**DATE PRESENTING CLINICAL SIGNS**

1/24/23

Frank blood in urine and significantly enlarged prostate.

Current Medications: None listed.

Lab Results: Lyme positive.

**PATIENT**

Chase Marcus

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.

**SPECIES**

Canine

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

Mix

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. The bladder revealed a moderate amount of debris with a minimal amount of urine present at the time of the sonogram. Polypoid changes were noted in the bladder. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

**SEX**

Intact male

The **prostate** was uniformly enlarged with lobar swelling appeared to impinge upon the urethra and mildly deviate the descending colon. The prostatic tissue was hyperechoic containing focal areas of decreased echogenicity. These changes are suggestive of either chronic inflammatory episodes, benign cystic pathology or both. Underlying neoplasia cannot be completely ruled-out but is lower on the differential list. This presentation is most consistent with benign prostatic hyperplasia with possible active prostatitis. Neutering or off-label Finasteride (Propecia) (0.1-0.5 mg/kg Sid) treatment is indicated +/- FNA or prostatic wash cytology and culture. The prostate measured 3.0 cm in width.

**AGE**

11/4/18

**WEIGHT**

2.9 kg

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 3.42 cm with non-obstructive pinpoint mineralization. The left kidney measured 3.29 cm.

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**Adrenal Glands**

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 1.06 x 0.49 cm at the cranial pole and 0.51 cm at the caudal pole. The right adrenal gland measured 0.35 x 0.37 cm.

**HOSPITAL NAME**

Banfield Towson

**REFERRING VET**

Dr. Washington

**Spleen**

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

**INVOICE**

42265

**Liver**

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy

was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

### **Gastrointestinal**

Examination of the **gastrointestinal tract** revealed a stomach free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Minor mucosal fogging was noted in the small intestine. The intestinal wall thickness measured 0.35 cm. Mild reactive mesentery was noted associated with the gastrointestinal tract with mild, regional lymphadenopathy. A trace amount of free fluid was noted associated with the small intestine.

### **Pancreas**

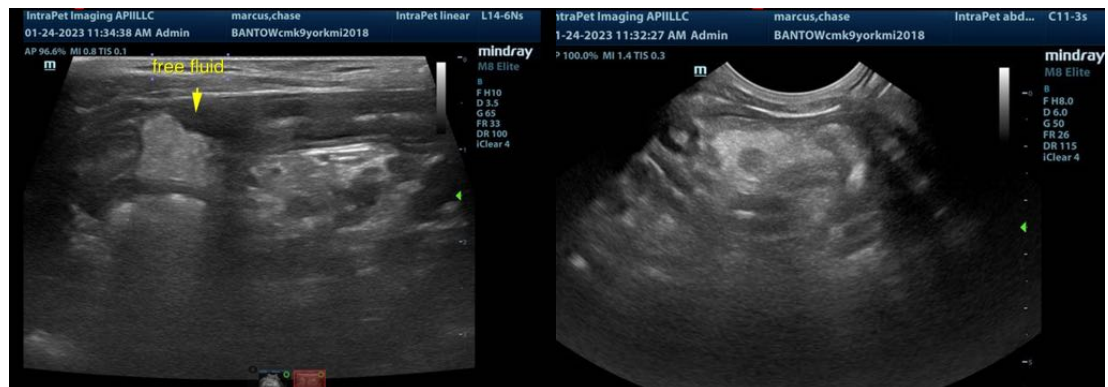
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

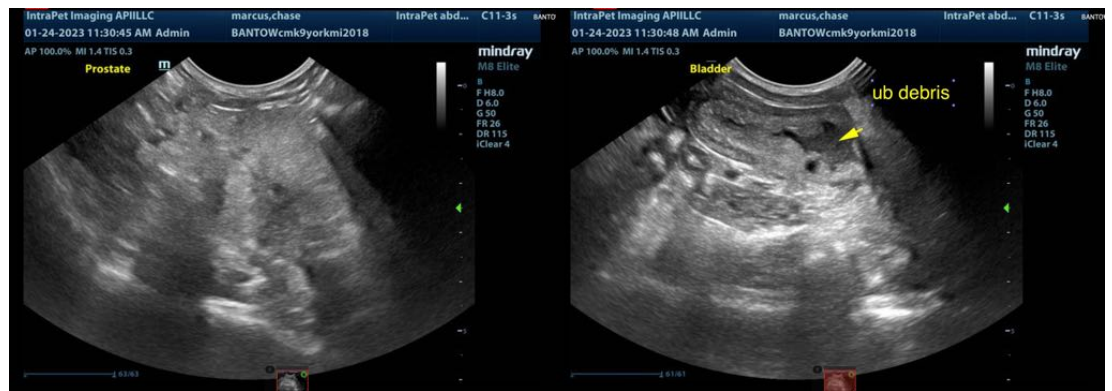
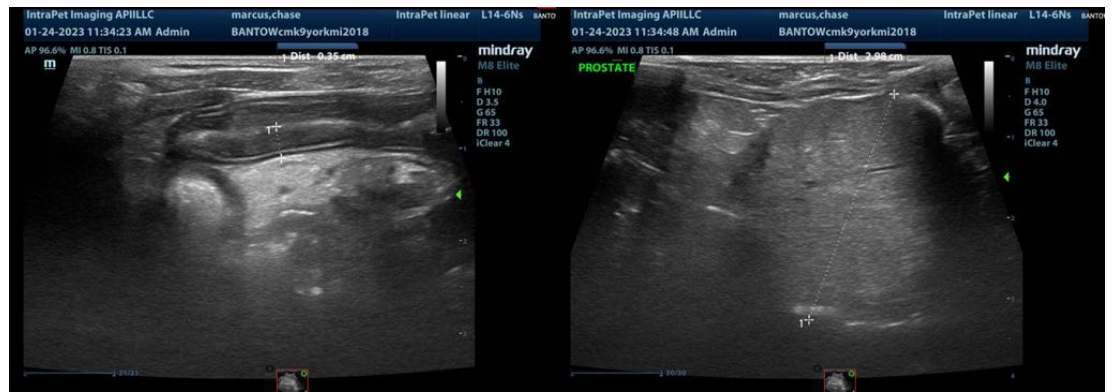
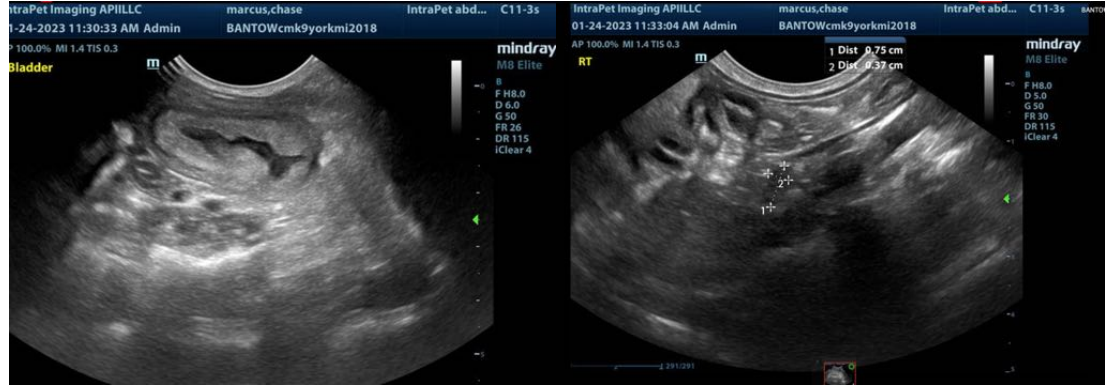
### **ULTRASONOGRAPHIC FINDINGS**

