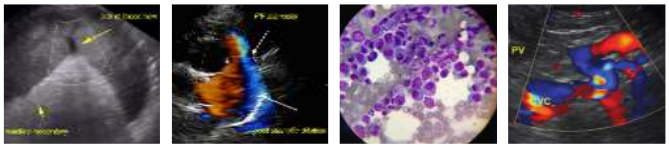
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Gizmo Ackerman

SPECIES

Canine

BREED

Yorkie

SEX

Male

AGE

9 months

WEIGHT

2.6 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Dave Stasiuk RDMS, RDCS

HOSPITAL NAME

Resolution Veterinary Ultrasound LTD

REFERRING VET

Southern Alberta Veterinary Emergency

INVOICE

13332

DATE

2/11/22

PRESENTING CLINICAL SIGNS

Pre bile acids at 26. Post bile acids at 75. ALT elevated. Rule out hepatic disease / PSS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and cystourethral junction exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths, sediment, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The prostate was of expected size and presentation for a young, intact, male canine measuring 2.3 cm in diameter.

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 3.9 cm in length. The right kidney measured 4.0 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 0.26 cm width at the caudal pole and 0.29 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.27 cm width at the caudal pole and 0.29 cm width at the cranial pole.

Spleen

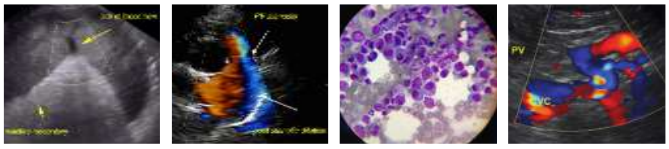
The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver/ Gallbladder

The liver exhibited potential for mild subnormal size with normal structure and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. Normal overall subjective hepatoportal vascular volume was present. Sonographic assessment in the area of the portal vein revealed subjective normal branching at the level of the porta hepatis. The gallbladder was non-distended in size with thin walls and 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. Minor retained non-shadowing ingesta / chyme was present In the stomach.



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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

Primary Findings

- Low-grade inflammatory hepatopathy - possible portal hypoplasia / microvascular dysplasia

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of intrahepatic or extrahepatic shunting was noted. Subjective normal portal vein branching and overall normal hepatic intravascular volume were present. FNA could be considered to assess potential inflammatory cell type. Core biopsy or surgical biopsy is likely necessary for definition as to whether portal hypoplasia / microvascular dysplasia Is present. A clinical trial of the following could be considered if clinically indicated. No obvious evidence of a macroscopic portosystemic shunt including no evidence of secondary findings such as renal or cystic mineralization was evident.

Royal Canin Hepatic Support diet or Hills L/D, **Metronidazole** (7.5 mg/kg PO bid) over the next 14 days, **Lactulose** (Oral: 3.1-3.7 g/5 ml lactulose in a syrup base) long term to target 2-3 soft stools/day, with a **high-quality protein supplement** of minor amount of **yogurt** or **cheddar cheese**. Monitor bile acids, with attention paid to dropping albumin, BUN or cholesterol. SAMe and nutraceuticals as needed. **Ursodiol (**10-15 mg/kg p.o. q24h) can be considered as hepatoprotectant and to enhance bile flow. **Zinc** serum level keep between 200—500 ug/dl. If deficient then Tx zinc acetate 1-3 mg/kg/day. Gastrointestinal protectants are recommended if the patient is anorexic.

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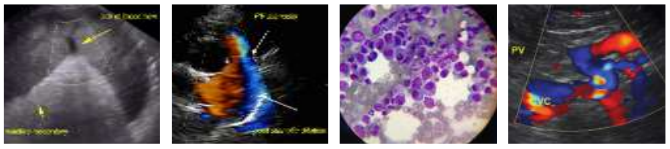

