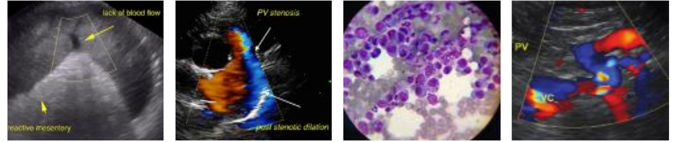
SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Pepe Alley

SPECIES

Canine

BREED

Miniature Schnauzer

SEX

FS

AGE

12yr

WEIGHT

14.6lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Carly Pate

HOSPITAL NAME

VCA McKenzie AH

REFERRING VET

Dr. Arpaia

INVOICE

12478ag

DATE

12/19/2022

PRESENTING CLINICAL SIGNS

P is on Denamarin Adv 1/2 tab daily, Amoxicillin 100 twice daily since 12/9/22 after increased ALT and ALP elevation noted on senior labwork. On 12/16 P returned for visit for not wanting to eat, low energy, large amount of frank blood in stool and mucus. P has had diarrhea all her life, sometime with blood present. Tends to have episodes once a month, has been on RCVD GI dry kibble for years, has had episodes of decreased appetite. No reported vomiting.

Abnormal PE/Chem/CBC/UA Results: 12/9/22 senior panel showed CBC - NSF; Chemistry profile - ALT 490 HIGH ALKP 309 HIGH. SDMA WNL GI Parasite PCR (Keyscreen) undetected

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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 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 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. Non-obstructive medullary to lateral diverticuli mineral to small renoliths were present. The left kidney measured 4.0 cm in length. The right kidney measured 4.1 cm in length

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

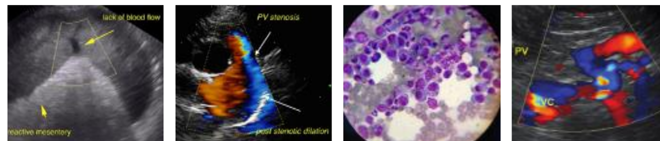
The bilateral adrenal glands were borderline prominent in size based on caudal pole width measurement and body weight. No adrenal tumors. The left adrenal gland measured 0.58 cm width at the caudal pole and 0.51 cm width at the cranial pole. The right adrenal gland measured 0.59 cm width at the caudal pole and 0.67 cm width at the cranial 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

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 moderate non-dependent mildly congealed non-organized debris. No evidence of gallbladder or peripheral gallbladder inflammation was present. The cystic and common bile ducts were normal.



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

PATIENT

Pepe Alley

SPECIES

Canine

BREED

Miniature Schnauzer

SEX

FS

AGE

12yr

WEIGHT

14.6lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Carly Pate

HOSPITAL NAME

VCA McKenzie AH

REFERRING VET

Dr. Arpaia

INVOICE

12478ag

DATE

12/19/2022

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 mildly prominent submucosa and muscularis layer. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. The duodenum wall measured 0.5 cm width. The jejunum wall measured 0.36 cm width.

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

Pancreas

The pancreas base and right limb were subtly prominent in size with minor capsule asymmetry. Mild heterogeneous to hypoechoic parenchyma compared to the adjacent omental fat.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

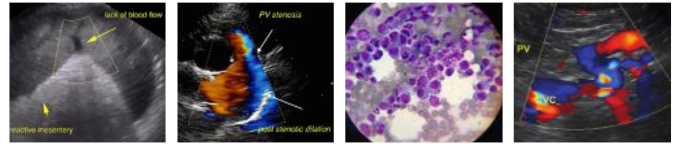
- Bilateral non-obstructive renal medullary mineral/renolithiasis
- Benign hepatopathy-vacuolar hepatopathy, inflammatory/immune mediated disease i.e. cholangiohepatitis, non-obstructive cholestasis, hematopoiesis, hyperplasia or other hepatopathy possible
- Early to potential emerging gallbladder mucocele-non-inflamed
- Inflammatory enteropathy pattern with probable intermittent colitis-suspect inflammatory bowel
- Mildly prominent to heterogeneous pancreas base/right pancreatic limb

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Assuming normal clotting status and using a 25g needle, a hepatic FNA for screening cytology is warranted for further assessment and identification of inflammatory cell type if present. Current hepatosupportive medications with the addition of Ursodiol may prove beneficial. Sonographic monitoring of the gallbladder if evidence of increasing cholestasis may be indicated.

