

**DATE PRESENTING CLINICAL SIGNS**

8/2/23

Recently adopted by new owner from previous owner in NY - not much history available; currently dripping urine while walking - history of UTI, treated in Jan 2023 by previous clinic with enrofloxacin and currently with clavamox; hematuria and pyuria, no accidents in house, normal stream of urine produced when voids outside

**PATIENT**

Samosa Yeager

**SPECIES**

Canine

**BREED**

English Bulldog

**SEX**

Neutered Male

**AGE**

1/31/19

**WEIGHT**

45 Pounds

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM**HOSPITAL NAME**

Airpark AH

**REFERRING VET**

Dr. Ridinger

**INVOICE**

44582

Current Medications: started clavamox 250mg 1 PO BID on 7/28, carprofen 100mg 1/2 PO BID started 7.31  
Lab Results: UA - TNTC RBCs, moderate WBCs, no crystals, pH = 9.0, USG= 1.015. CBC and chem - NSF  
T4 WNL, 4dx all neg  
Date of Previous IntraPet Ultrasound: No previous.  
Sedation: 0.4ml dexdomitor + 0.4ml torb IV.  
Stat Report: Not requested.  
Imaging Performed By: Rachel Brillhart, RDMS.

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

The urinary bladder is empty, resulting in an overall generally thick, mildly irregular appearance to the wall. The apical wall measures 0.90 cm thick. The visible contents are primarily anechoic. No definitive masses or cystoliths are observed. However, within the trigone, there is an approximately 1.8 cm long x 0.67 cm thick, ovoid, smooth, mildly heterogeneous, isoechoic density with no acoustic shadow. Otherwise, the trigone and visible pelvis urethra are of normal thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

The right kidney is normal in size (4.73 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of infarcts observed. Multiple nephroliths are noted within the renal pelvis of the right kidney, the largest of which measures 1.75 cm in diameter. Trace pyelectasia is noted but there is no definitive overt evidence of obstruction in these images at this time.

The left kidney is normal in size (6.58 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of mineral or infarcts observed. Trace pyelectasia is noted.

**Adrenal Glands**

The right adrenal gland is normal in size (1.3 cm at the cranial pole and 0.58 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.86 cm at the cranial pole and 0.81 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**Spleen**

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in

echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

- The urinary bladder is empty, which limits full evaluation and makes it difficult to definitively determine the pathology, if any, within the trigone. The structure described above could represent an atypical view of normal tissue in an empty bladder versus potentially mucus or a blood clot, or much less likely even infiltrative neoplasia can't be definitively ruled out.
- Large intrapelvic nephroliths in the right kidney without evidence of obstruction present at this time.

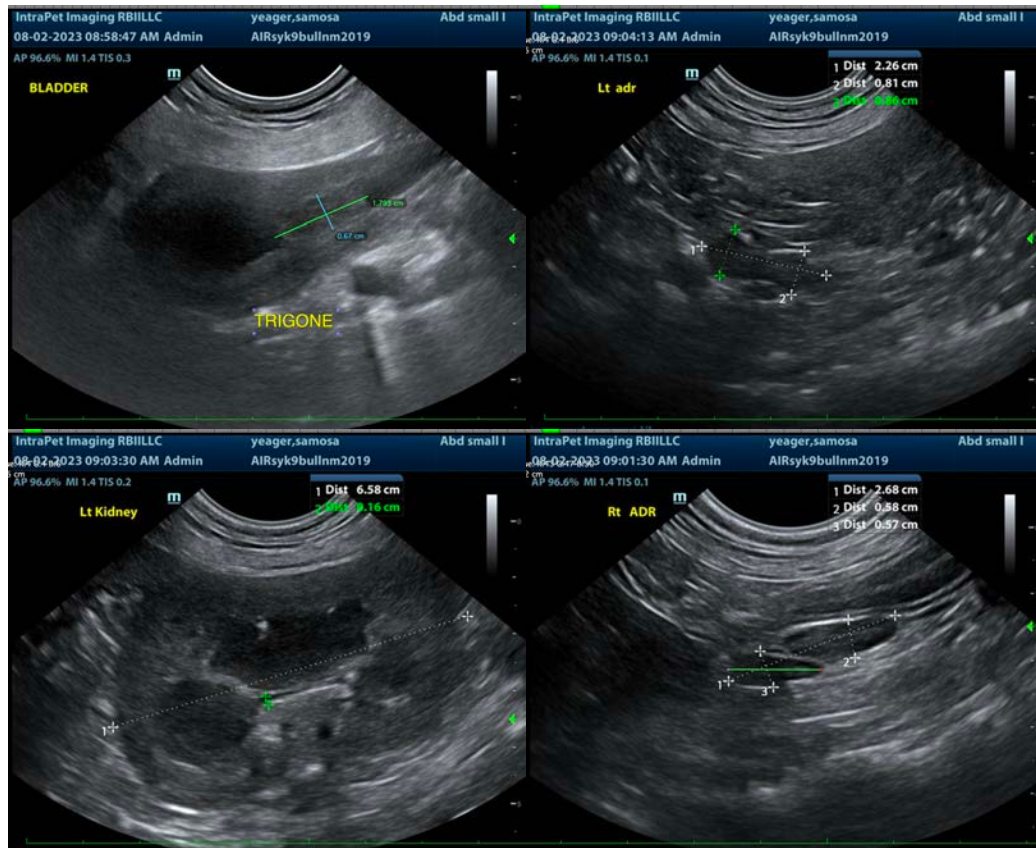
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

