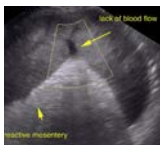
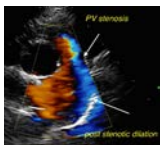
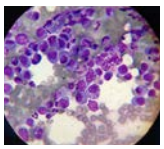
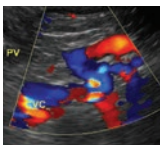
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Sylvie Heritage

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12

WEIGHT

3 kg

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Meliasa Robinson

HOSPITAL NAME

St. Francis Vet Center of South Jersey

REFERRING VET

Dr. Audrey Rollins

INVOICE

44947

DATE

2/9/23

PRESENTING CLINICAL SIGNS

Chronic history of vomiting, and hairballs over multiple years. Over last week has been vomiting with decreased appetite. After eating vomits in 5-10 minutes.

Abnormal PE/Chem/CBC/UA Results: USG - 1.018. Wbc/RBC in urine (4-10/hpf). Creat 2.3 Glob 5.2 All liver values (Alt, Alkp, Ggt, Tbil wnl) WBC 20K (Upper limit 17k)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (2.88 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (2.9 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.16 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

Spleen

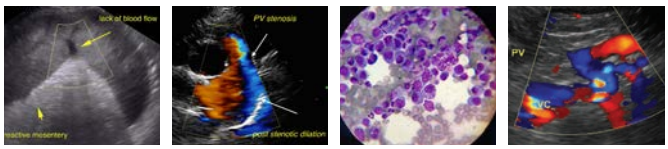
The spleen is subjectively normal in size (0.92 cm), echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. There are numerous dilated tubular anechoic structures within the liver, most consistent with dilated intrahepatic bile ducts. An example of this measures at 0.29 cm in diameter. No focal nodules or cystic lesions are observed.

The gallbladder lumen is minimally distended. The wall of the gall bladder appears slightly prominent, measuring at 0.26 cm. Luminal contents are mild and primarily anechoic. There is the appearance of hypoechoic dilated structures visualized both within the liver and caudal to the liver, most consistent with dilated intrahepatic bile ducts and a dilated cystic and common bile duct. Example of intrahepatic bile duct dilation measures 0.29 cm. The bile duct measured 0.44 cm caudal to the liver. No obvious obstruction is visualized. The duodenal papilla is not clearly visualized.

Gastrointestinal



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

PATIENT

Sylvie Heritage

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12

WEIGHT

3 kg

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Meliasa Robinson

HOSPITAL NAME

St. Francis Vet Center of South Jersey

REFERRING VET

Dr. Audrey Rollins

INVOICE

44947

DATE

2/9/23

The stomach contains mild to moderate fluid. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.43 cm. Duodenum wall measures 0.46 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are prominent/enlarged hypoechoic mesenteric lymph nodes measuring 0.64 cm and 0.50 cm. The omentum is generally mildly hyperechoic.

PRIMARY FINDINGS

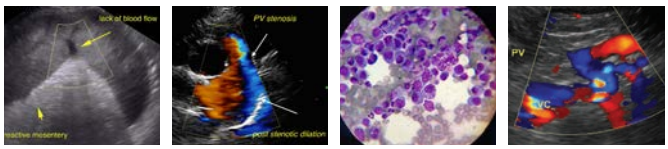
- Heterogeneous liver with diffusely dilated intrahepatic bile ducts – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. An obvious obstruction is not visualized. Consider chronic inflammation or an unseen obstruction.
- Non-distended gallbladder with a mildly thickened wall and dilated intra- and extrahepatic bile ducts – There is concern for possible inflammatory or infiltrative biliary disease. No obvious obstruction is visualized, but it cannot be definitively ruled out.
- Thickened small intestine with moderately thickened muscularis layer – The bowel wall thickening could be consistent with inflammation, edema, or infiltrative neoplasia.
- Large, hypoechoic mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

SECONDARY FINDINGS

- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The intra- and extrahepatic bile ducts appear prominent and dilated, possibly with thickened walls. No obvious obstruction with calculi debris or a mass is observed, but this cannot be definitively ruled out. It is somewhat surprising that all of the liver values are normal. This likely indicates some level of



