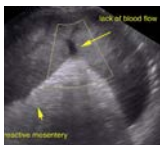
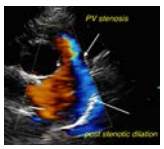
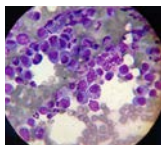
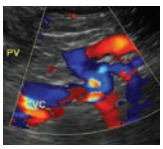
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Holly Rennewanz

SPECIES
Canine

BREED
Mixed

SEX
Spayed Female

AGE
7 Years

WEIGHT
70 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Jack Reese

HOSPITAL NAME
Willow Run VC

REFERRING VET
Dr. Jack Reese

INVOICE
39092

DATE
6/29/22

PRESENTING CLINICAL SIGNS

Several day history of decreased appetite and lethargy. No vomiting or diarrhea noted at home. Exam revealed fever (102.7) and mild dehydration, tense abdomen. No other obvious abnormalities. No recent change in environment food, known ingestion of foreign material.
Abnormal PE/Chem/CBC/UA Results: SDMA 16 (0-14) No other significant changes in lab work.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (5.78 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

The left kidney is normal in size (5.95 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A hyperechoic band parallel to the corticomedullary border is present.

Adrenal Glands

The adrenal glands are bilaterally uniformly plump egg-shaped adrenals (left measures 0.46 cm at the cranial pole and 0.45 cm at the caudal pole, the right measures 1.0 cm a the cranial pole and 0.54 cm at the caudal pole), hypoechoic in echogenicity with bilateral dystrophic mineralization noted. This is most likely a benign age-related change. This change can be caused by chronic stress/disease, so investigation for/management of other disease (chronic kidney disease, hyperthyroidism, etc.) is recommended.

Spleen

The spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

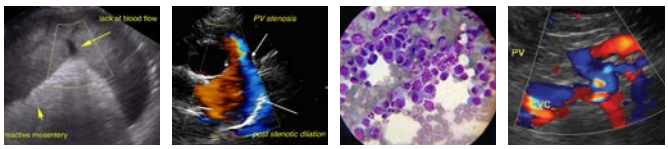
The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions



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

PATIENT
Holly Rennewanz

SPECIES
Canine

BREED
Mixed

SEX
Spayed Female

AGE
7 Years

WEIGHT
70 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Jack Reese

HOSPITAL NAME
Willow Run VC

REFERRING VET
Dr. Jack Reese

INVOICE
39092

DATE
6/29/22

per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease. **See pancreas.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreas is prominent (enlarged) in size and mildly irregular in shape with a slightly undulating contour. Parenchyma is coarse in echotexture and heterogenous to hypoechoic in echogenicity. In the mid to caudal abdomen, there is a focal area of free fluid and enhanced hyperechoic fat, indicative of a focal peritonitis, likely secondary to pancreatitis, but a primary focal bowel lesion cannot be ruled out.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

PRIMARY FINDINGS

- Acute pancreatitis with suspected secondary focal peritonitis/gastroenteritis. However, as stated above, a focal bowel pathology cannot be ruled out.
- Flat adrenal glands – This can be a normal patient variant and/or a sign of exogenous cortisol administration. If exogenous steroids are not being administered, hypoadrenocorticism (either relative or absolute) should be considered.

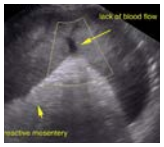
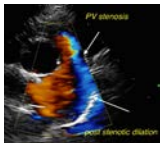
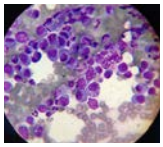
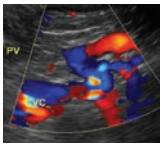
SECONDARY FINDINGS

- Hypersplenism – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, amyloidosis (leave amyloidosis out if canine) as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.
- Medullary Rim Sign - of unknown clinical significance and can be a normal variant. Medullary rim sign(s) should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function. Recommend baseline cortisol added to the panel. if the baseline is <2.0, a full follow up ACTH stimulation test is recommended to rule out hyperadrenocorticism.
- Acute canine pancreatitis – Medical management of pancreatitis with anti-emetics, gastroprotectants, appetite stimulants or nutritional support as needed, pain management, broad spectrum antibiotics, and fluid support is recommended. If possible, a fresh frozen plasma transfusion and hyperbaric oxygen therapy (HBOT) could be beneficial. Monitoring of the pancreas with power doppler is recommended to identify possible necrosis as well as other potential sequelae such as abscesses, etc.
- If clinical signs of abdominal pain, fever, etc. persist beyond medical management of acute pancreatitis, reevaluation of the mid to caudal focal peritonitis described above is recommended to rule out emerging lesion not appreciated at this time.

