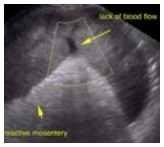
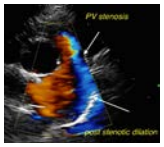
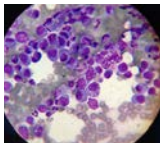
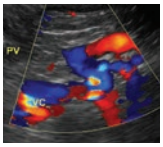
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Ellie Gump

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

14 Years

WEIGHT

10.6 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Meghan Myers

HOSPITAL NAME

Hershire AH

REFERRING VET

Dr. Erika Gallisdorfer

INVOICE

44070

DATE

1/10/23

PRESENTING CLINICAL SIGNS

Presented to ER on Jan 1 2023 for lethargy and blood in urine - BW at that time revealed moderate anemia HCT 20%, mild increase in BUN and hematuria, brief bladder ultrasound concern for clot or mass mid bladder - treated with 3 day course of onsior and clavamox; Recheck 10 days later - O states energy has improved, appetite slowly increasing though has lost another 3/4 of lIb, PCV stable at 23%, BUN and Crea currently normal, ALP has increased 113 (14-111) was previously normal. O has not noticed blood in urine at home over last few days.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is adequately distended with some anechoic contents, but the majority of the lumen is made up of a hyperechoic, irregular, partially mineralized mass measuring 2.4 cm x 2.3 cm. The bladder is surrounded by markedly enhanced hyperechoic mesenteric fat and some free fluid.

The right kidney is normal in size (4.0 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.

The left kidney is normal in size (4.0 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.

Adrenal Glands

The area of both adrenal glands are examined without evident adrenal gland pathology.

Spleen

Spleen is subjectively large in size with subtly scalloped or undulating capsular contour. Parenchyma is normal in echogenicity with a mildly coarse/heterogenous echotexture. No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

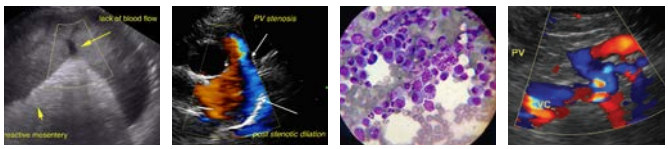
Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. Tortuous cystic and common bile duct noted, not pathologically distended, which is likely a normal anatomic variant in a senior cat.

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



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

PATIENT

Ellie Gump

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

14 Years

WEIGHT

10.6 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Meghan Myers

HOSPITAL NAME

Hershire AH

REFERRING VET

Dr. Erika Gallisdorfer

INVOICE

44070

DATE

1/10/23

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

Pancreas

The observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Pancreatic duct dilation is noted. Enhanced hyperechoic ill-defined surrounding fat and anechoic free fluid are noted.

Free Abdomen

There is anechoic free fluid throughout the abdomen in addition to enhanced hyperechoic mesentery fat from around the bladder all the way cranial to around the spleen and pancreas.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- **Urinary bladder density** – concerning for infiltrative neoplasia. However, given the lack of visible vascularity, non-tissue debris, including a large blood clot, mineral, etc. cannot be definitively ruled out. There is evidence of inflammation surrounding the urinary bladder.
- **Scalloped spleen –** can be associated with benign or malignant infiltrative disease. Common causes include a reactive spleen secondary to immune stimulus or early infiltrative round cell neoplasia such as lymphoma or mast cell tumor.
- **Hypoechoic hepatomegaly** – This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- Acute pancreatitis
- **Anechoic free fluid and enhanced mesenteric fat throughout the abdomen** – suggestive of inflammation changes related to urinary tract disease as well as pancreatitis. However, paraneoplastic effusion/carcinomatosis versus other cannot be ruled out.