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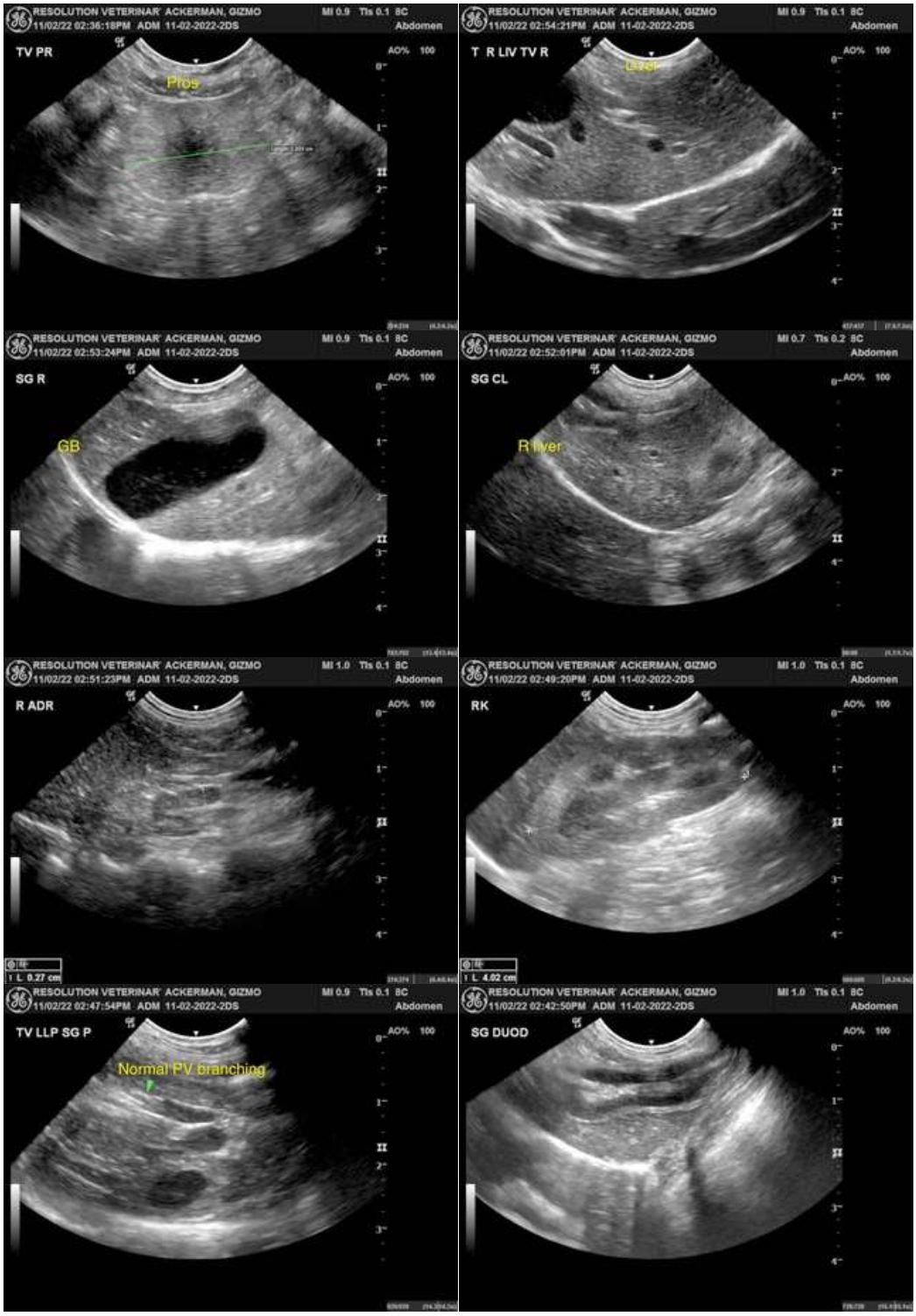

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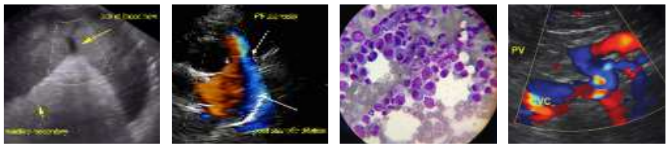

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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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