

**DATE PRESENTING CLINICAL SIGNS**

2/17/23

Dog exhibiting signs of voiding urine well initially but then continues to strain or show urgency to continue to void afterward. Urine samples show persistent signs of cystitis. When clinical signs first noted a few months ago, dog otherwise acting fine. However, recently owner noticed a change or decline in appetite but a continued normal level of water consumption. Physical examination - N/R on abdominal palpation or rectal examination except a persistent and ongoing enlarged anal glands (no evidence of pain or mass noted). 1/30 - U/A showing significant cystitis/hematuria but no bacteria on the cytology.

PATIENT

Bexie Kupiec

SPECIES

Canine

Dog was given antibiotics (cefpodoxime) for 10 days with some minor improvement but generally a continuation of the clinical signs of straining following the initial voiding of urine. Visible hematuria and the severity of blood and white cells in bladder declined but not resolved.

BREED

Spaniel X

Current Medications: Thyrosyn 0.3 mg BID, Rimadyl 75 mg - give 1/2 tablet once daily

Radiographs: lateral abdomen N/R no signs of bladder stones or change in the appearance of the bladder or abdomen.

SEX

Spayed Female

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Declined.

Stat Report: Declined.

Imaging Performed By: Rachel Brillhart, RDMS.

AGE

7/25/13

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is adequately distended with anechoic contents. No inflammatory changes, echogenic sediment or cystoliths are observed within the urinary bladder. However, in the proximal urethra extending just into the trigone, Both ureters are dilated at the level of the ureteral papilla.

WEIGHT

43.2 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM

The right kidney measures 6.58 cm. A thin rim of renal cortex is the only tissue present, surrounding a markedly fluid dilated renal pelvis/collecting system. Narrow bands of hyperechoic tissue extend from the capsule towards the hilus.

HOSPITAL NAME

Fork Vet Hospital

The left kidney is normal in size (6.58 cm), shape and echogenicity. Marked pyelectasia noted. 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.

REFERRING VET

Dr. Doherty

Adrenal Glands

The right adrenal gland is normal in size (2.94 cm long x 0.71 cm at the cranial pole 0.62 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INVOICE

45359

The left adrenal gland is normal in size (2.53 cm long x 0.60 cm at the cranial pole and 0.68 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

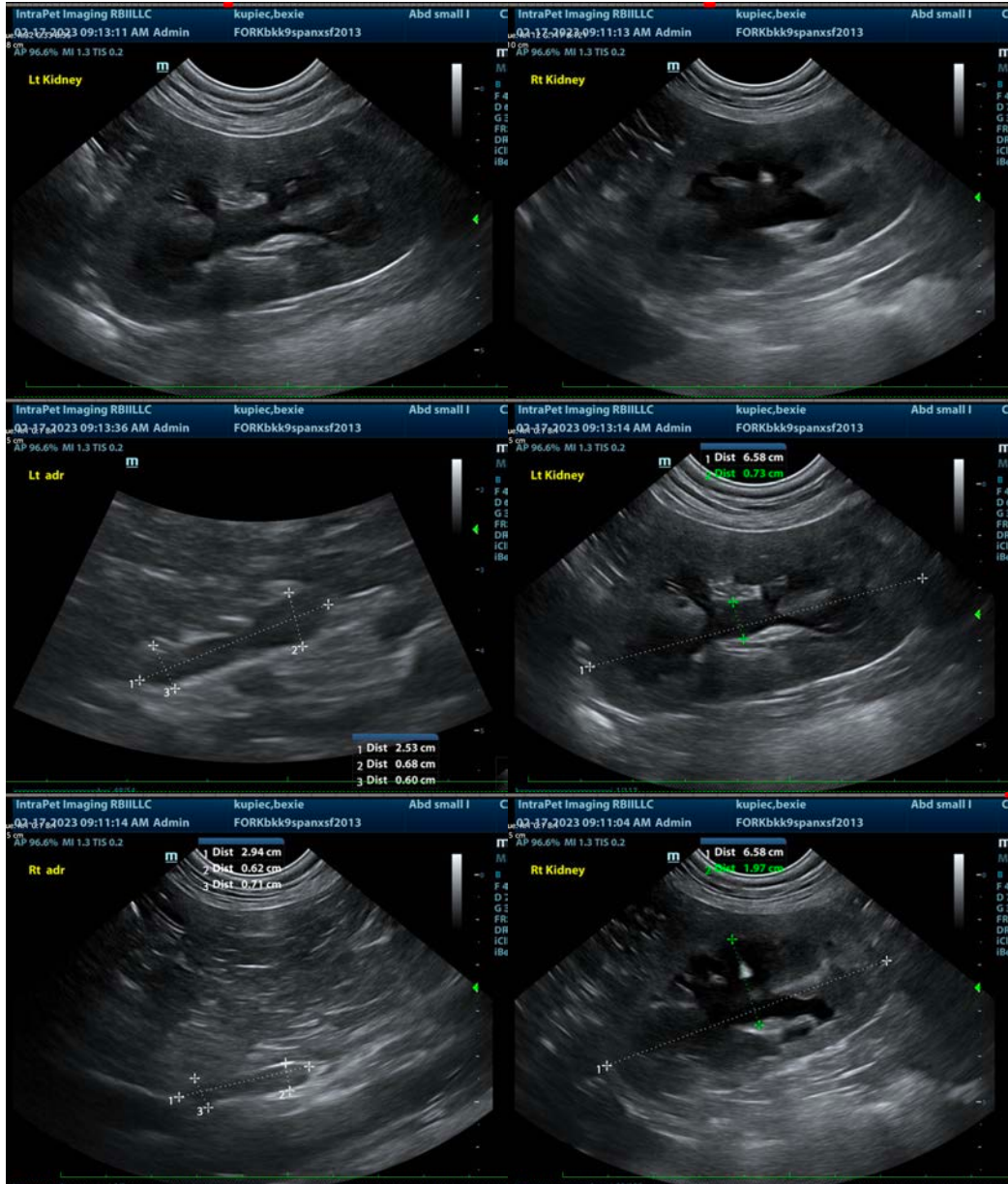
- Proximal urethral/trigone mass – most concerning for infiltrative neoplasia such as transitional cell carcinoma versus other. Benign inflammatory disease cannot be ruled out but is considered much less likely, given the location and appearance of the tissue.
- The dilated ureters and pyelectasia/right kidney hydronephrosis are most likely secondary to a chronic, at least partial urinary outflow obstruction. Concurrent infection/pyelonephritis cannot be definitively ruled out.