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

PATIENT

Sylvie Heritage

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12

WEIGHT

3 kg

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Meliasa Robinson

HOSPITAL NAME

St. Francis Vet Center of South Jersey

REFERRING VET

Dr. Audrey Rollins

INVOICE

44947

DATE

2/9/23

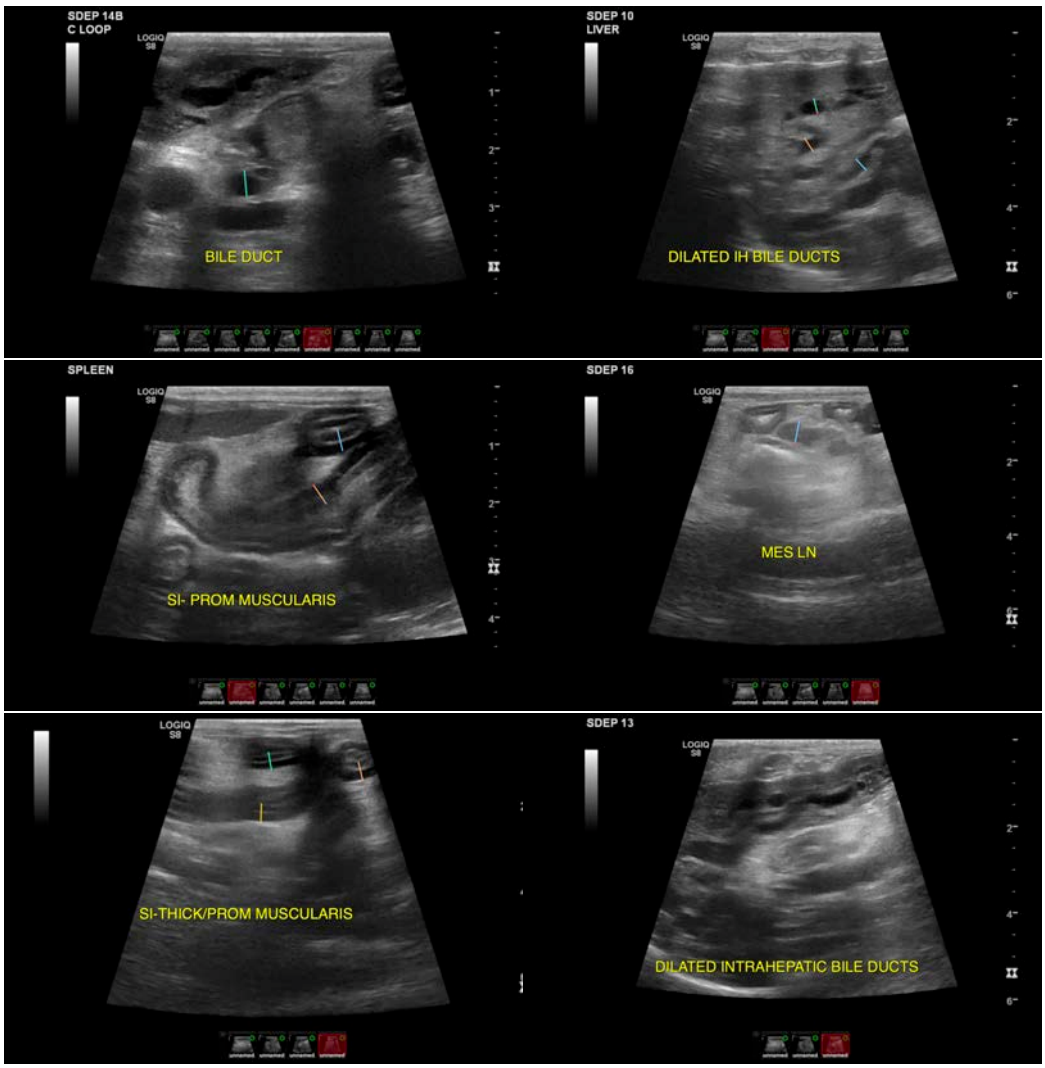
chronicity to what is going on.

Additionally, the small intestine appears thickened with a prominent muscularis layer. This is suggestive of a primary enteropathy (inflammatory, infiltrative, infectious, etc.). There are prominent mesenteric lymph nodes throughout the abdomen.

