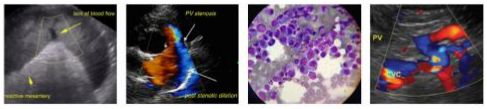
PAUS
Pet Animal Ultrasound Service



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Sophie Benner

SPECIES

Canine

BREED

Daschund

SEX

FS

AGE

10 years

WEIGHT

10.3 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

New England AMC

REFERRING VET

Alberto Fernandez, DVM

INVOICE

13369

DATE

1/10/22

PRESENTING CLINICAL SIGNS

Recent vomiting, diarrhea, decreased appetite. Switched to bland diet - vomiting improved, but diarrhea has persisted. 3rd eyelids came up. Now very lethargic, anorexic, and vomiting. History UTIs. Azotemia. BUN 178; Crea 15.2; Phos 21.3; ALT 253; K 6.4 STT/Fluorecein/IOP - all WNL/negative. BP 170 mmHg.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Mild nondependent particulate sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

The area of the aortic trifurcation was free of pathology.

Both kidneys exhibited mild subjective enlargement given the patient breed. No overt evidence of retroperitoneal inflammation or free fluid. Subtle generalized mildly echogenic uniform cortical hypertrophy was present in both kidneys with mild loss of corticomedullary border demarcation. Mild pyelectasia was present in both kidneys. The left kidney measured 7.3 cm in length. The right kidney measured 7.0 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.64 cm width at the caudal pole and 0.60 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 0.67 cm width at the caudal pole and 0.55 cm width at the cranial 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.

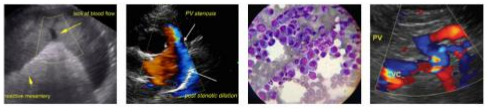
Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non distended in size with echogenic, nonmineralized, nondependent biliary sludge. The biliary sludge was non organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of peripheral inflammation.

Gastrointestinal

The stomach presented intact yet subjective mild prominent wall layering with a normal wall layer ratio. No evidence of retained ingesta, fluid or foreign material. The pylorus wall measured 0.57 cm.



PATIENT

Sophie Benner

SPECIES

Canine

BREED

Daschund

SEX

FS

AGE

10 years

WEIGHT

10.3 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

New England AMC

REFERRING VET

Alberto Fernandez, DVM

INVOICE

13369

DATE

1/10/22

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. The duodenum wall measured 0.52 cm. The jejunum wall measured 0.38 cm.

The colon walls presented intact yet mildly prominent yet intact colon wall layering with mild thickened to echogenic submucosa. The colon was primarily empty with non-formed feces noted in distal descending colon and colorectum.

The parenchyma of the pancreas was hyperechoic to adjacent omental fat with diffuse parenchyma remodeling. The capsule of the pancreas was mildly asymmetrical in contour without evidence of peripancreatic inflammation. These changes may suggest chronic inflammation, fibrosis, or saponification if previous history of pancreatitis. No overt signs of pancreatic neoplasia.

Free Abdomen

No omental masses, lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

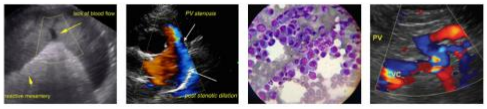
- Urinary bladder sediment
- Potential mild renomegaly with mild nonspecific chronic changes and mild pyelectasia
- Low-grade hepatopathy- nonspecific
- Partial gallbladder mucocele- subjectively noninflamed
- Chronic pancreatitis pattern with potential fibrosis
- Gastroenterocolitis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The bilateral kidneys exhibited mild chronic renal changes and did not appear to be subjectively end-stage. Given the azotemia in this patient, potential acute renal and possible GI tract insult may be considered.

