

**DATE PRESENTING CLINICAL SIGNS**

7/20/23 Significant weight loss, not eating well, inappropriate urination.

**PATIENT**

Marley Troutman

Current Medications: None listed.

Lab Results: Significant regenerative anemia, leukocytosis, neutrophilia, monocytosis. Low T4, elevated SDMA/BUN/Phosphorus, low protein.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

**SPECIES**

Feline

**BREED**

Siamese

**SEX**

Spayed Female

**AGE**

12/24/07

**WEIGHT**

9.53 Pounds

**INTERPRETED BY**

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

**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 is large, measuring 5.52 cm. It is irregular in shape and hyperechoic with decreased corticomedullary distinction and irregular cortical striations. There is irregular bulging of the renal capsule with surrounding inflammation and scant perinephric fluid. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is large, measuring 5.45 cm. It is irregular in shape and hyperechoic with decreased corticomedullary distinction and irregular cortical striations. There is irregular bulging of the renal capsule with surrounding inflammation and scant perinephric fluid. 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 0.39 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 0.22 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.

**HOSPITAL NAME**

Bayside AMC

**REFERRING VET**

Dr.

**Spleen**

The spleen is subjectively normal in size (0.98 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.

**INVOICE**

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**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 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.

### ***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 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 0.22 cm. Visualized peristalsis appears appropriate. There are multiple (at least 3) areas of focal wall thickening and loss of layering consistent with bowel masses. One lesion in the right cranial abdomen possibly involving the duodenum has a wall thickness of 0.69 cm. Another in the mid abdomen creates a mass effect measuring 3.6 cm x 2.44 cm. In this area, the bowel wall measures 1.5 cm in length and the lesion extends for approximately 4.57 cm. There are other areas with more extensive thickening and irregularity. One such area has a bowel wall measuring at 1.3 cm.

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 left limb of the pancreas is prominent and mottled 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***

There is scant free abdominal fluid. There is a mild mesenteric lymphadenopathy present with lymph nodes measuring 0.53, 0.80, and 0.82 cm. The omentum is hyperechoic around the enlarged lymph nodes, bowel masses, and kidneys.

## **PRIMARY FINDINGS**

- Large, irregular, hyperechoic kidneys with decreased corticomedullary distinction, cortical striations, perinephric inflammation, and fluid – Findings are concerning for possible infiltrative disease to the kidneys (LMA). Acute renal failure is an alternate differential.
- Multiple areas of severe intestinal wall thickening with complete loss of layering – Findings are most consistent with multicentric infiltrative lesions to the bowel. Primary differentials would be round cell neoplasia, although carcinoma and other benign differentials are possible.
- Clusters of large, hypoechoic mesenteric lymph nodes – Findings could be consistent with severely reactive or neoplastic nodes.

## **SECONDARY FINDINGS**

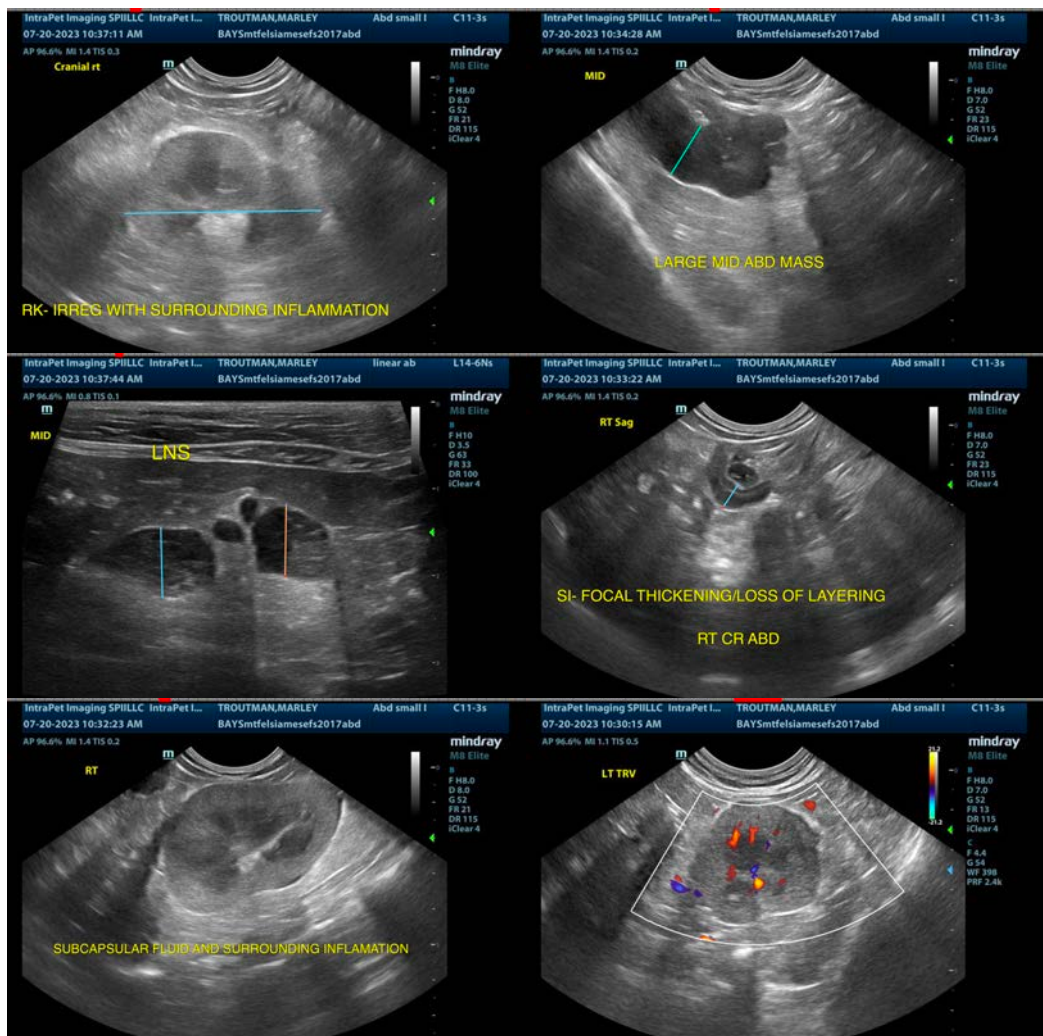
- Prominent, mottled pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.