A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. The pancreas was non-specific and may indicate patient/ age variant, remodeling owing to previous inflammatory episode or mild to chronic pancreatitis possible. This potential may be considered if evidence of cranial abdominal or subxiphoid discomfort on palpation.

Empirically as needed GI support, hydrolyzed diet trial, high colony count probiotic, empirical deworming +/- cobalamin supplementation and assessment of response is suggested.



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

PATIENT

Pepe Alley

SPECIES

Canine

BREED

Miniature Schnauzer

SEX

FS

AGE

12yr

WEIGHT

14.6lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Carly Pate

HOSPITAL NAME

VCA McKenzie AH

REFERRING VET

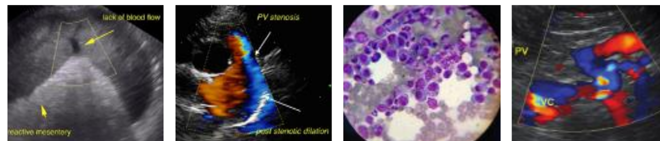
Dr. Arpaia

INVOICE

12478ag

DATE

12/19/2022



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

PATIENT

Pepe Alley

SPECIES

Canine

BREED

Miniature Schnauzer

SEX

FS

AGE

12yr

WEIGHT

14.6lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Carly Pate

HOSPITAL NAME

VCA McKenzie AH

REFERRING VET

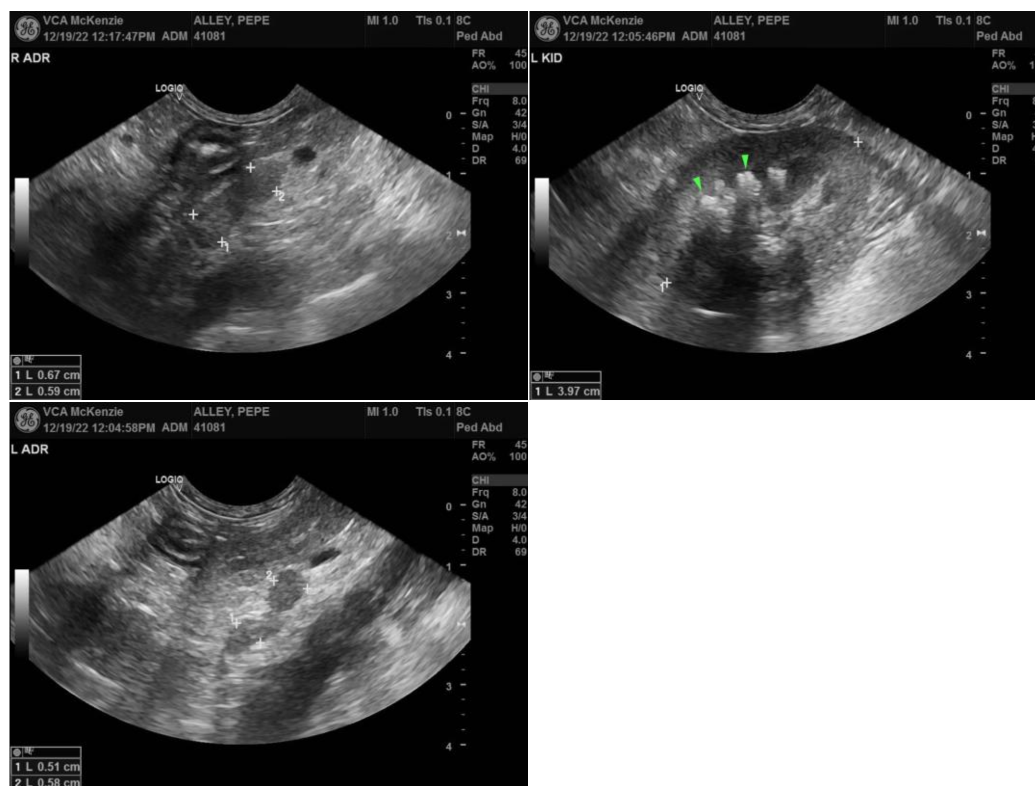
Dr. Arpaia

INVOICE

12478ag

DATE

12/19/2022



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)
mac.daniel@sonopath.com