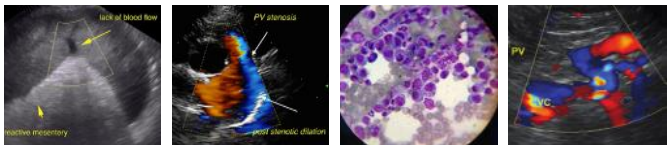
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Emmett Nade

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered male

AGE

13 years

WEIGHT

5 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Kevin Moon DVM

HOSPITAL NAME

Shiloh Veterinary Hospital

REFERRING VET

Kevin Moon DVM

INVOICE

10188ag

DATE

03/18/2022

PRESENTING CLINICAL SIGNS

History: Suspected microvascular shunt from a young age, never confirmed Recently increasing ALT

Abnormal PE/Chem/CBC/UA Results: ALT 167 9/2021 ALT 216 2/022

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no evidence of uroliths, macro calculi or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some mildly increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. Bilateral pinpoint to medullary mineral was observed. No evidence of pelvic dilation was present. The left kidney measured 3.4 cm in length. The right kidney measured 3.3 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.45 cm width at the caudal pole and 0.41 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 0.39 cm width at the caudal pole.

Spleen

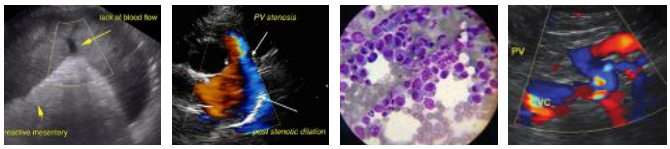
The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute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

Liver

The liver exhibited subjective normal to potential mild subnormal size yet normal hepatic parenchymal architecture with normal parenchyma echogenicity and symmetrical capsule contour. Normal subjective portal vasculature volume was noted. The visualized portal vein appeared to be overtly normal in volume with suspected normal branching. The portal vein measured 0.39 cm width-by comparison the normal caudal vena cava exhibiting normal volume measured 0.42 cm in diameter. The gallbladder was non-distended in size with thin walls and mild to moderate nondependent yet nonorganized and subjectively mobile gallbladder debris. The gallbladder was otherwise normal without evidence of peripheral or gallbladder inflammation. 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.



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

PATIENT

Emmett Nade

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered male

AGE

13 years

WEIGHT

5 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY
Kevin Moon DVM

HOSPITAL NAME

Shiloh Veterinary Hospital

REFERRING VET

Kevin Moon DVM

INVOICE

10188ag

DATE

03/18/2022

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 was evident.

ULTRASONOGRAPHIC FINDINGS

- Hepatopathy exhibiting subjective normal vascular volume-low grade inflammatory hepatopathy or possible portal hypoplasia/micro vascular dysplasia likely.
- Mild to moderate gallbladder debris (non-mucocele)-nonspecific and likely incidental potentially owing to fasting or non-clinical cholestasis.
- Mild age-related kidneys exhibiting pinpoint medullary mineral.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

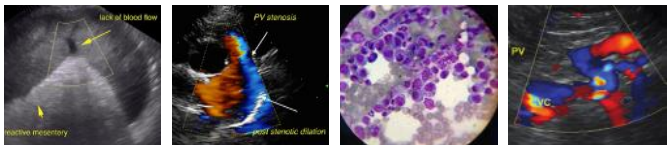
No overt evidence of intrahepatic or extrahepatic shunt. Subjectively normal portal vein volume as well as normal hepatic volume. Assuming normal clotting status and using a 25g needle, a FNA of the liver could be considered for screening cytology and potential assessment of inflammatory cell type if present. Core or surgical biopsy is likely necessary for further assessment as to whether primary parenchymal disease or portal hypoplasia/microvascular dysplasia is present.

Bile acid testing could also be considered for further assessment.

Overall, no overt evidence of macroscopic portosystemic shunt.

Hepatosupportive medications may prove beneficial.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Emmett Nade

