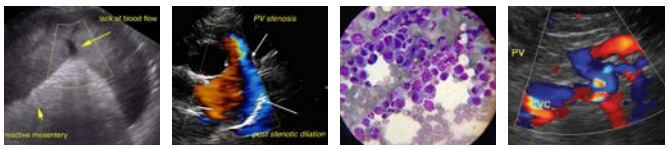
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Alex Kneeld

SPECIES
Canine

BREED
Puggle

SEX
Neutered Male

AGE
11 Years

WEIGHT
29.1 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Dr. Lynette Reyes

HOSPITAL NAME
Chain of Lakes AC

REFERRING VET
Dr. Lynette Reyes

INVOICE
41481

DATE
9/21/22

PRESENTING CLINICAL SIGNS

Pet presented end of August for frequent and inappropriate urination around the house. Trial with antibiotic decreased accidents but not frequency. Today owner reports that pet is shaking more, spirts when urinating, sometimes will urinate and sit on it which is very abnormal. BAR on PE. Pet is currently on Hill's U/D. Sending urine culture and repeated radiographs, no radiopaque uroliths seen today or last month

Abnormal PE/Chem/CBC/UA Results: August 29 Protein: 3+ Blood: 3+ WBC: 21-50 RBC: 11-20 Bacteria: rods 51-100 After antibiotic (cefpodoxime) treatment UPC: 0.5 Prot: 2+ Occ blood: 3+ WBC: 11-20 Bacteria: none seen

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is non-distended, almost empty, resulting in a thick, irregular, hyperechoic wall. Contents are primarily anechoic with one small 0.34 cm in diameter shadowing mineral cystoliths noted. Just caudal to the trigone, in the area of the prostate is a 2.0 cm thick heterogeneous mass encroaching on the trigone and neck of the urinary bladder, suspected to be a prostatic mass.

The right kidney is normal in size (5.0 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

The left kidney is normal in size (4.7 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted.

Adrenal Glands

The area of both adrenal glands is examined without evident pathology.

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). An approximately 0.70 cm in diameter anechoic nodule is noted at the head of the spleen, resulting in a mild capsular bulge. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. 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.

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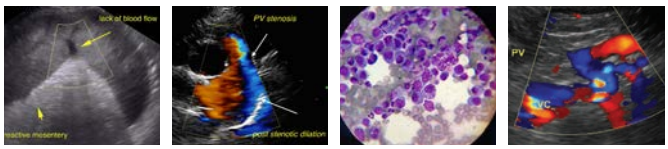

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Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach 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. 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.

PRIMARY FINDINGS

- **Prostatic mass** – concerning for infiltrative neoplasia. However, active prostatitis cannot be definitively ruled out.
- Evidence of chronic cystitis, but bladder wall health cannot be fully assessed due to the urinary bladder being empty. However, there is a cystoliths present.
- **Hypo to anechoic splenic nodule** – likely represents a benign lesion such as a cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.
- **Hyperechoic hepatomegaly -** This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible but considered less likely.

SECONDARY FINDINGS

- Non-obstructive nephrolithiasis bilaterally in the kidneys

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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/prostatic 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.

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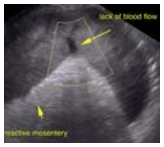
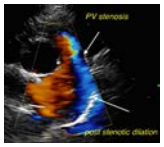
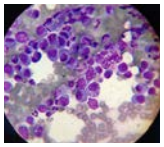
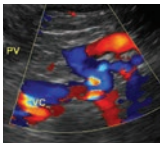

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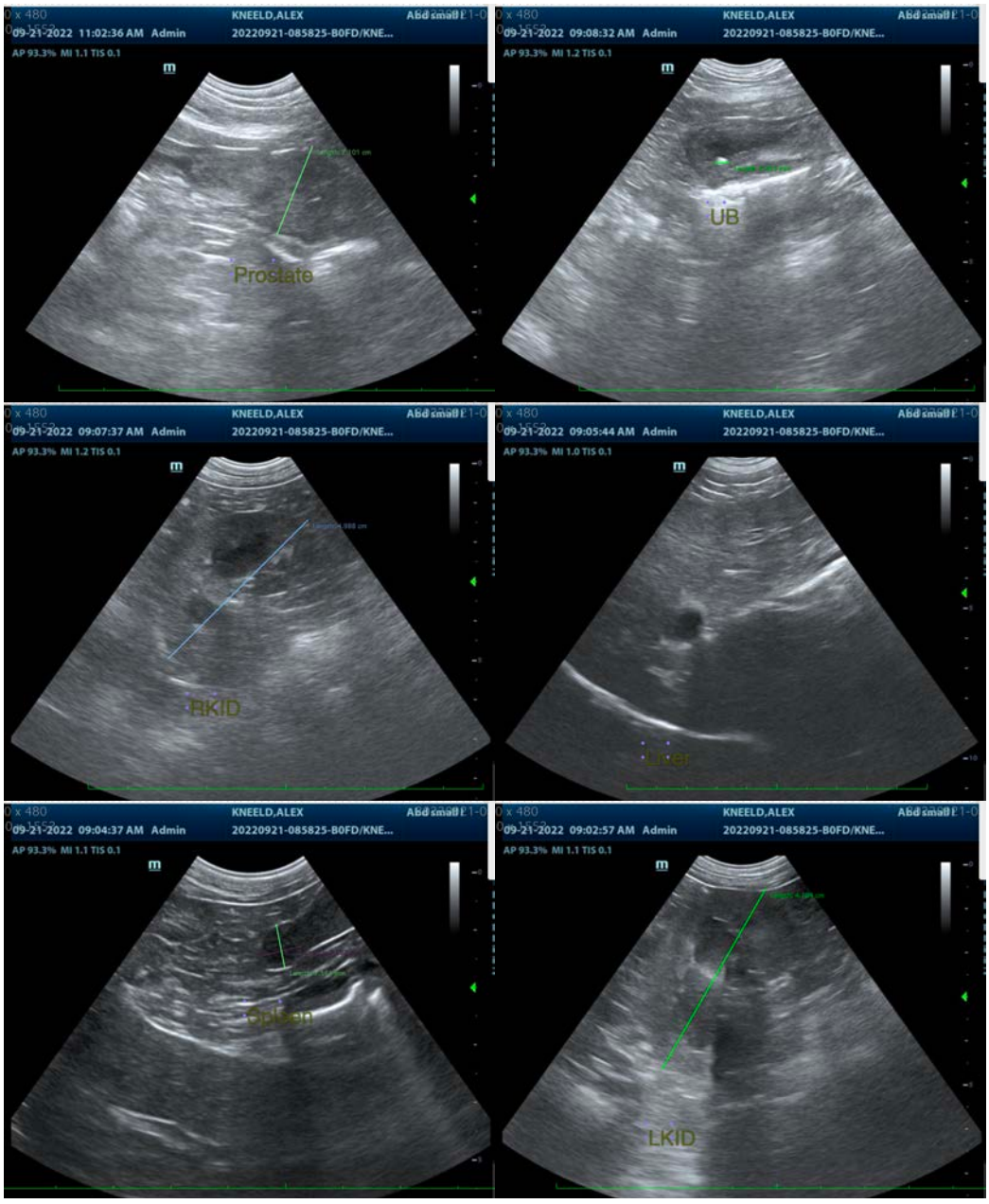
In the meantime, continuing antibiotic therapy with a broad-spectrum antibiotic that will penetrate the prostate, combined with an anti-inflammatory could be considered to help alleviate clinical signs while awaiting results.



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