



PATIENT PRESENTING CLINICAL SIGNS

Clyde Nierer 7.11 - acute PU/PD, elevated liver values, suspected toxic event, continued elevation of ALP >2000, ALT 72, GGT 0, TBIL 0.2, CBC wnl. Medication: Denamarin

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

BREED The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths, mineral or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Collie Mix

SEX 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 mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 6.3 cm in length. The right kidney measured 6.3 cm in length.

MN

AGE The area of the aortic trifurcation was free of pathology.

2016 The area of the residual prostate appeared normal and free of pathology.

WEIGHT Adrenal Glands

54 The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.59 cm width at the caudal pole and 0.49 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 0.62 cm width at the caudal pole.

INTERPRETED BY

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

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.

IMAGING PERFORMED BY
 Rebekah Jakum, CVT
 ARDMS/RVT

Liver/Gallbladder

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform 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 primarily anechoic luminal content and mild non-organized sediment. The cystic and common bile ducts were normal.

HOSPITAL NAME

Blue Ridge VC

REFERRING VET

Filchner

Gastrointestinal

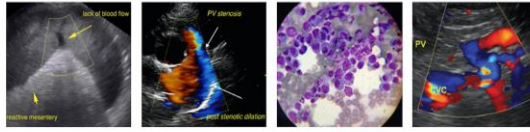
INVOICE The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

14519ag

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.

DATE
 08/08/2023

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



PATIENT *Pancreas*

Clyde Nierer 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 was evident.

SPECIES *Free Abdomen*

Canine No omental masses, overt lymphadenopathy or peritoneal effusion was present.

BREED **ULTRASONOGRAPHIC FINDINGS**

Collie Mix

- SEX** • Hepatopathy-subjectively benign, vacuolar hepatopathy, persistent to resolving hepatitis (viral, bacterial, leptospirosis, toxin), hematopoiesis, hyperplasia, non-obstructive cholestasis, or other hepatopathy possible. Neoplastic criteria considered less likely.
- MN** • Gallbladder debris (non-mucocele).
- Sonographically unremarkable bilateral adrenal glands.

AGE **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

2016

Assuming normal clotting status and using a 25g needle, a hepatic FNA for screening cytology is warranted for further assessment. A leptospirosis titer/PCR may be considered if clinically indicated or if potential exposure/endemic to the area.

WEIGHT

54

Non-obvious primary adrenal disease considered less likely given no persistent PU/PD yet reassessment could be considered if recurrent/progressive PU/PD is noted.

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Continued hepatosupportive medications such as Denamarin and Ursodiol due to its antioxidant and immunomodulatory effects within the liver would be warranted, although these medications may not result in decreased hepatic enzyme levels.

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INVOICE

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PATIENT

Clyde Nierer

SPECIES

Canine

BREED

Collie Mix

SEX

MN

AGE

2016

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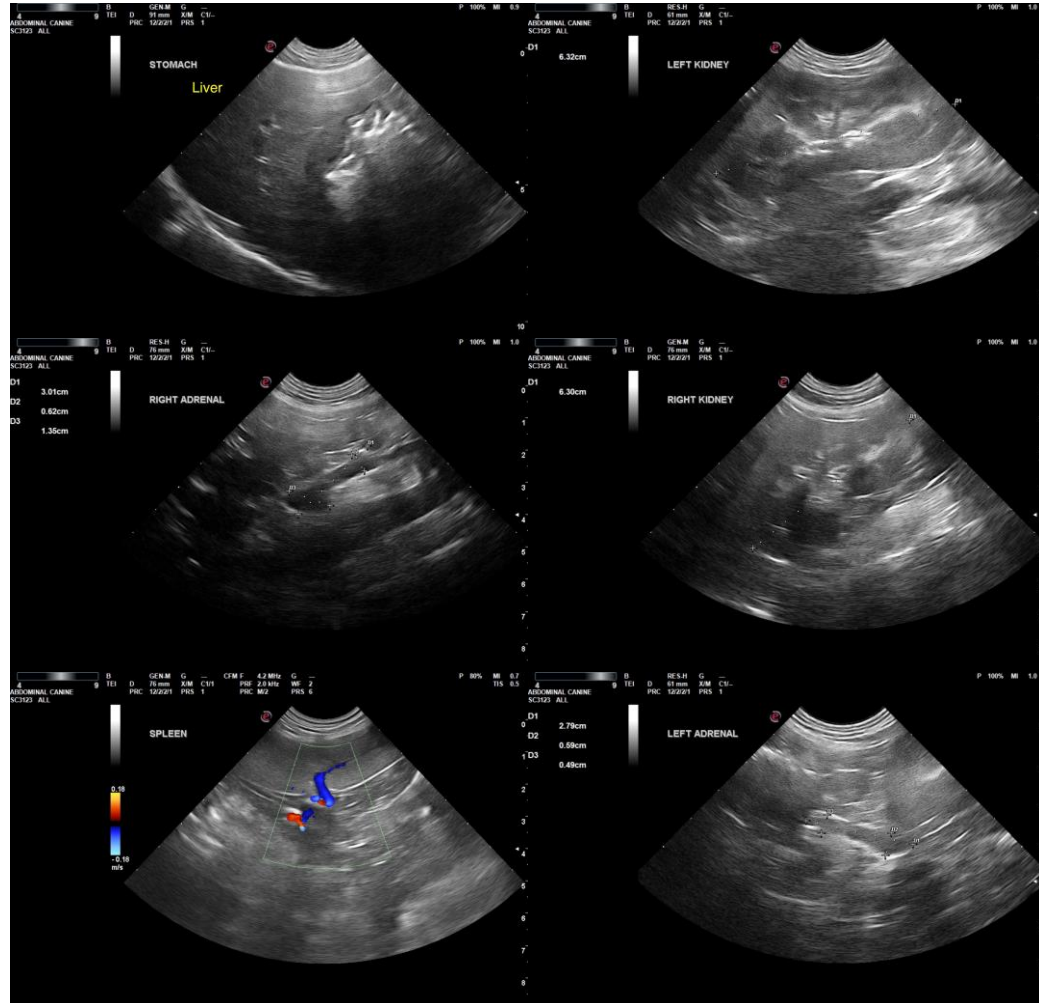
Filchner

INVOICE

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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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