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered male

AGE

13 years

WEIGHT

5 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Kevin Moon DVM

HOSPITAL NAME

Shiloh Veterinary Hospital

REFERRING VET

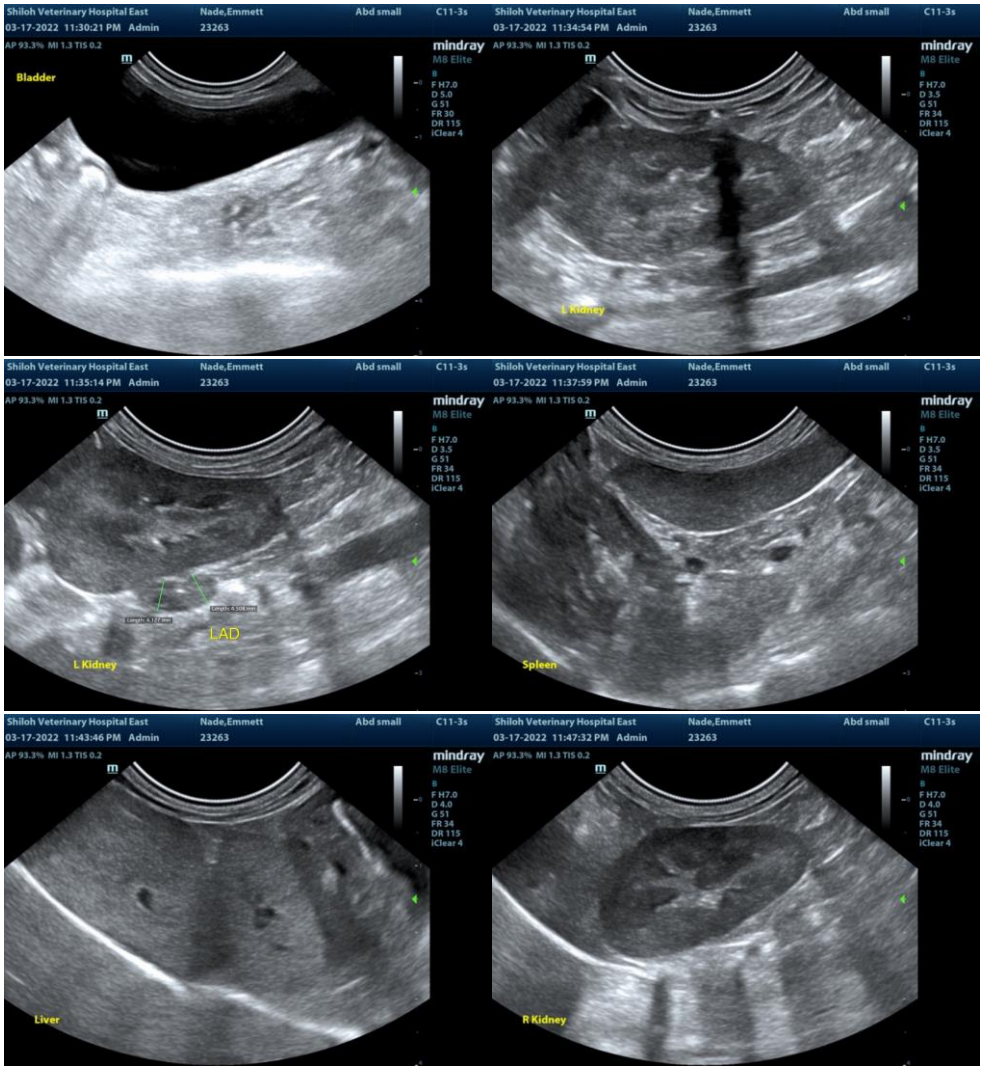
Kevin Moon DVM

INVOICE

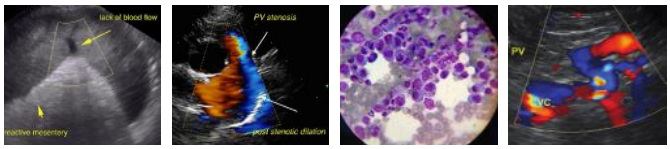
10188ag

DATE

03/18/2022



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Emmett Nade

SPECIES

Canine

BREED

Chihuahua

SEX

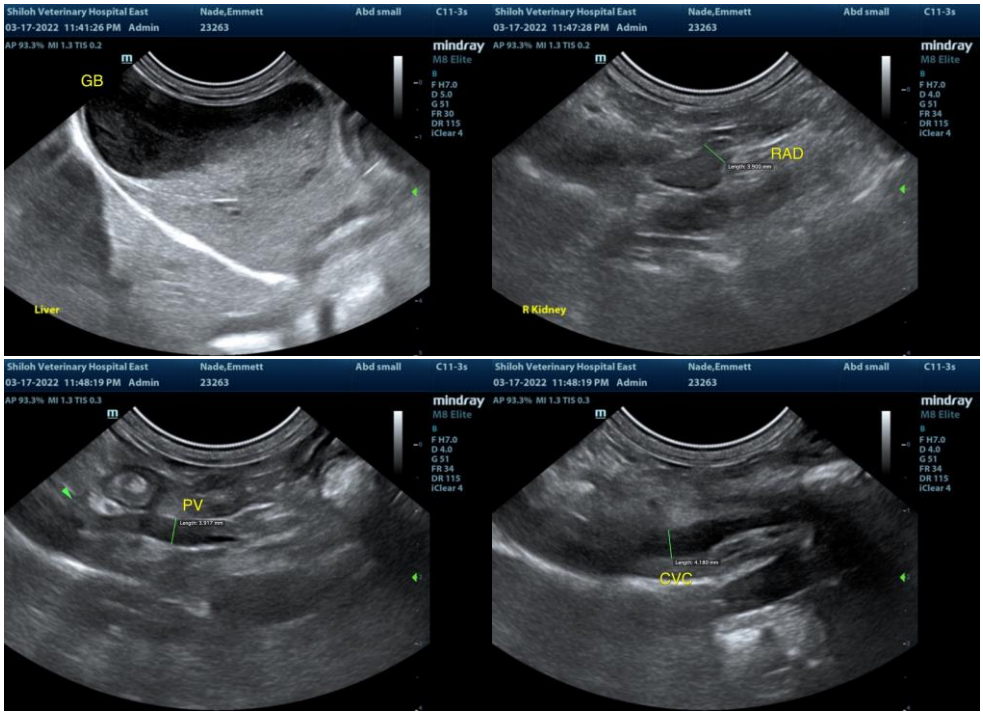
Neutered male

AGE

13 years

WEIGHT

5 pounds



INTERPRETED BY

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

IMAGING PERFORMED BY

Kevin Moon DVM

HOSPITAL NAME

Shiloh Veterinary Hospital

REFERRING VET

Kevin Moon DVM

INVOICE

10188ag

DATE

03/18/2022

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