



**PATIENT**

Patrick Meyer

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

18 Years

**WEIGHT**

7 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Elaina Petrone

**HOSPITAL NAME**

Long Branch AH

**REFERRING VET**

Dr. Elaina Petrone

**INVOICE**

44422

**DATE**

1/24/23

**PRESENTING CLINICAL SIGNS**

18 yo MN DSH. Stage 2 CKD, weight loss, voracious appetite, HCT 25%, neutrophilia and monocytosis. Severe chronic dental disease.

Abnormal PE/Chem/CBC/UA Results: BUN: 59 Creatinine: 2.8 Total protein 10.7 Globulin 8.4 Albumin 2.3 Neutrophilia 11,000 Monocytes 1036 T4: 1.2 USG: 1.023

**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 (4.2 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 (4.3 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 region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

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 (0.47 cm in diameter), 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 homogenous echotexture. 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.

**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.



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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 0.19 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 nonformed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

**Pancreas**

The pancreas is prominent and hypoechoic as compared to the surrounding isoechoic 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. Lymph nodes appear normal in size, one such lymph node measures 0.37 cm. The omentum is of normal echogenicity.

**PRIMARY FINDINGS**

- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Subjective “ropey” small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.

**SECONDARY FINDINGS**

- Moderate gallbladder debris – 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.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Today’s scan appears relatively normal for an 18 year old cat. The changes in the kidneys are consistent with chronic progressive age related renal changes; Recommend a urinalysis and culture and blood pressure evaluation to obtain a baseline.

The changes observed in the pancreas are likely consistent with previous episodes of pancreatic inflammation, as no evidence of active inflammation is present, but correlate with a quantitative fPLI level.

There are no focal lesions visualized associated with the gastrointestinal tract, and the small intestine is not thickened but does appear slightly “ropey”. This is a subjective finding that can sometimes be normal for older cats, so the significance is uncertain. Your plan to perform a maldigestion panel is a good one. You could also consider a novel protein/hydrolyzed protein prescription diet and 3-view thoracic radiographs.



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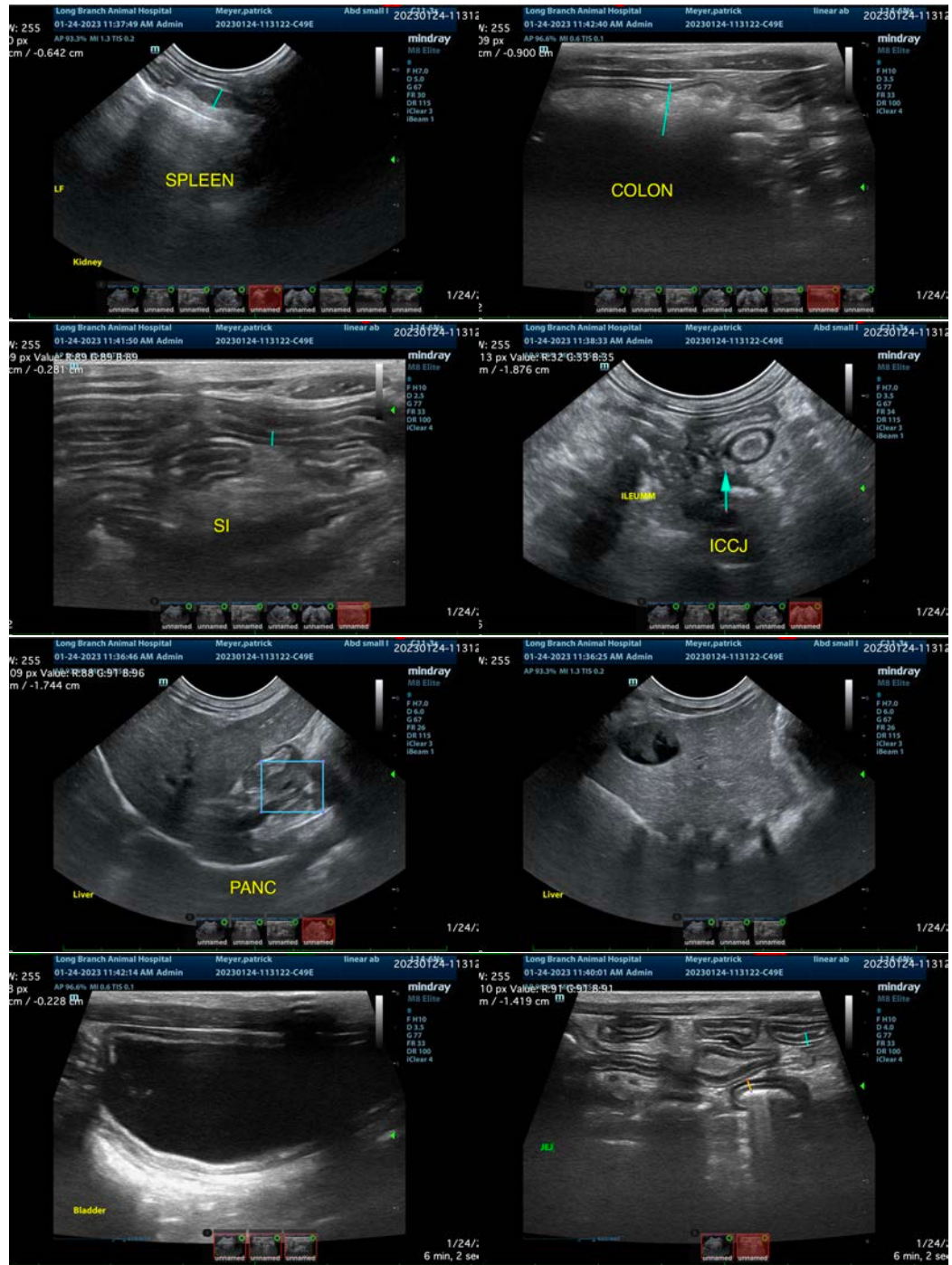
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I would also consider looking into the elevated globulin levels reported with a protein electrophoresis, looking for evidence of underlying neoplasia versus chronic inflammation. If inflammatory changes are thought most likely, then you could consider malabsorption as a possibility. I would recommend chronic probiotic therapy and evaluation of a TLI level. Additionally, GI biopsies may be helpful.