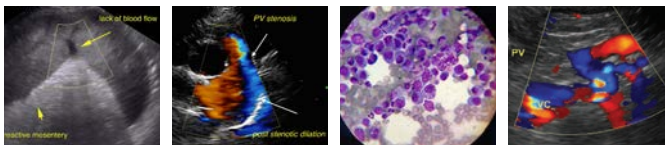
My primary concern would be either infiltrative or inflammatory disease (cholangiohepatitis/triaditis, round cell neoplasia, etc.) with IBD or neoplastic change to the bowel.

Recommend a fine needle aspirate of the liver provided coagulation parameters are normal, and 3-view thoracic radiographs, and a GI panel (Texas A&M for quantitative fPLI, TLI, cobalamin and folate) to further evaluate the pancreas and small intestine.

While awaiting cytology results and GI panel results, consider treating for pancreatitis/cholangiohepatitis with Ursodiol, an antibiotic, a probiotic. A CT scan may be necessary to definitively rule out the possibility of a biliary obstruction. Continued monitoring of liver values and serial ultrasound imaging for further dilation could also be considered. If there is no response to these steps, then surgical biopsies of the liver and small bowel may need to be considered. Ideally, prior to this, advanced imaging of the liver would be performed to make sure a partial obstruction is not present, which should be addressed at the time of surgery.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Sylvie Heritage

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12

WEIGHT

3 kg

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Meliasa Robinson

HOSPITAL NAME

St. Francis Vet Center of South Jersey

REFERRING VET

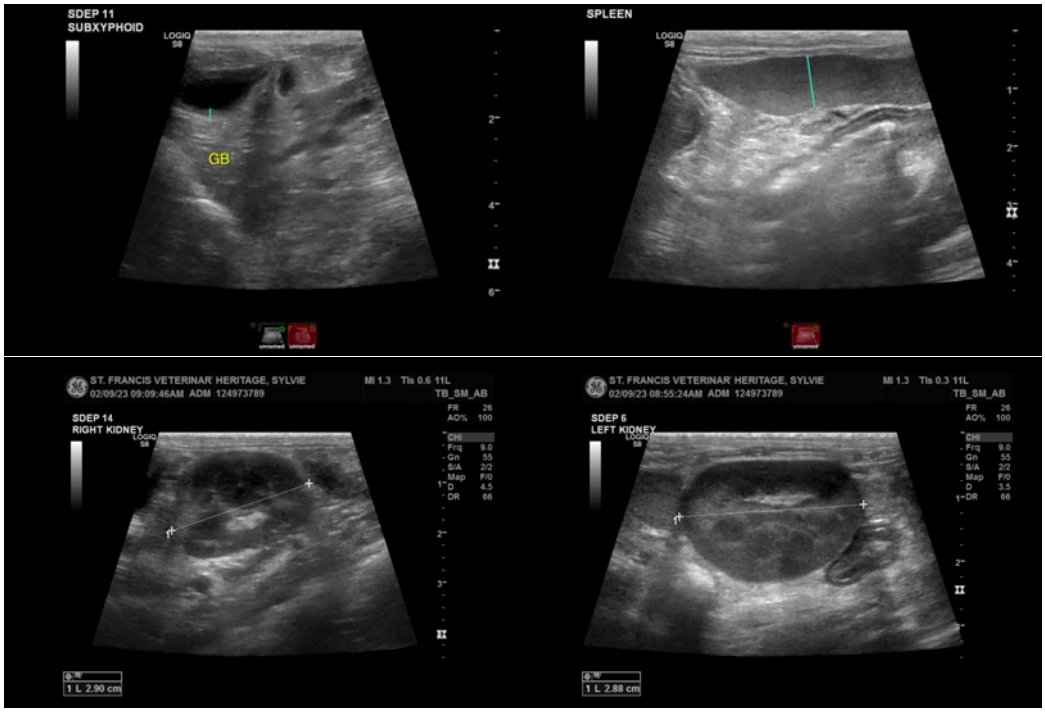
Dr. Audrey Rollins

INVOICE

44947

DATE

2/9/23



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

kathleen.sennello@sonopath.com