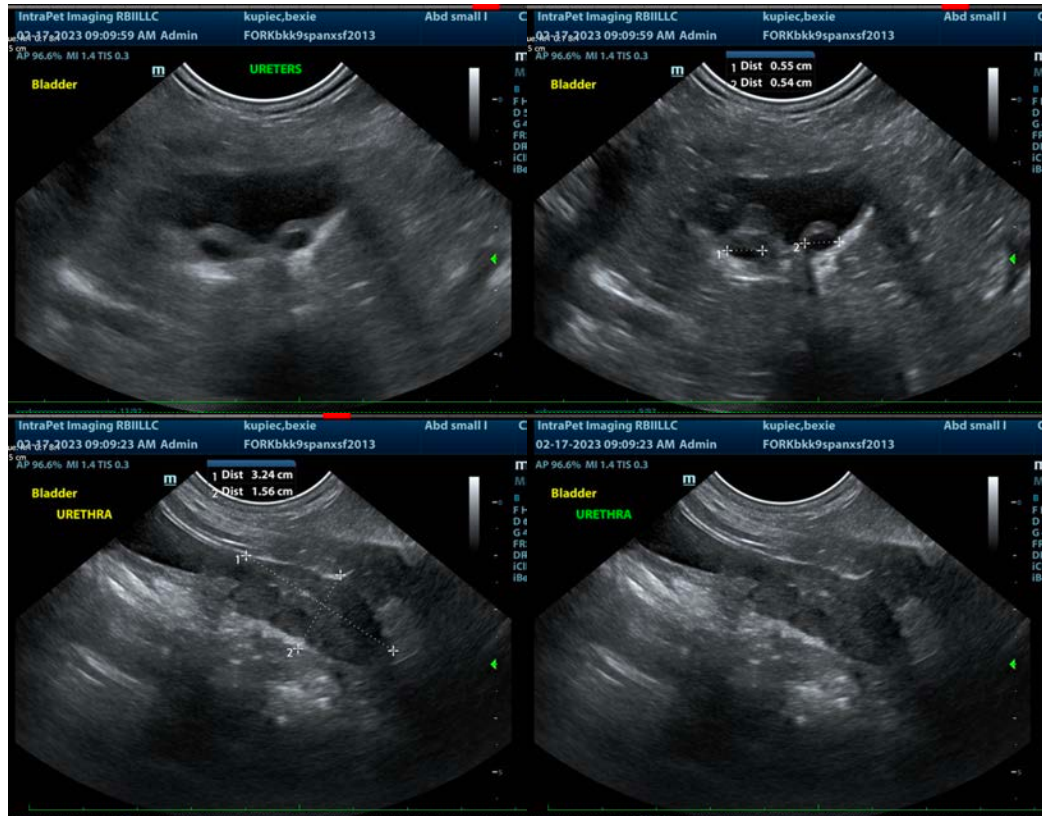
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

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.

In the meantime, as is reportedly already in place, broad-spectrum antibiotics ideally based on culture and sensitivity results as well as an anti-inflammatory may be considered while waiting for results, to offer some clinical relief. Ultimately, consultation with a veterinary oncologist is recommended.





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
Beth.Johnson@sonopath.com