SonoPath
Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Holly Rennewanz

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

7 Years

WEIGHT

70 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Jack Reese

HOSPITAL NAME

Willow Run VC

REFERRING VET

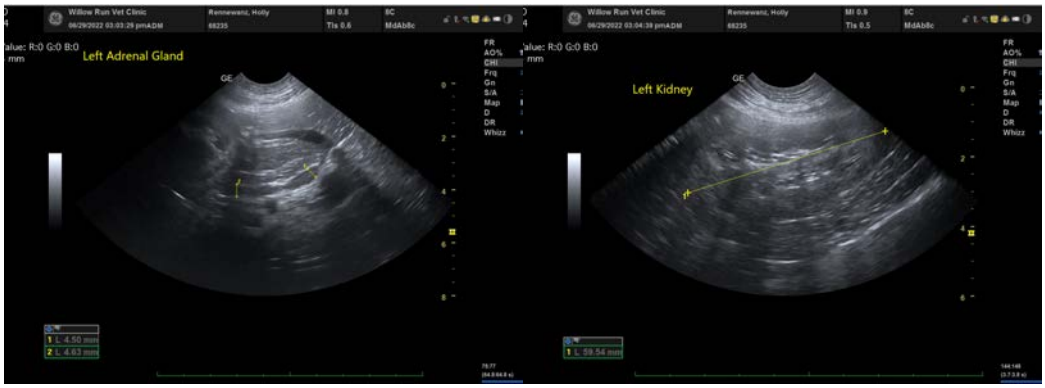
Dr. Jack Reese

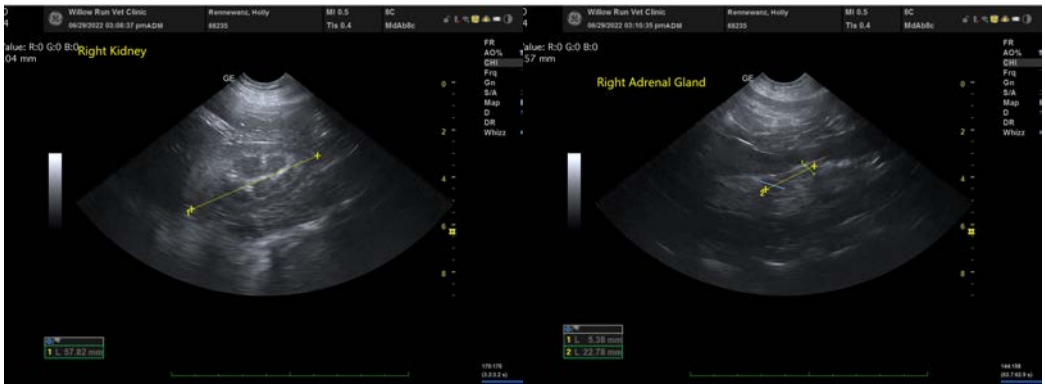
INVOICE

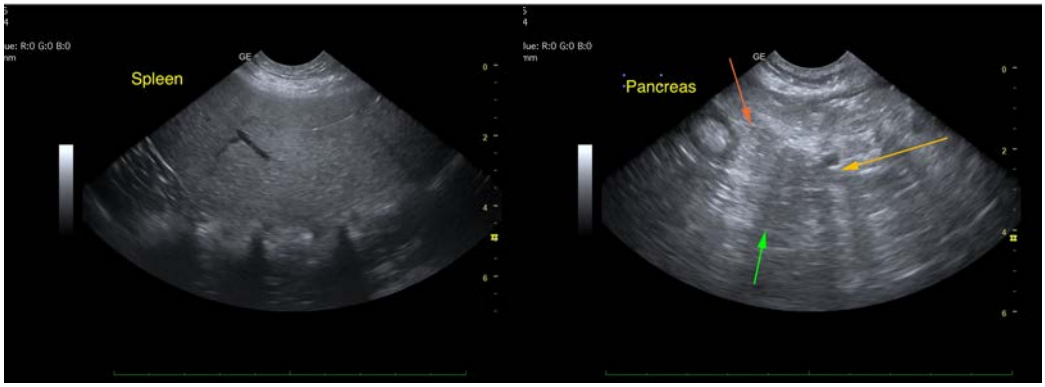
39092

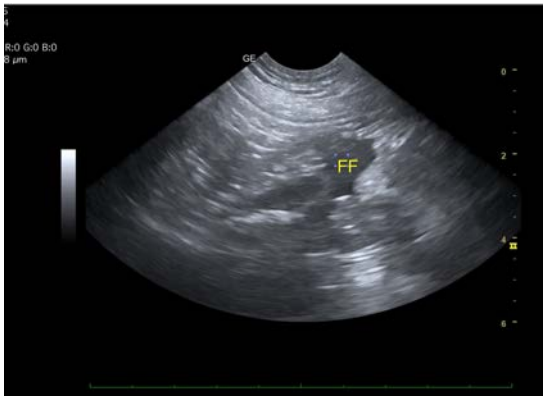
DATE

6/29/22

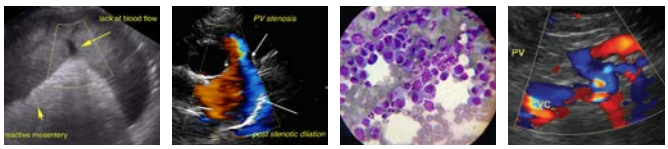








SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Holly Rennewanz

SPECIES

Canine

BREED

Mixed

SEX

Spayed Female

AGE

7 Years

WEIGHT

70 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Jack Reese

HOSPITAL NAME

Willow Run VC

REFERRING VET

Dr. Jack Reese

INVOICE

39092

DATE

6/29/22

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com