**DATE**

12/5/22

**PRESENTING CLINICAL SIGNS**

History: Chronic/Recurrent UTI since 3/28/22.

**PATIENT**

Gibbs Beck

Current Medications: 3/28/22- Cefpodoxime-200mg- 1 SID x 10 days. 8/29/22- Enrofloxacin-136mg- 1 and 1/2 SID x 10 days. 9/29/22- Doxycycline-300mg- 1 BID x 14 days. 10/31/22- Doxycycline-300mg- 1 BID x 14 days

**SPECIES**

Canine

Lab Results: 3/28/22- U/A= 3+rods, 2+ Neuts, 1+ RBC, pH=5, UrSpGr=1.020. 8/30/22- BW-WNL's. 9/19/22- Rods &gt;100/HPF

**BREED**

Gordon Setter

9/24/22- Urine C&amp;S= E.coli-highly resistant. 10/31/22- UrSpGr= 1.010, pH=5, Rods=4+. 11/28/22- UrSPGr=1.010, pH=5, Rods=4+

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Telazol IV.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

**SEX**

Neutered Male

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****AGE**

5/26/12

**Urinary System**

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**WEIGHT**

80 Pounds

Prostate is mildly enlarged. Parenchyma is diffusely homogenous and relatively hypoechoic. Normal distinct margins and symmetrical bilobed shape are maintained. This finding is likely normal patient variant, especially if patient was neutered as an adult; however, if patient was neutered as a puppy, prostatitis or, less likely, infiltrative neoplasia cannot be ruled out. This finding should be interpreted in combination with clinical signs, urinalysis results, etc. and either further investigated or monitored, as indicated.

**INTERPRETED BY**Beth Johnson, DVM  
DACVIM

Left kidney is normal is size (6.77 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.

**HOSPITAL NAME**

Alexander AH

Right kidney is normal is size (5.6 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.

**REFERRING VET**

Dr. Alexander

**Adrenal Glands**

Left adrenal gland is normal in size (2.87 cm long x 0.47 cm at cranial pole and 0.93 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**INVOICE**

19013

Right adrenal gland is normal in size (2.81 cm long x 0.61 cm at cranial pole and 0.59 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

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***

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 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 visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

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 mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The observed pancreas 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.

### ***Free Abdomen***

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

## **ULTRASONOGRAPHIC FINDINGS**

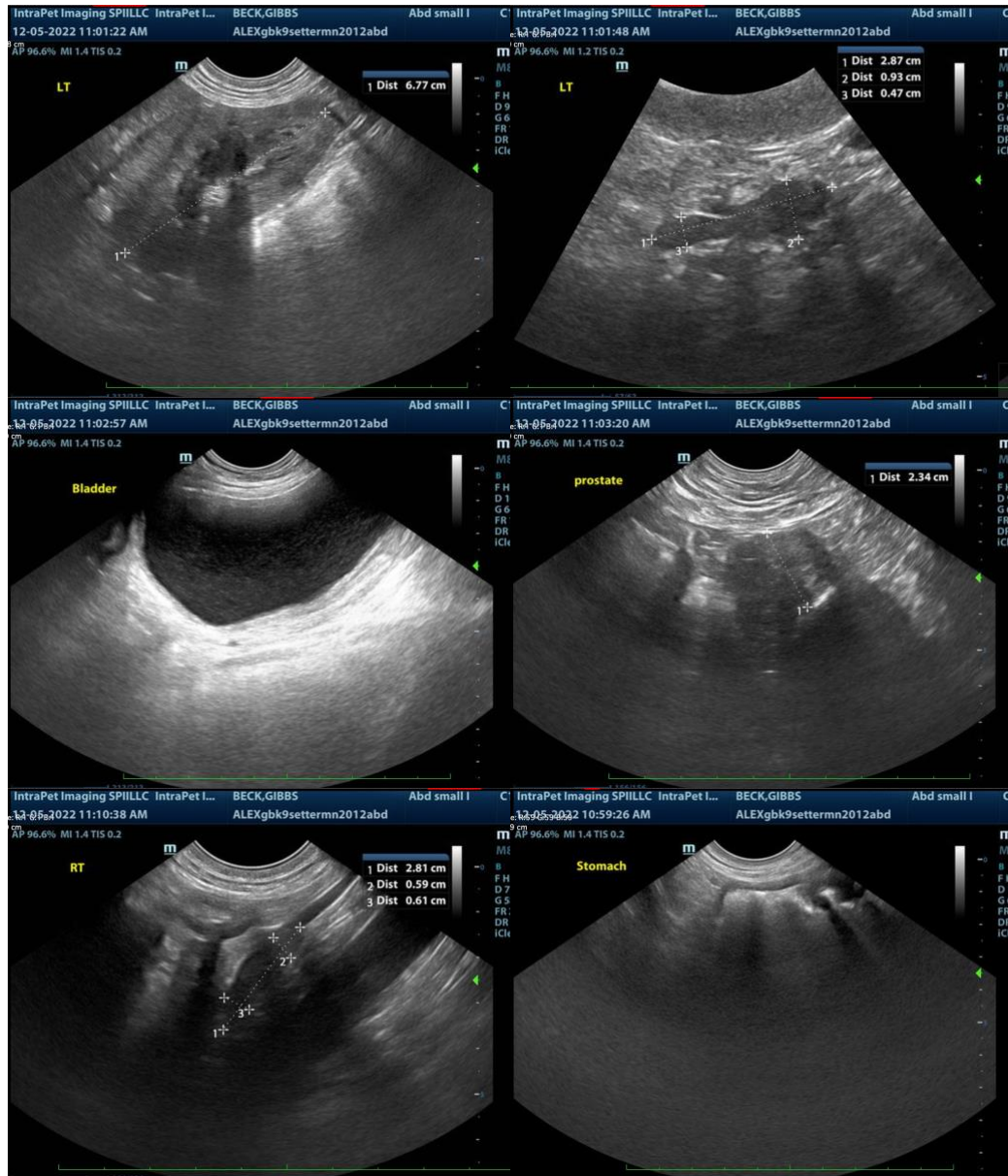
- Urinary bladder debris
- Mild prostatomegaly (see description above)

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

There is not an obvious ultrasonographic explanation for this patient's persistent or recurrent resistant urinary tract infection. Concurrent prostatitis may be contributing.

It is possible that this is a persistent infection versus recurrent infection. Therefore, recommendations include treating it long term as a complicated urinary tract infection, including a 4–6-week course of antibiotics, as well as a follow up culture a week to 10 days after starting antibiotics to assure the resistance pattern hasn't changed and no secondary bugs are growing, as well as a final culture a week after finishing antibiotics to be sure the infection has fully cleared.

Given this patient's resistance pattern and unknown underlying cause, referral for further evaluation by a board-certified internist may be warranted.





**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.

**Beth Johnson, DVM DACVIM**  
Beth.Johnson@SonoPath.com