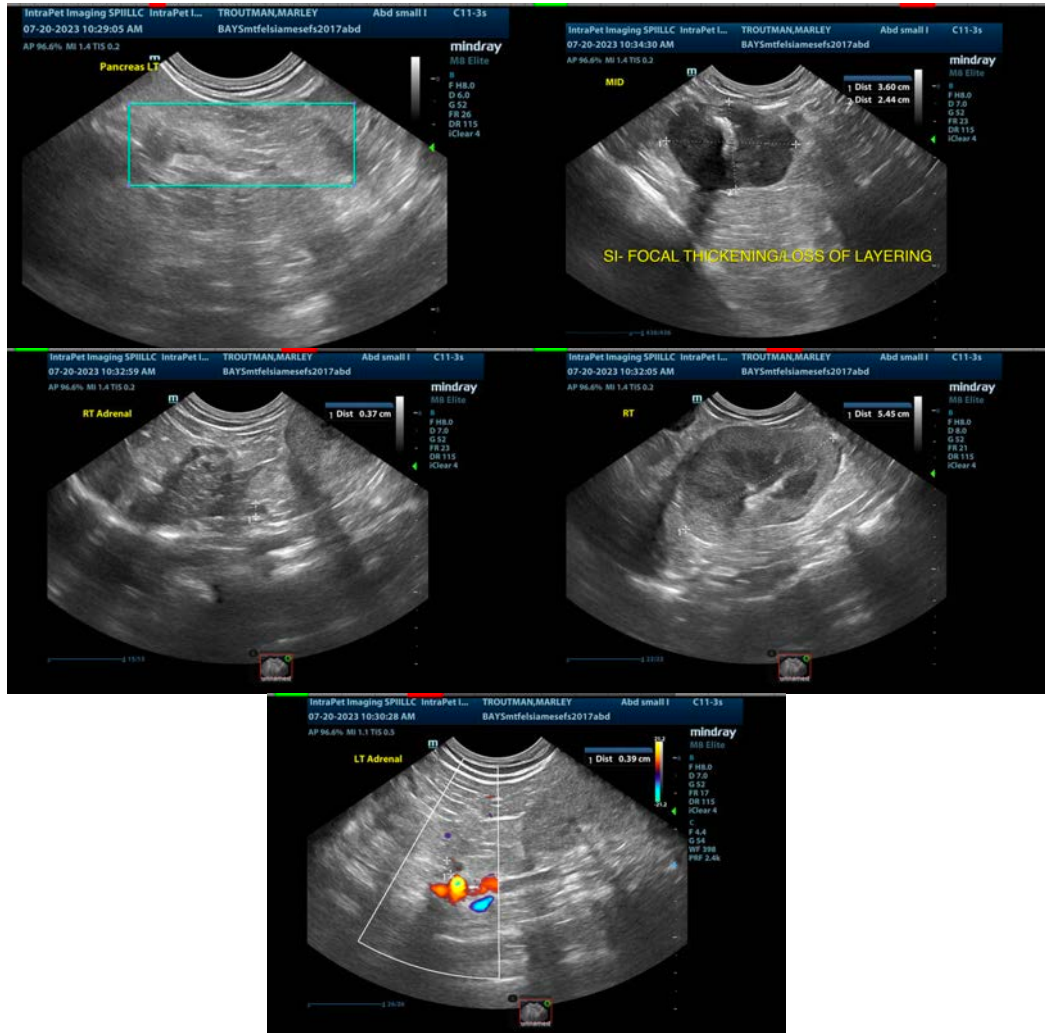
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Both kidneys are irregular with bulging areas. They are hyperechoic, large, and have perinephric inflammation and subcapsular effusion. These findings would be concerning for possible round cell neoplasia affecting both kidneys, although other differentials such as acute renal failure, etc. can have a similar appearance. This combined with the multiple areas of severe wall thickening and loss of layering in the small intestine, and the enlarged mesenteric lymph nodes increases my suspicion for underlying diffuse round cell neoplasia.

Recommend a fine needle aspirate of a bowel mass (or more than one). If a diagnosis cannot be obtained based on sampling of a bowel mass, then you could consider a fine needle aspirate of one of the kidneys (provided coagulation parameters and blood pressure is normal).

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





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)  
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