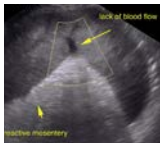
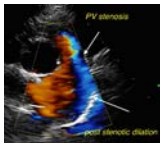
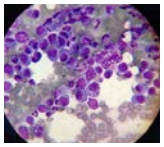
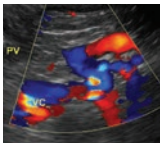
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended. Urine culture should not be obtained until a week to 10 days after finishing current course of antibiotics to prevent false negatives.

Additional recommendations regarding the urinary bladder changes include either continued medical management (since improvement is noted) and continued monitoring of the urinary bladder for improvement versus additional sampling, including either traumatic catheterization, cytology, or even fine needle aspirate with a small risk of tumor seeding if this is a bladder mass.

At least some of the clinical signs (i.e., weight loss, etc.) are likely attributed to other disease including pancreatitis +/- infiltrative disease affecting the spleen and liver, and therefore potentially unrelated to the urinary bladder disease. Further evaluation is recommended, beginning with a fine needle aspirate of the spleen and liver, if patient's coagulation status is appropriate.

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.

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

PATIENT

Ellie Gump

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

14 Years

WEIGHT

10.6 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Meghan Myers

HOSPITAL NAME

Hershire AH

REFERRING VET

Dr. Erika Gallisdorfer

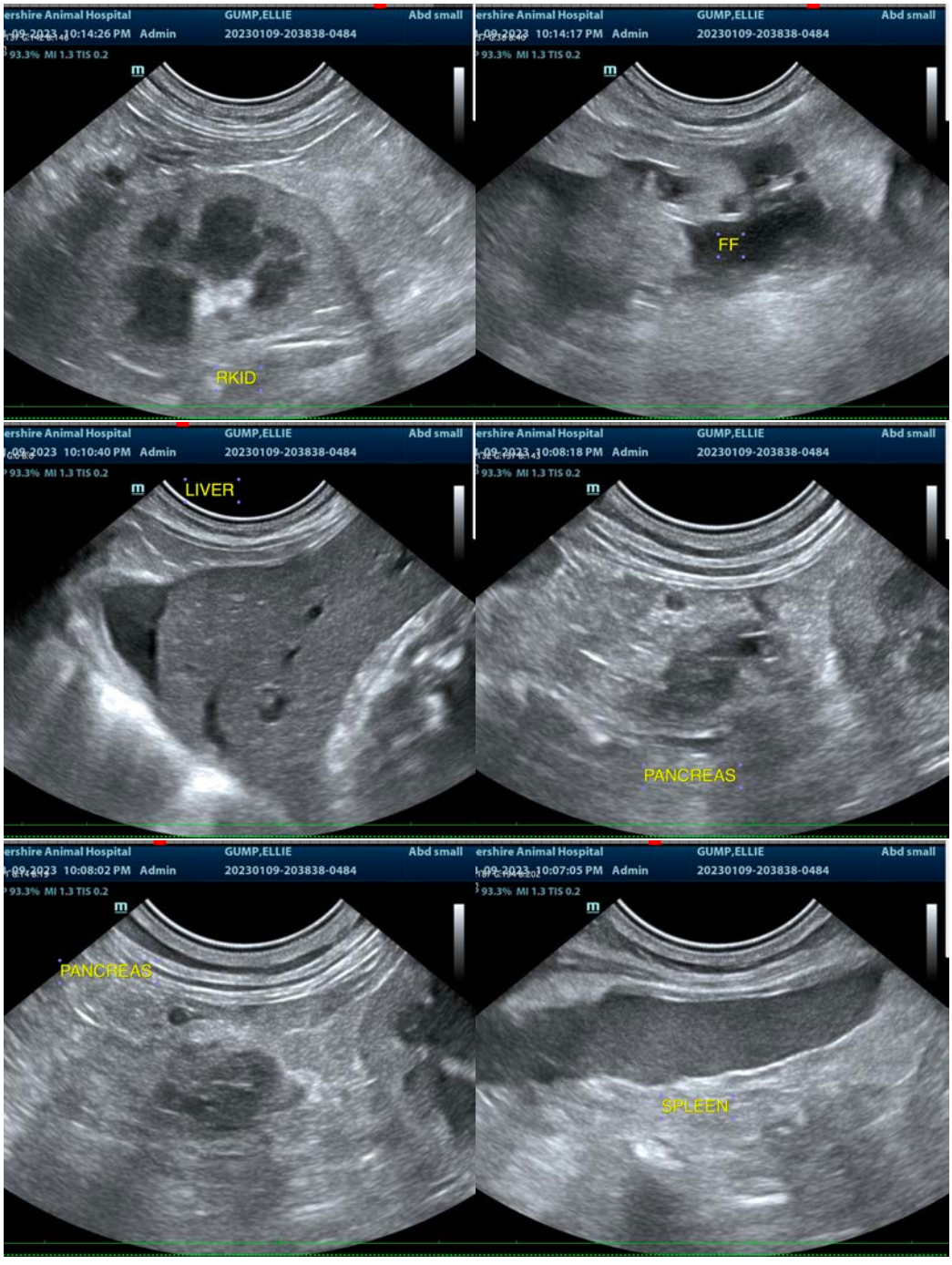
INVOICE

44070

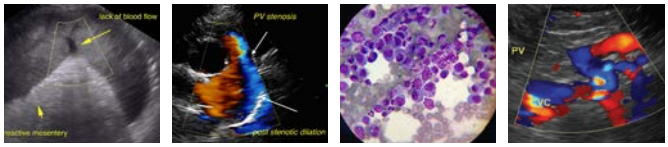
DATE

1/10/23

In the meantime, in addition to antibiotics and anti-inflammatories reporting in clinical improvement of the urinary signs, supportive/symptomatic medical management of the acute pancreatitis, as indicated clinically, is recommended, and could include antiemetics, gastroprotectants, appetite stimulants if needed, pain management if clinically indicated, fluid therapy, etc.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Ellie Gump

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

14 Years

WEIGHT

10.6 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Dr. Meghan Myers

HOSPITAL NAME

Hershire AH

REFERRING VET

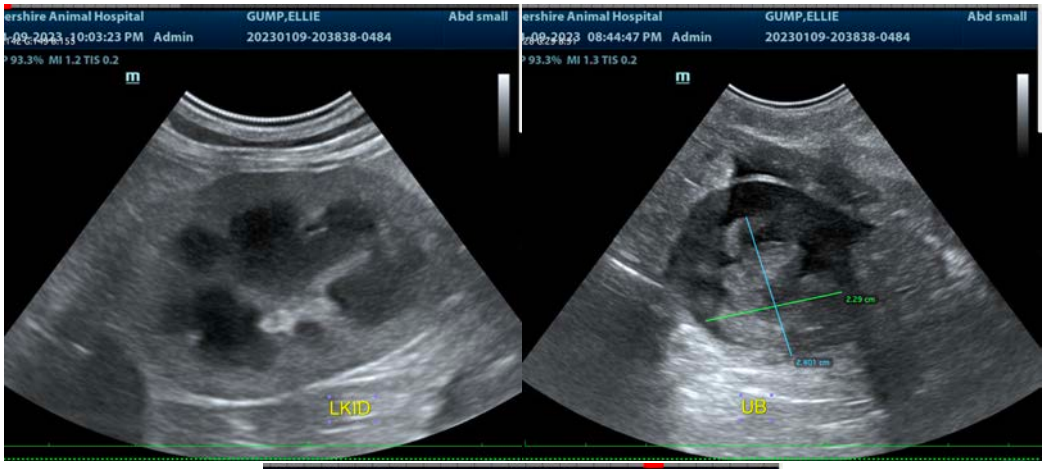
Dr. Erika Gallisdorfer

INVOICE

44070

DATE

1/10/23



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.

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