SonoPath
Clinical Sonography & Telecytology
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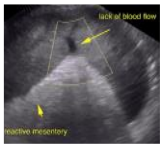
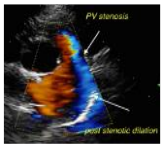
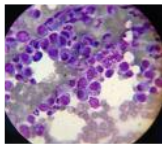
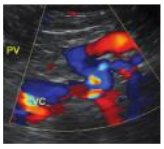




SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Tanner Armstrong

SPECIES

Canine

BREED

Golden Retriever

SEX

MN

AGE

14 years

WEIGHT

56 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Animal General on Hudson

REFERRING VET

Dr. Karen Zelinski

INVOICE

16424

DATE

3/22/23

PRESENTING CLINICAL SIGNS

Spring of 2022 - weight loss, was on raw duck diet, blood work NSF. June 2022 - diarrhea, July 2022 - Abd. U/S- NSF, stool improved with metronidazole and Z/D diet and gained weight. Jan. 2023 diarrhea, anorexia, blood work NSF. Abnormal cPL - improved with support.

Current meds: thyroid supplement, carprofen, and Adequan.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 5.0 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.

The residual prostate was normal in size with mild capsule asymmetry and heterogeneous parenchyma measuring 2.4 cm x 1.7 cm.

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 was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.9 cm in length. The right kidney measured 5.8 cm in length.

Adrenal Glands

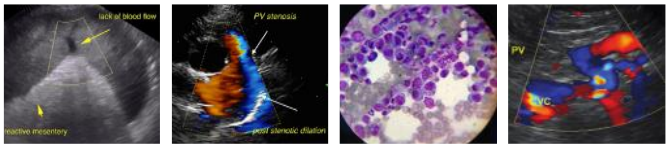
The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. No adrenal tumors were noted. The left adrenal gland measured 2.2 cm length x 0.80 cm width at the caudal pole. The right adrenal gland measured 2.1 cm length x 0.60 cm width at the caudal pole.

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.

Liver/ Gallbladder

The liver was subjectively mildly enlarged in size with minor areas of capsule asymmetry and generalized nonhomogeneous to nodular parenchyma. The gallbladder was non-distended in size containing anechoic content with mildly progressive, previously noted inspissated hyperechoic gallbladder debris. The area of inspissated gallbladder debris measured 3.2 cm in diameter. No



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evidence of gallbladder or peripheral gallbladder inflammatory criteria was noted. The cystic and common bile ducts were normal.

Gastrointestinal

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. No signs of active inflammation or neoplasia.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Heterogeneous residual prostate - likely benign
- Age-related renal / adrenal / splenic changes
- Hepatomegaly exhibiting nonhomogeneous / nodular parenchyma - age-related parenchymal remodeling, hyperplasia, hematopoiesis, vacuolar hepatopathy, fibrosis, and infiltrative neoplasia are all potentials
- Mildly progressive inspissated gallbladder debris (non-mucocele)
- Pancreatic remodeling - no sonographic evidence of active pancreatitis, benign / age-related remodeling potentially owing to previous inflammation or chronic pancreatitis possible
- Structurally unremarkable gastrointestinal tract

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assuming normal clotting status, screening ultrasound guided hepatic FNA cytology is warranted despite lack of reported hepatic enzyme elevations. Monitoring of hepatic enzyme going forward +/- hepatosupportive medications, if hepatic elevated enzymes, could be considered.

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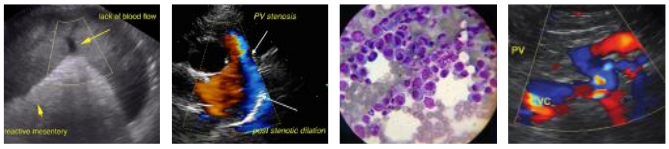

