

**DATE PRESENTING CLINICAL SIGNS**

7.7.2023

Presented 7/5/23 with a 3-day history of vomiting that progressed to diarrhea and inappetance. Diarrhea progressed further to mostly blood, fluid, and mucus. On presentation, patient was QAR to BAR, tacky and dehydrated, painful on abdominal palpation with a temp of 102.7. Bloodwork revealed negative cPL, leukocytosis with neutrophilia, a left shift, and monocytosis. Radiographs of abdomen revealed irregular left kidney, gastroenteritis and acute hemorrhagic diarrhea syndrome.

**PATIENT**

Tidbit Kaluzienski

**SPECIES**

Canine

**BREED**

JR Terrier Mix

**SEX**

Spayed Female

**AGE**

7/31/2015

**WEIGHT**

19.4 lbs

**INTERPRETED BY**

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

**HOSPITAL NAME**

Perry Hall AH

**REFERRING VET**

Dr. Breidenbaugh

**INVOICE**

13606

Current Medications: Metronidazole 15mg/kg IV (or PO) BID, Cerenia 1mg/kg SC or IV SID

Provable paste (TID)/capsule (SID) probiotic as directed

Lab Results: 7/5/23: CBC: low MCV, elevated MCH, leukocytosis (30.99k) with neutrophilia and L shift (24.2k) and monocytosis (3.12k); CHEM: SDMA 15 (creat 1.5), hyperphosphatemia (7.6), hyperglobulinemia (5.1), hypercholesterolemia (325), cPL normal on snap. 7/6/23: PCV 39%, TS 6.8 g/dL

Radiographs: See attached report.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is moderately distended with anechoic urine. The bladder wall is diffusely mildly thickened (0.46 cm), and the mucosa is mildly irregular. The trigone, ureteral papillae, and visible urethra (to a depth of 2 cm) appear normal with no evidence of severe mucosal irregularities, masses or cystic calculi.

Findings are most consistent with bacterial cystitis or lack of urine distension. Recommend urinalysis and culture.

The left kidney has a normal shape and size (4.95 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. Mild pyelectasia is present is noted (0.20 cm). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.20 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. Mild pyelectasia is present is noted (0.24 cm). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size (0.70 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 (0.81 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, 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.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### **Gastrointestinal**

The stomach is mildly dilated with fluid. 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. The gastric wall measures 0.30 cm. 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. The duodenum measured as normal (0.43 cm) and the jejunum measured as normal (0.35 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 normal and isoechoic to surrounding 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 free fluid. There are occasional prominent mesenteric lymph nodes (one such node measuring at 4.30 cm). The omentum is generally of normal echogenicity.

### **Other**

Ringdown artifact is visualized at the level of the diaphragm. This can be sometimes be seen with pulmonary parenchymal disease.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Mildly thickened irregular, urinary bladder wall - The bladder mucosal changes could be consistent with cystitis or artifactual due to lack of adequate luminal distension. Bladder neoplasia cannot be ruled out but is considered unlikely in this patient.
- Decreased corticomedullary distinction in both kidneys with mild bilateral pyelectasia - Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the kidneys could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

- Occasional prominent mesenteric lymph nodes - The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

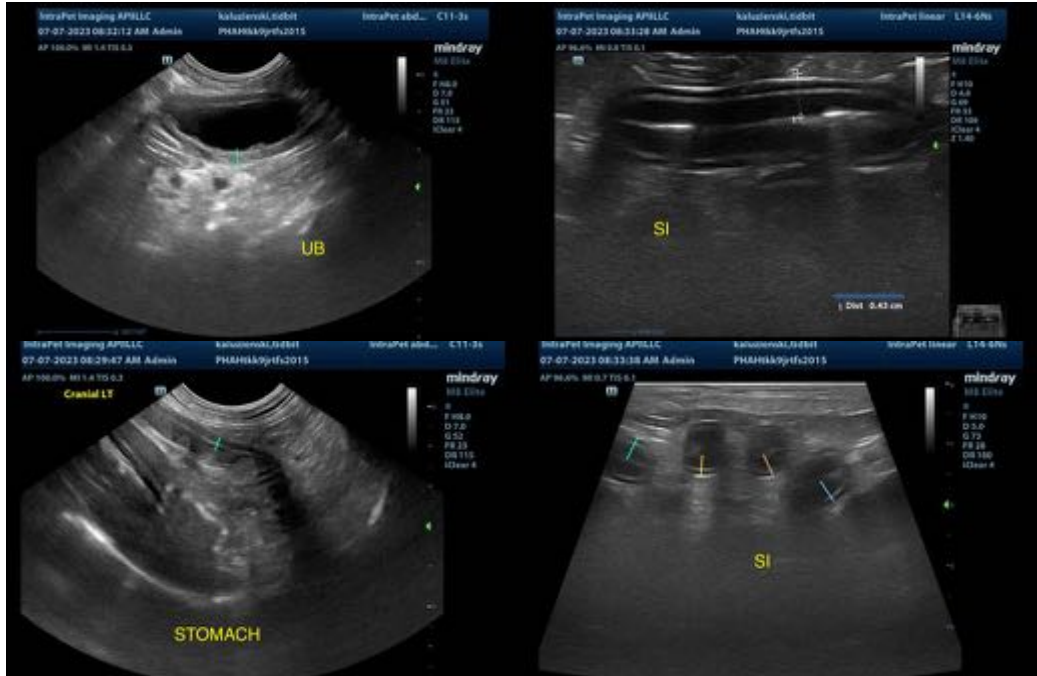
### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes on today's scan are relatively mild. The urinary bladder appears slightly thickened and irregular but is not fully distended. Recommend a urinalysis and culture to further evaluate. Additionally, both kidneys have decreased corticomedullary distinction for a middle-aged dog, with very mild pyelectasia. Recommend a blood pressure, urinalysis and culture as a baseline.

No focal lesions are visualized associated with the GI tract to explain the vomiting and diarrhea reported. I suspect this is severe gastroenteritis/acute hemorrhagic diarrhea. Recommend continued monitoring and empirical treatment. If symptoms are not improving, consider repeat imaging.

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. 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.

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