



**PATIENT**

Riley Hannum

**SPECIES**

Canine

**BREED**

Papillon

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

18.6 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

North Jersey AH

**REFERRING VET**

Ddr. Mark Reidel

**INVOICE**

42412

**DATE**

10/27/22

**PRESENTING CLINICAL SIGNS**

Non-specific symptoms of lethargy, discomfort, urinary incontinence, vomiting. Current meds: Baytril, Rimadyl, and Gabapentin.

Abnormal PE/Chem/CBC/UA Results: EBC 37.5, Neutro 21000, Bands 750, lymphocytes 13500, U/A NSF, USG: 1.014.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. Much of the wall appears normal in thickness with a smooth mucosal surface. There is a focal area in the ventral portion of the urinary bladder in the caudal third, where there is a mass effect arising from the bladder wall, measuring approximately 0.89 cm x 0.57 cm. This could represent a small transitional cell carcinoma or an inflammatory polyp. Recommend urinalysis and culture. Although this area is approaching the trigone, there is no evidence of urinary obstruction at this time, and the urethra appears within normal limits.

The left kidney has a normal shape and size (4.7 cm) with a 0.75 cm cortical cyst. 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 (4.85 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 0.46 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 0.59 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. The spleen echotexture is heterogenous and mottled, 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 gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.



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**Gastrointestinal**

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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.

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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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.)

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Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

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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**

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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 moderate pancreatitis.

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**Free Abdomen**

There is scant free abdominal fluid. There is a cranial abdominal lymph node that is prominent, measuring 0.59 cm x 0.79 cm. The omentum is focally hyperechoic around the inflamed pancreas.

**ULTRASONOGRAPHIC FINDINGS**

**INTERPRETED BY**

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

- Large, hypoechoic pancreas with surrounding hyperechoic mesentery – The pancreatic changes are most consistent with moderate 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.
- Focal irregularity/mass effect in the ventral aspect of the caudal urinary bladder – Findings are concerning for a possible early TCC lesion, but an inflammatory polyp cannot be ruled out.
- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.
- 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.

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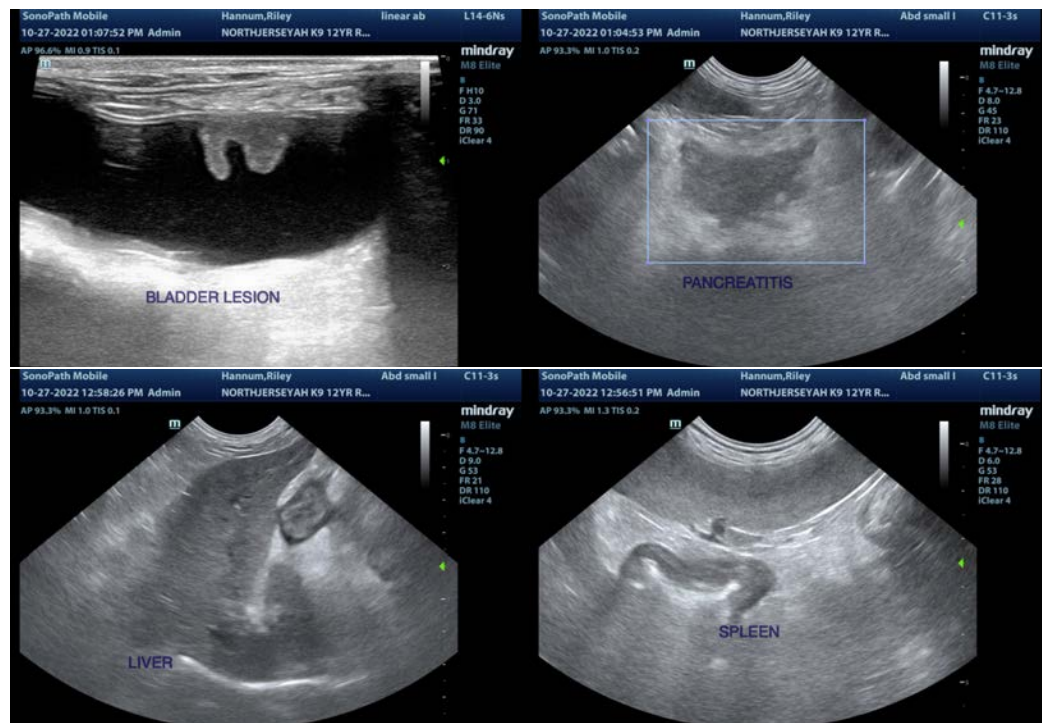
**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The pancreas is prominent and significantly inflamed. This is most consistent with moderate pancreatitis. Recommend aggressive treatment for pancreatitis with IV fluids, nausea medications, pain medications, etc. Recommend a transition to a low-fat diet. If the patient is not improving as expected, recommend repeat ultrasound to look for the development of an abscess, cystic lesion, etc.