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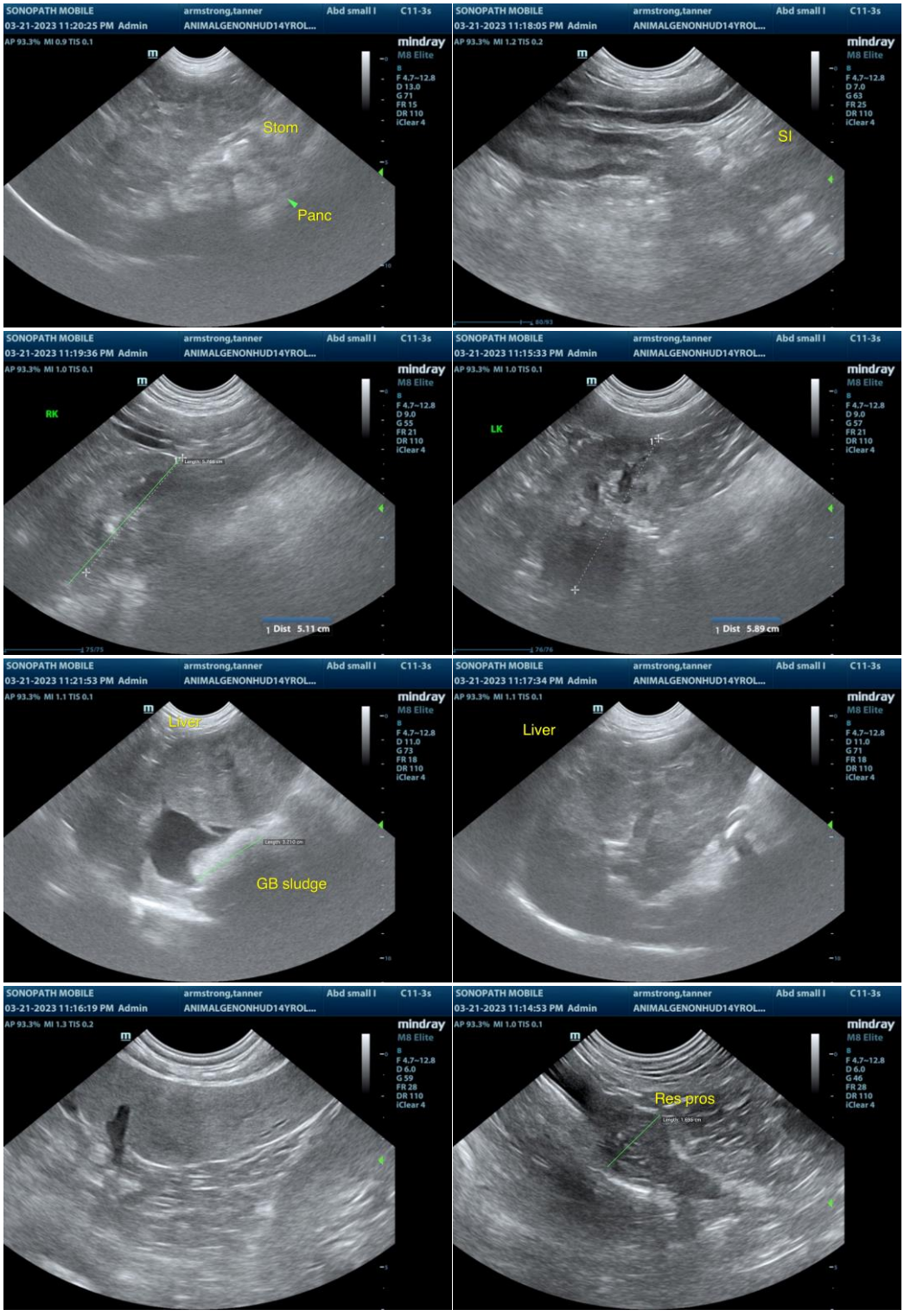

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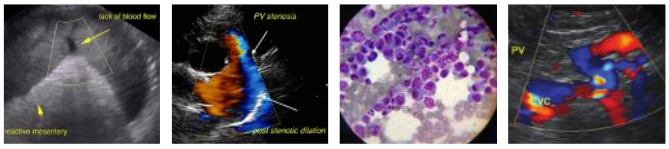

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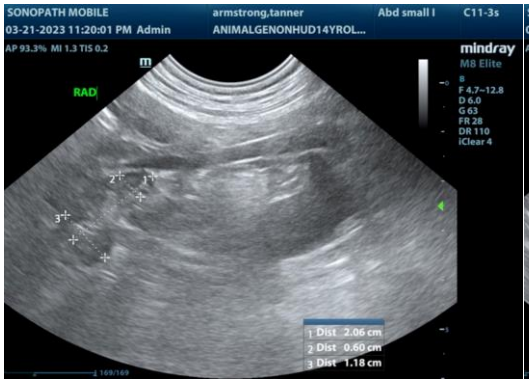

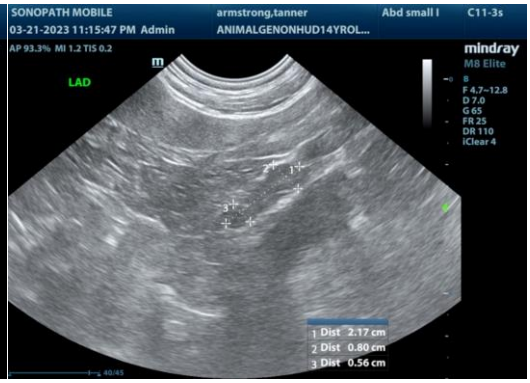

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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