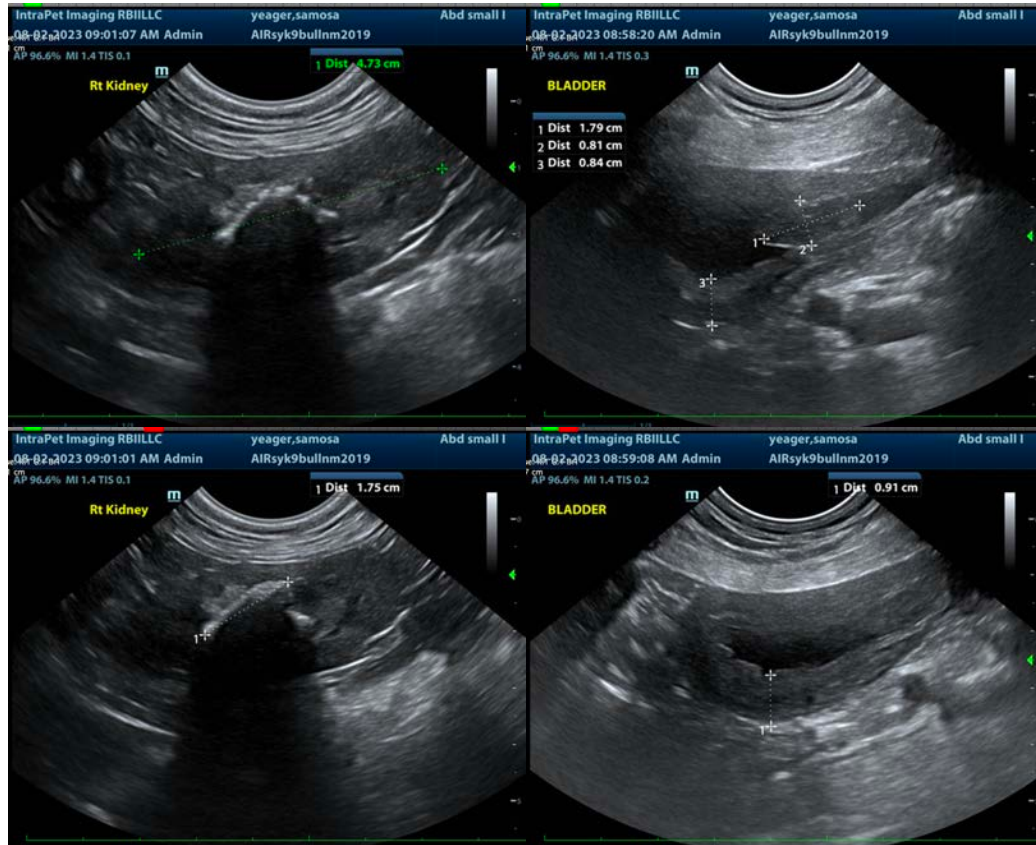
If possible in the near future or potentially after finishing the current course of antibiotics, pending patient response, recheck imaging of a full urinary bladder is recommended.

Additionally, a week to 10 days following antibiotics for the current reported suspected urinary tract infection, a urinalysis and urine culture, if indicated based on urinalysis results, are recommended. Submission of urine to look for BRAF gene mutation, which is associated with urinary bladder cancer, could be considered. Other diagnostic options include traumatic catheterization, fine needle aspirate (with small risk of tumor seeding/trailing) or cystoscopy for further sampling.

The reported hematuria, however, could be the result of the nephrolith versus primary urinary bladder pathology. Pending results of the above recommended diagnostics and patient's clinical status, etc. following

management of secondary infections, etc., consultation with a veterinary internist or surgeon regarding the nephroliths may be warranted, as surgical removal may not be indicated/warranted in a patient with normal kidney function, no evidence of obstruction, etc.





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.

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