with generalized moderate to severe nonhomogeneous irregular to nodular parenchyma
- Moderate congealed gallbladder debris
- Pancreatic remodeling
- Intact yet generalized prominent small bowel walls

**INTERPRETED BY**

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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

The diffuse hepatic changes were nonspecific with considerations including chronic vacuolar hepatopathy, inflammatory hepatopathy i.e., chronic active hepatitis/cholangiohepatitis, nodular hyperplasia, fibrosis, hematopoiesis, or other hepatopathy while the possibility of infiltrative neoplasia cannot be excluded. Some contribution to the hepatic enzyme elevations is suspected to be secondary to Phenobarbital.

**IMAGING**

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Further assessment may include, assuming normal clotting status, screening hepatic FNA for cytology.

**INVOICE**

Full adrenal work up may be considered given hepatic presentation and presence of PU/PD, although evidence of significant adrenomegaly or adrenal tumors was not present. Likewise, fasting and post-prandial bile acids to assess hepatic functionality, given the presence of PU/PD could be considered.

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**DATE**

8/23/22

The subjective generalized prominent yet intact small bowel walls were nonspecific with potential for patient variant. If evidence of GI signs, a GI panel to include PLI/TLI/Cobalamin/Folate, as well as further assessment of the pancreas for evidence of low-grade to chronic inflammation may be



**PATIENT**

Roscoe Merkle

considered. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

**SPECIES**

Canine

**BREED**

Dachsund

**SEX**

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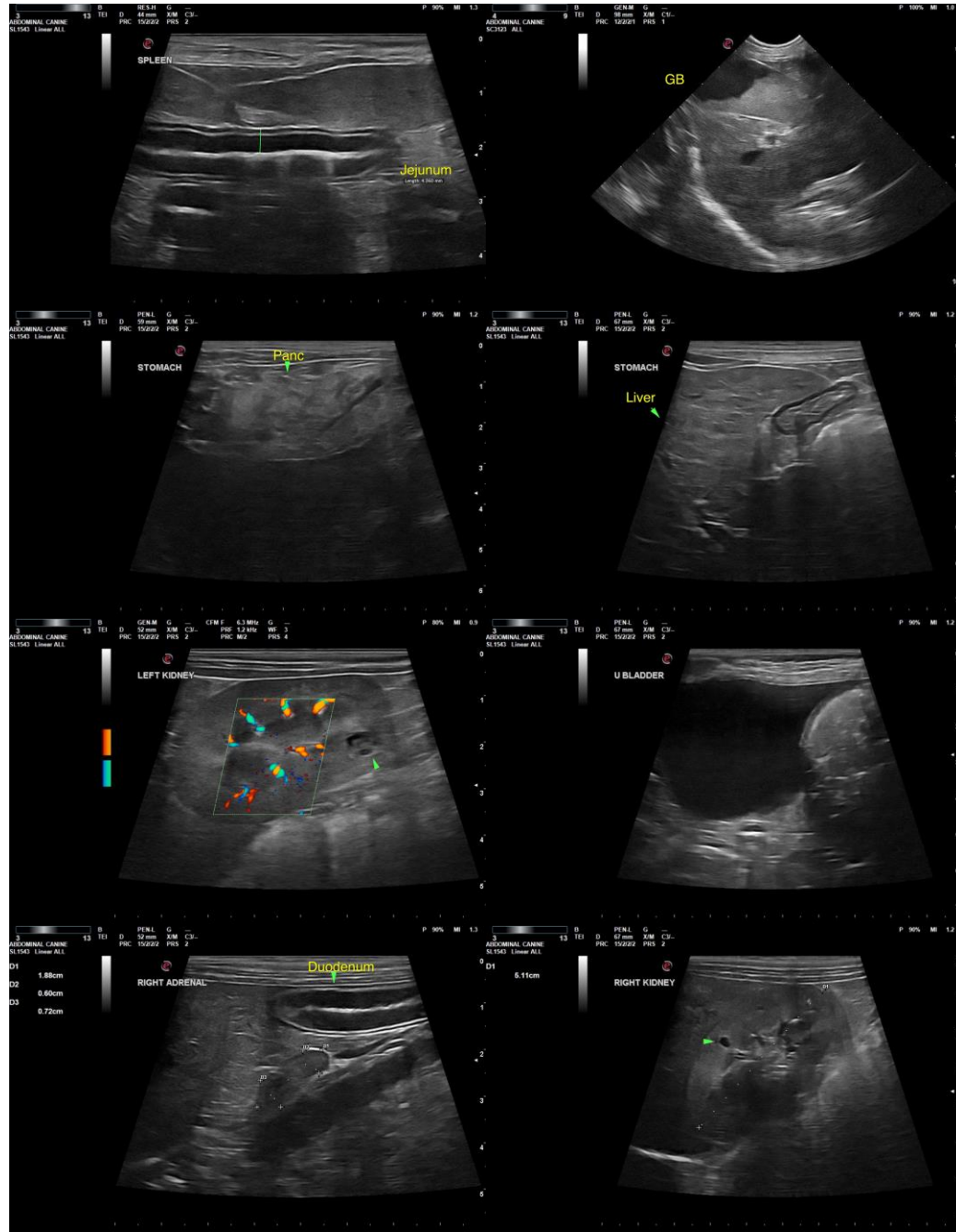
Dr. Gerenser

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**PATIENT**

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**SPECIES**

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**BREED**

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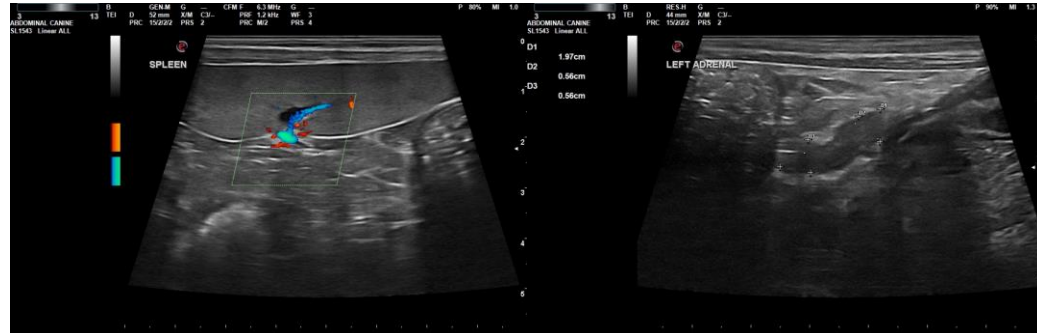
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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