There is a focal mass effect visualized in the caudal aspect of the ventral bladder wall. The appearance of this lesion is concerning for a transitional cell carcinoma, but an inflammatory polyp cannot be ruled out. Recommend urinalysis and culture. If there is no inflammation or infection present, I would consider a traumatic catheterization and/or a urine BRAF test (a positive BRAF test increases the likelihood of a transitional cell carcinoma, a negative BRAF test is non-diagnostic, and additional testing is required).

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

The spleen appears subjectively mottled on today's exam. Consider a fine needle aspirate of the spleen. Additionally, the liver is heterogeneous. This could be age related remodeling. Correlate with bloodwork findings. If liver enzyme elevations are present, further evaluation may need to be considered.





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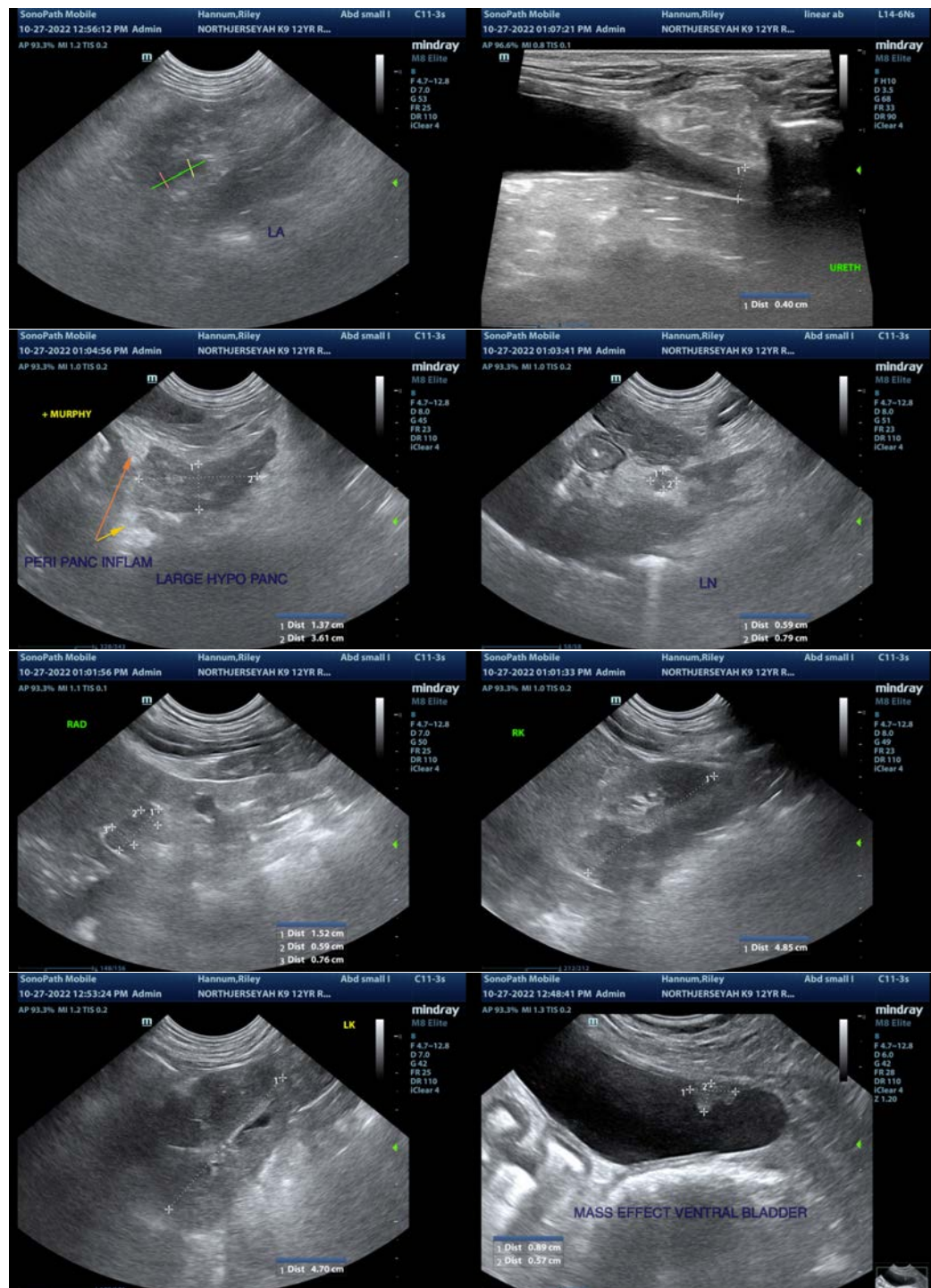
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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)

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