



**PATIENT**

Rio Crandall

**SPECIES**

Canine

**BREED**

Mixed

**SEX**

MN

**AGE**

4 years

**WEIGHT**

79.3 lbs

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Pamela Harrigan,  
RDCS

**HOSPITAL NAME**

All Friends Animal  
Hospital

**REFERRING VET**

Dr. Kathleen Tangari

**INVOICE**

11652

**DATE**

4/8/2026

**PRESENTING CLINICAL SIGNS**

History cystitis, recurrent UTIs - history of blood in urine. Rads: WNL, Urine culture - no growth. Last UA completely normal. Previous 5 UAs had severe hematuria and leukocyturia. Sedated with DKMT.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size (1.4 cm wide – sagittal view), echotexture, and echogenicity for a neutered male.

The right kidney is normal is size (5.96 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 pyelectasia, mineral or infarcts observed.

The left kidney is normal is size (7.23 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 pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

The right adrenal gland is normal in size (0.61 cm at cranial pole and 0.51 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.48 cm at cranial pole and 0.56 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. 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.

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 visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.



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The visible small intestines are normal in wall thickness and layering. 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.

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

***Pancreas***

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The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**SEX**

MN

***Free Abdomen***

**AGE**

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There is no visible free peritoneal effusion noted in these images.

Mesenteric and medial iliac lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

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**ULTRASONOGRAPHIC FINDINGS**

- Mildly to moderately reactive mesenteric and medial iliac lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.
- Moderate gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili. Some mineral/sand debris with no visible evidence of obstruction is noted.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is not a definitive ultrasonographically visible intraabdominal explanation for patient's reported hematuria. Given the report of the most recent urinalysis being normal, further evaluation may not be necessary, however, if clinical signs return further diagnostic recommendations include:

- Recheck urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.
- Assessment of patient's coagulation status would be recommended.
- There is no visible evidence of neoplasia, but submission of urine to look for BRAF gene mutation could be considered if another cause of the recurrent hematuria is not found.
- Ultimately, however, advanced imaging and/or even tissue sampling beginning with cystoscopy could be considered.