The urinary bladder sediment is likely indicative of minor cellular debris/protein crystalline debris or potential mucus. Further assessment may include a full urinary work up, including UA, culture and sensitivity, baseline UPC, fresh fecal analysis (to assess for parasitic ova/Giardia) and a GI panel (to include PLI, TLI, cobalamin and folate). If not done, hospitalization with IV fluid and gastrointestinal support with assessment of renal response would be appropriate. Leptospirosis titers/PCR (if potential exposure) recommended given the azotemia and ALT elevation. Monitoring for evidence of cranial abdominal/subxiphoid discomfort on palpation as well as increasing cholestasis associated with the gallbladder advised.

PAUS
Pet Animal Ultrasound Service



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Sophie Benner

SPECIES

Canine

BREED

Daschund

SEX

FS

AGE

10 years

WEIGHT

10.3 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

New England AMC

REFERRING VET

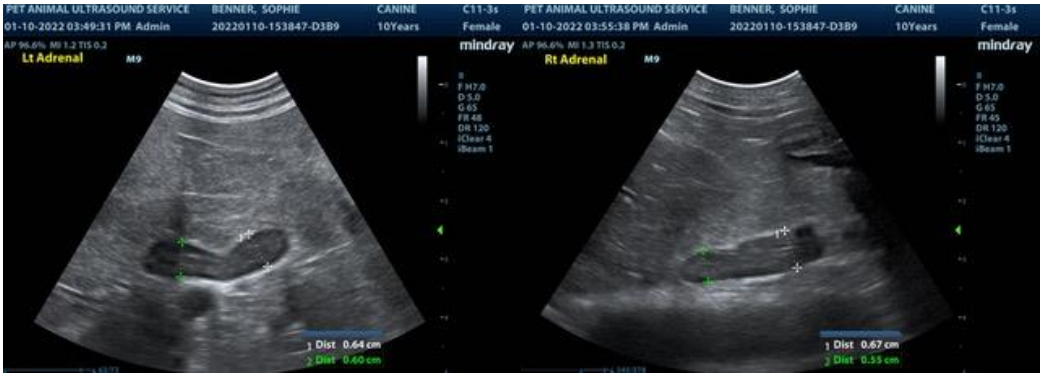
Alberto Fernandez, DVM

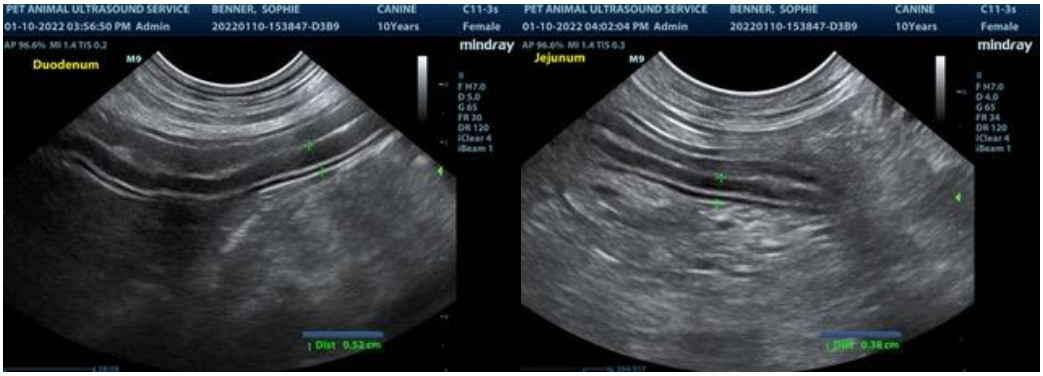
INVOICE

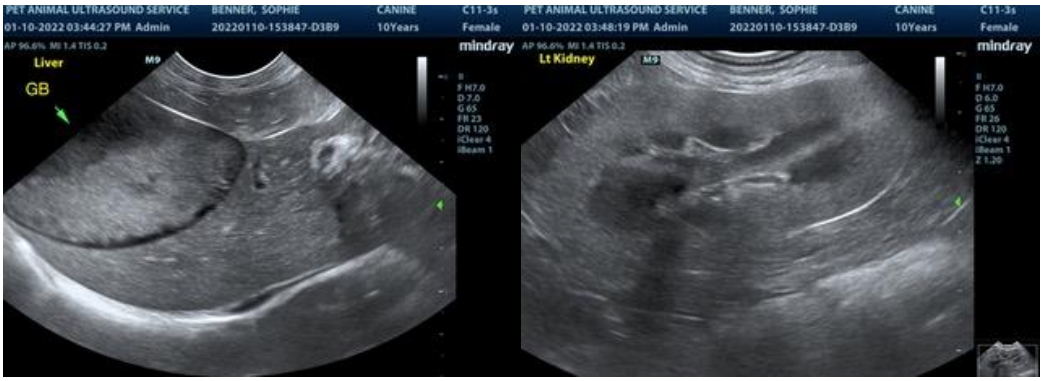
13369

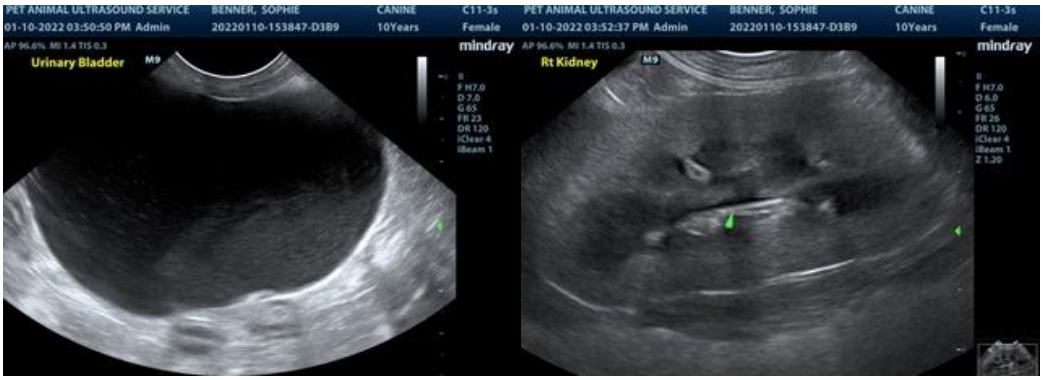
DATE

1/10/22

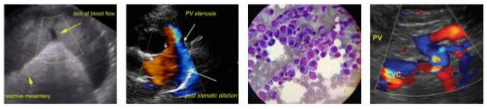








PAUS
Pet Animal Ultrasound Service



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Sophie Benner

SPECIES

Canine

BREED

Daschund

SEX

FS

AGE

10 years

WEIGHT

10.3 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

New England AMC

REFERRING VET

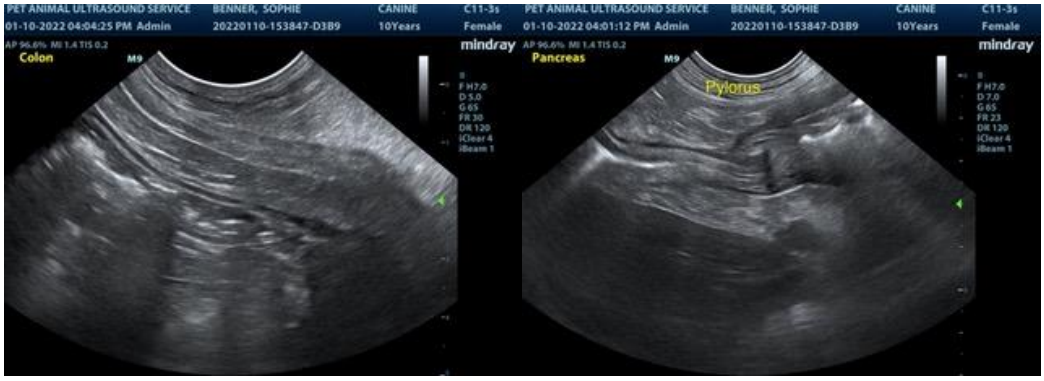
Alberto Fernandez, DVM

INVOICE

13369

DATE

1/10/22



The information and recommendations provided are based on the images presented by the referring veterinarian. 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