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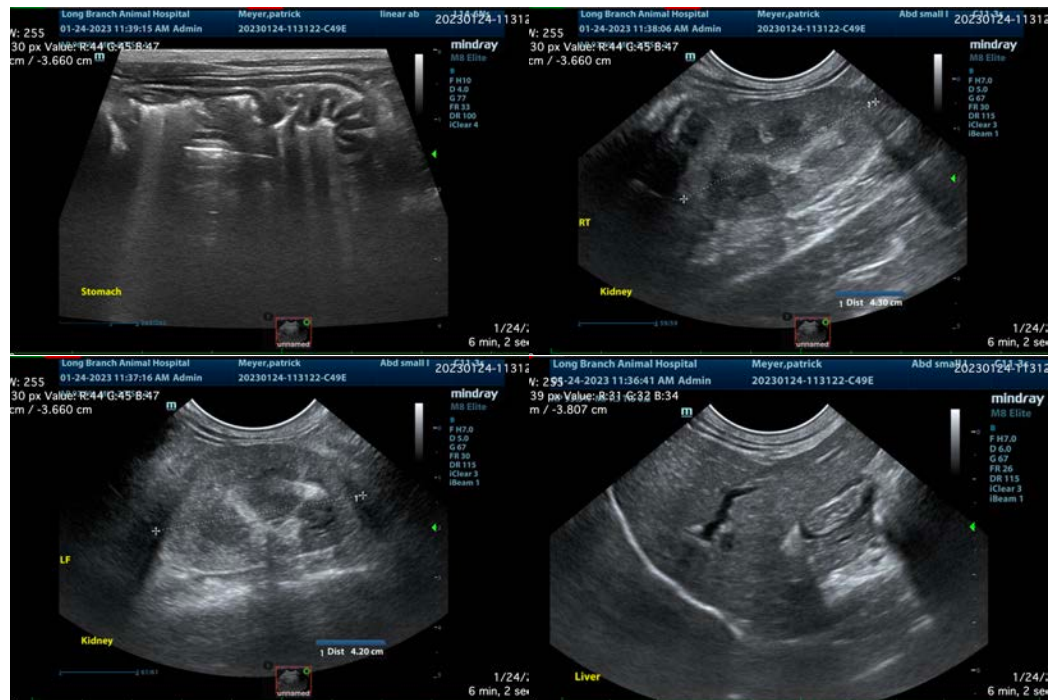
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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