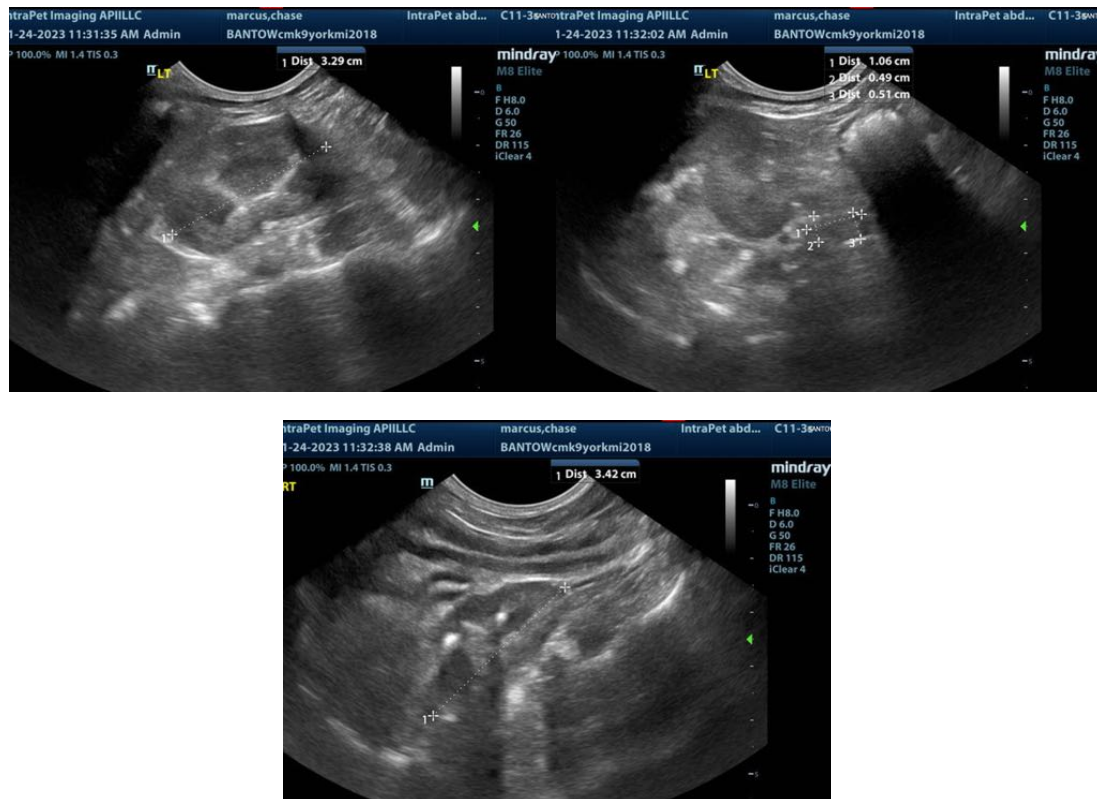
Chronic cystitis bladder pattern.  
Non-obstructive nephrolithiasis.  
BPH Prostate.  
Free fluid.  
Enteritis pattern with mucosal fogging, potential lymphangiectasia.

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

There are two separate issues occurring in this patient the BPH prostate or possible prostatitis, cystitis pattern responsible for the hematuria, enteritis pattern with reactive mesentery and non-obstructive nephrolithiasis. Given the patient's history full coagulation panel is warranted with treatment for enteritis, fecal test and traumatic catheterization of the bladder and prostate with cytospin to assess for any carcinoma cells. Culture would also be appropriate; however, I recommend screening for carcinoma first prior to cystocentesis. Full coagulation panel is warranted given the patient's history as occult coagulopathy may be playing a role.







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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
Eric.Lindquist@SonoPath.com