



**PATIENT**

Tiger Lily Barr

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

12

**WEIGHT**

2.9 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Amber Goldman, RVT

**HOSPITAL NAME**

Appalachian Vet  
Ultrasound

**REFERRING VET**

Dr. Wolverton

**INVOICE**

46568

**DATE**

4/12/23

**PRESENTING CLINICAL SIGNS**

Indoor only, no pre-existing medical conditions, not on daily Rx, not on prevention, no Hx of allergies, no Hx Rx reactions, P is on a hairball management kibble and Purina food topper. P presents today for intermittent emesis x2 weeks. O states vomiting is random, mostly bile. Decreased appetite the past two weeks as well. Unsure of BM. Mentation normal at home. O feels that P has lost a significant amount of weight in a short period of time (has lost 3 lbs since 9/2022). Called PCC to obtain previous MR. Owner reports no change in water intake or urinations.

**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 (3.22 cm). Overall echogenicity is normal with adequate 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 (3.31 cm). Overall echogenicity is normal with adequate 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 0.31 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 right adrenal gland is normal in size measuring 0.40 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size (0.56 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. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.



**PATIENT**

Tiger Lily Barr

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

12

**WEIGHT**

2.9 kg

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Amber Goldman, RVT

**HOSPITAL NAME**

Appalachian Vet  
Ultrasound

**REFERRING VET**

Dr. Wolverton

**INVOICE**

46568

**DATE**

4/12/23

**Gastrointestinal**

The stomach contains minimal luminal contents. 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 relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.26 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 pancreas is large and hypoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is evidence of regional mesenteric inflammation. Consistent with mild pancreatitis.

**Free Abdomen**

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are occasional prominent mesenteric lymph nodes, two of which measured at 0.25 cm and 0.40 cm. The omentum is of normal echogenicity.

**ULTRASONOGRAPHIC FINDINGS**

- Hypoechoic, prominent pancreas with mild surrounding inflammation – The pancreatic changes are most consistent with mild pancreatitis/pancreatic inflammation. Recommend fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.
- Mildly heterogeneous liver – 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.
- Moderate adhered debris to the gallbladder wall – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting. Incidental gall bladder debris is less common in cats. Findings could be consistent with cholecystitis.
- Mild mesenteric lymphadenopathy – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

No focal lesions were visualized associated with the liver or gallbladder on today's exam. Visualization was somewhat challenging, as the majority of the liver was visualized between rib spaces. There appear to be some debris adhered to the gallbladder wall with no significant surrounding inflammation. Findings could be consistent with a primary hepatopathy or even mild cholecystitis. Consider the following:



**PATIENT**

Tiger Lily Barr

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

12

**WEIGHT**

2.9 kg

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Amber Goldman, RVT

**HOSPITAL NAME**

Appalachian Vet  
Ultrasound

**REFERRING VET**

Dr. Wolverton

**INVOICE**

46568

**DATE**

4/12/23

- Consider close evaluation of history for possible toxic changes examine medications, diet, dietary indiscretion etc.
- Recommend thyroid evaluation (if not already done)
- Recommend screening for toxoplasmosis
- If not already done consider pre and post prandial bile acids to evaluate liver function
- Consider Fine needle aspirate if round cell neoplasia is on your differential list (25 g needle, normal coags)
- Consider liver biopsy with samples obtained for histopathology and culture
- If triaditis is suspected consider therapy for cholangiohepatitis, testing for pancreatitis and evaluation for IBD (GI panel to Texas A&M GI lab)

The pancreas is somewhat prominent in the right and left limbs. This could be consistent with mild current inflammation or previous episodes of inflammation, and there could be an element of Triaditis present. Consider empirical treatment for cholangiohepatitis (antibiotics, Ursodiol, etc.). Additionally, consider treatment for pancreatitis and consider a quantitative fPLI level.