**IMAGING PERFORMED BY**

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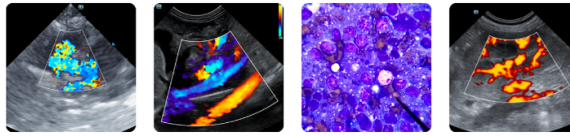
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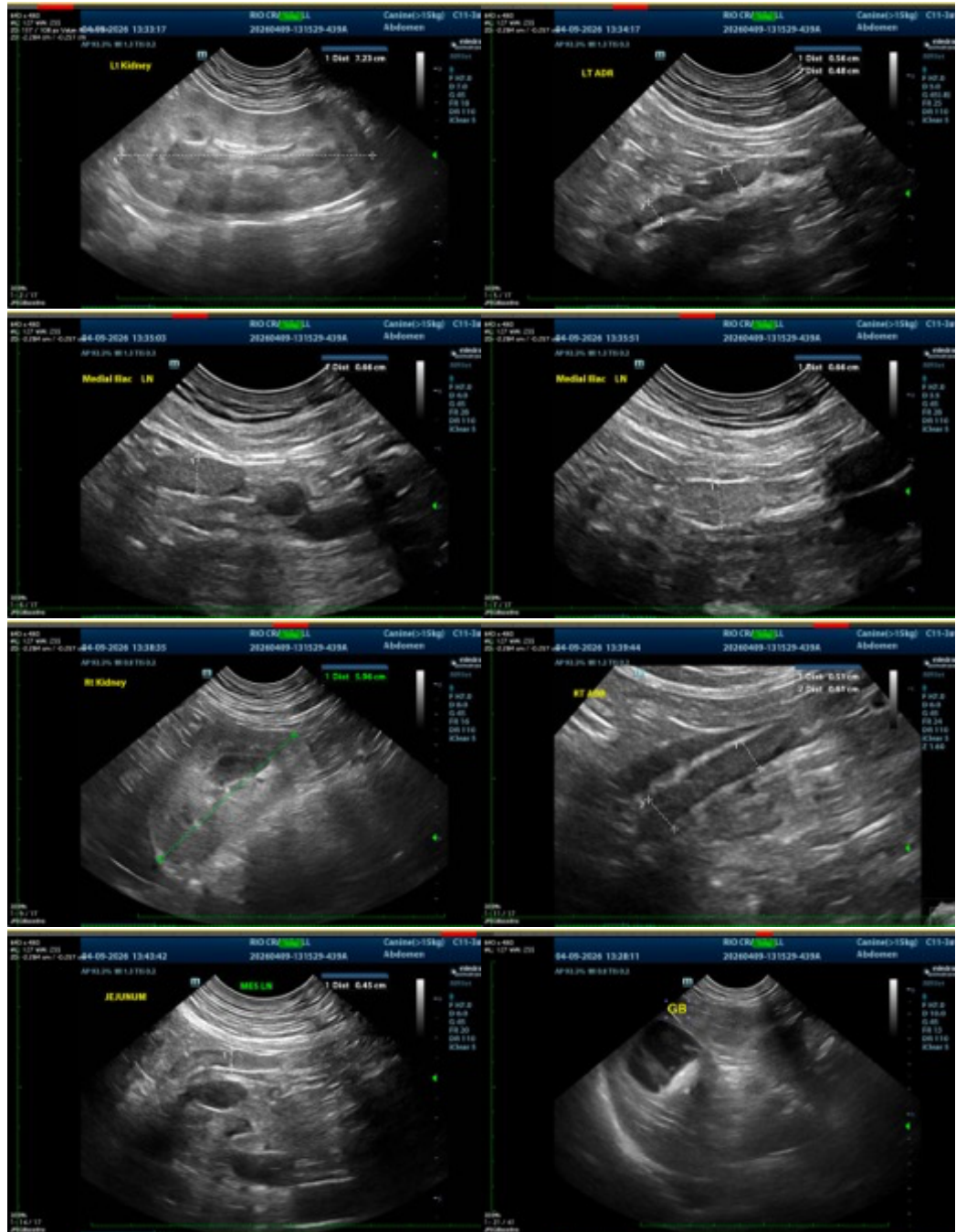
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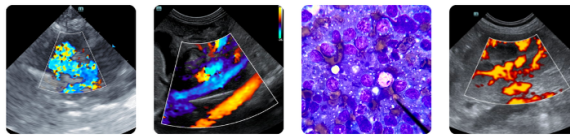
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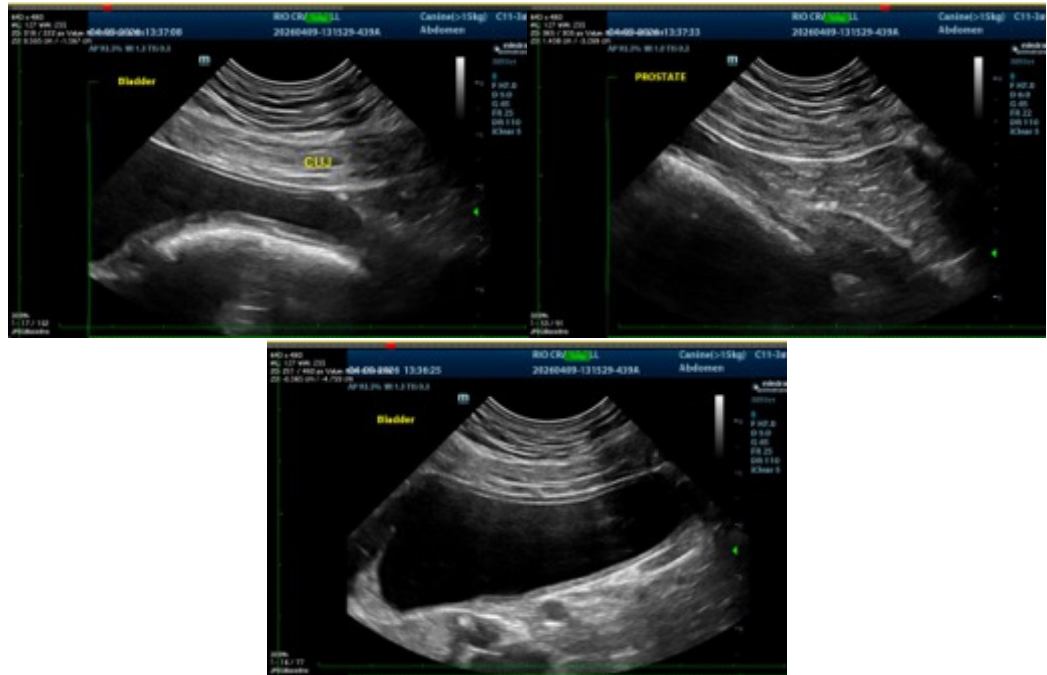
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM  
info@sonopath.com