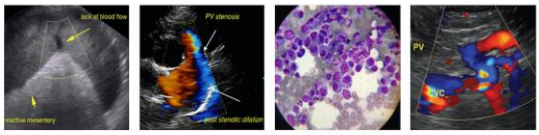


PATIENT

Logan Michael

SPECIES

Canine

BREED

Shetland Sheepdog

SEX

MN

AGE

2010

WEIGHT

36

INTERPRETED BY

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

IMAGING PERFORMED BY

Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME

Maple Hills VH

REFERRING VET

Dr. Banzhof

INVOICE

16731

DATE

5/2/23

PRESENTING CLINICAL SIGNS

Horner's Syndrome, seizures, 3/6 murmur, elevated liver values.

Medication: Vetmedin, Levetracetan, Levothyroxine, NeoPolyDex

WBC 19.6 with neutrophilia, mild monocytosis, Platelets 316, ALT 129, ALP 1899, GGT 12, TBili 0.4

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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. No evidence of mineral or calculi was noted. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

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

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. Mild nonuniform increased cortex echogenicity was noted with mild loss of corticomedullary border demarcation. No evidence of pelvic dilation was present. Small bilateral cortical cysts were present with minor left kidney pyelectasia. The left kidney measured 5.4 cm in length. The right kidney measured 5.6 cm in length.

Adrenal Glands

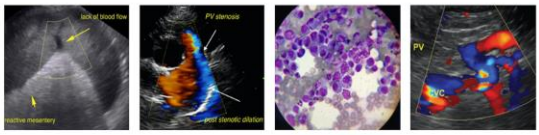
The bilateral adrenal glands were normal in size based on caudal pole width measurement in light of body weight. Mild parenchyma heterogeneity and mild capsule asymmetry were present without suspicion for overt neoplasia. The left adrenal gland measured 2.1 cm length x 0.52 cm width at the caudal pole. The right adrenal gland measured 2.7 cm length x 0.71 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 spleen exhibited minor medial capsule asymmetry with possible discrete areas of medial capsule fibrosis. The spleen was normal in overall size with no masses. 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 exhibited moderate enlargement with normal contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size containing primarily anechoic



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content with mild echogenic nonorganized gallbladder debris. No evidence of peripheral gallbladder inflammation 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 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

- Enlarged nonhomogeneous liver - vacuolar hepatopathy pattern suspected, hyperplasia, hematopoiesis, primary or concurrent inflammatory hepatopathy, infiltrative neoplasia (less likely) all potentials
- Mild gallbladder debris (non-mucocele)
- Chronic renal changes with cortical cysts and minor left kidney pyelectasia
- Mild heterogeneous spleen with suspect minor medial capsule fibrosis - subjectively benign

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The left kidney pyelectasia may be owing to chronic renal changes, potential pelvic scarring possibly owing to previous calculi passage, IV fluid therapy (if applicable). Urine C/S and protein: creatinine ratio on sterile urine sample is recommended.

Assuming normal clotting status, screening hepatic FNA cytology could be considered for further clarification primarily to assess for or possibly identify evidence of inflammatory criteria. Empirically, Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial.

Hepatic functionality is likely adequate given normal glucose, BUN, cholesterol, and albumin levels. Bile acid testing could be considered for further assessment of hepatic functionality given reported seizures.

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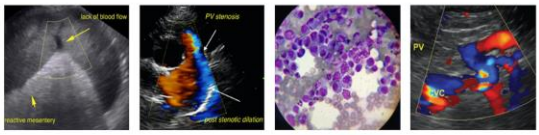

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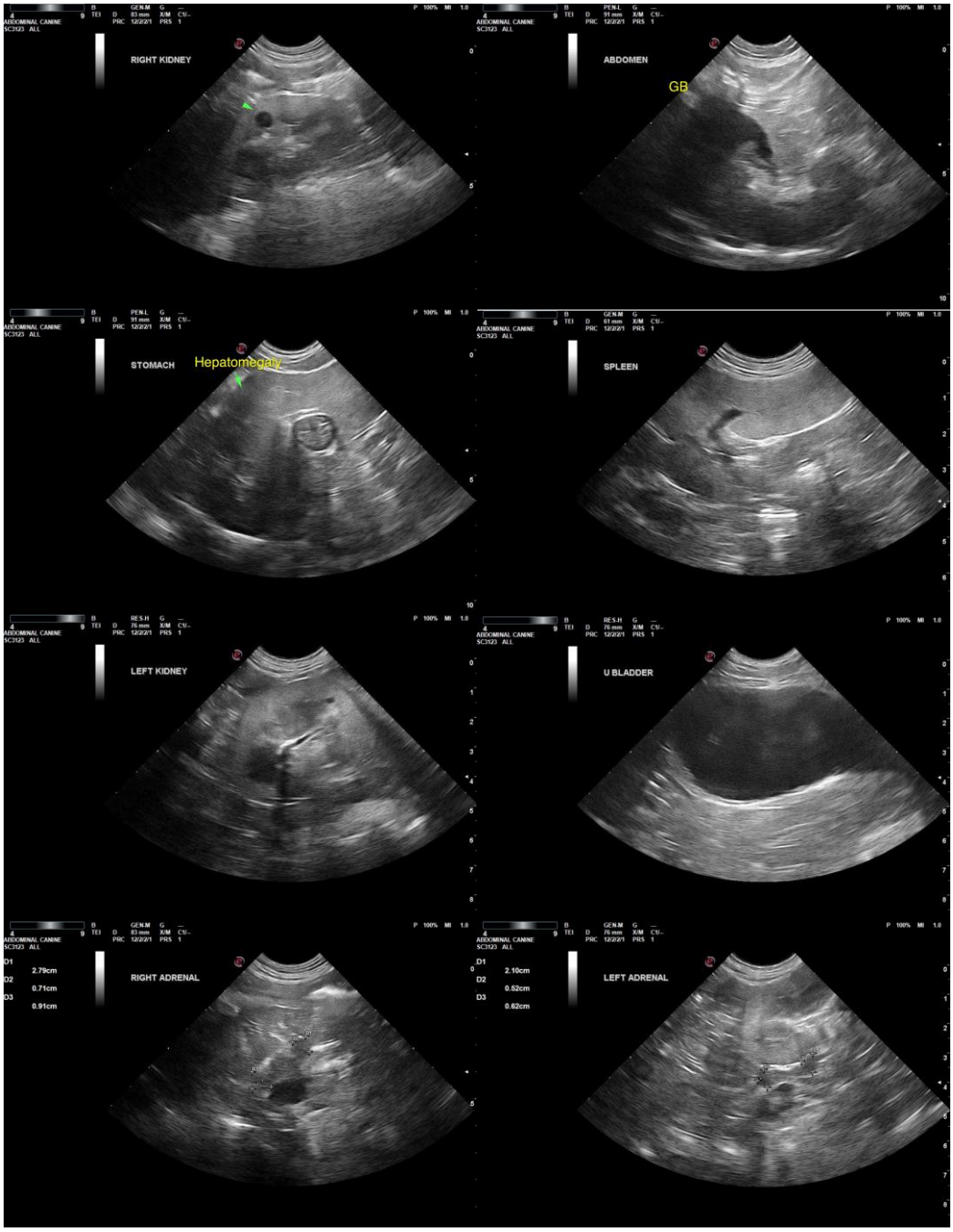

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)
mac.daniel@sonopath.com