If liver values do not improve with this therapy and cytology is not helpful, consider obtaining a hepatic biopsy, provided coagulation parameters are normal.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





**PATIENT**

Tiger Lily Barr

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Spayed Female

**AGE**

12

**WEIGHT**

2.9 kg

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Amber Goldman, RVT

**HOSPITAL NAME**

Appalachian Vet  
Ultrasound

**REFERRING VET**

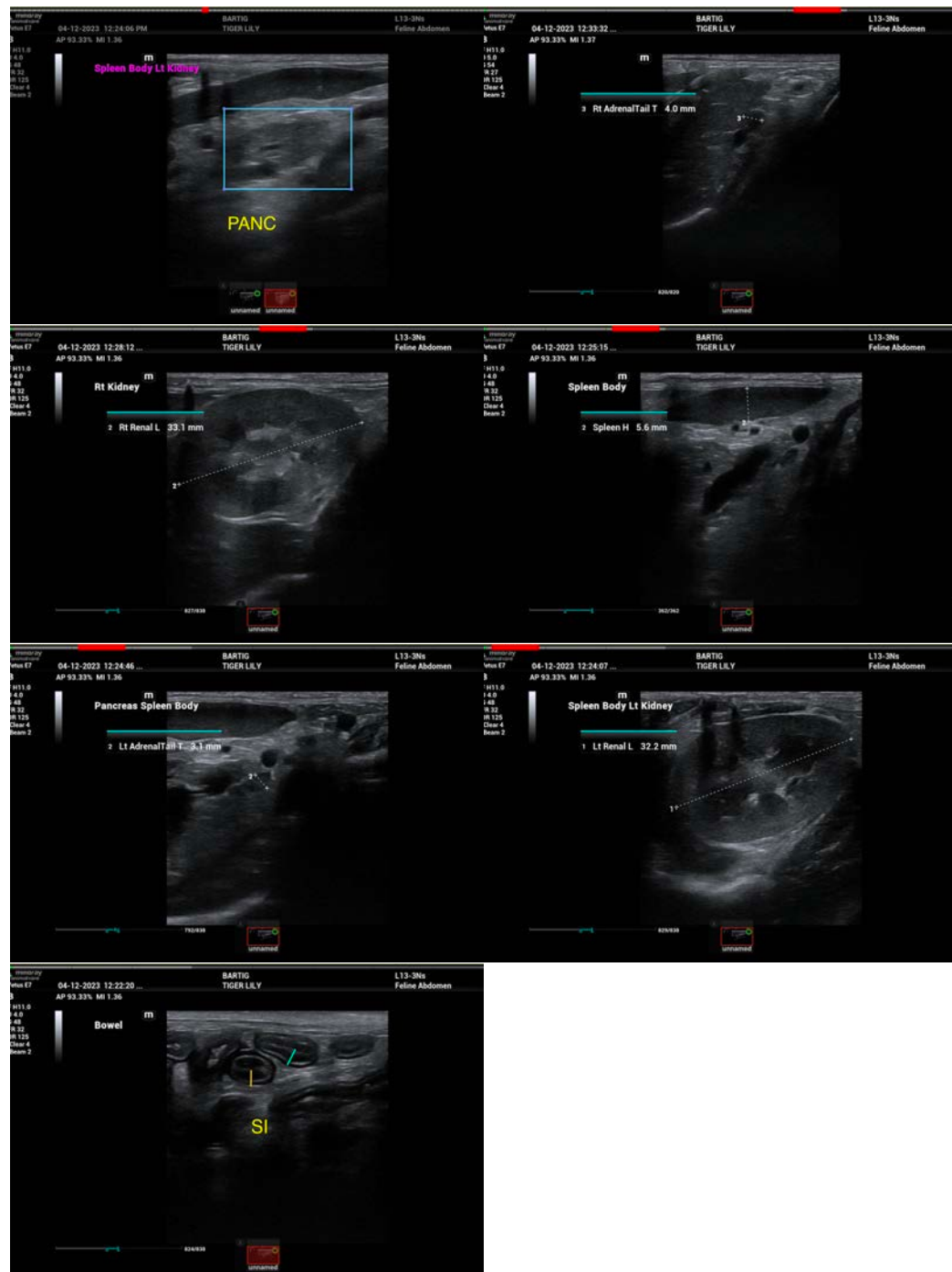
Dr. Wolverton

**INVOICE**

46568

**DATE**

4/12/23



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