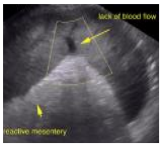
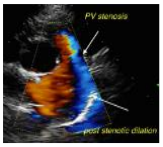
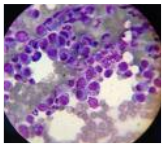
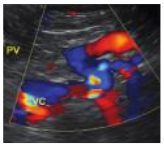
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Ghost Rotolo

SPECIES

Canine

BREED

Terrier Mix

SEX

Intact Male

AGE

1.5 years

WEIGHT

16 lbs

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional VH

REFERRING VET

Dr. Hartwick

INVOICE

10915

DATE

5/18/22

PRESENTING CLINICAL SIGNS

History: Urinating good stream but blood and straining when finished. Seen at emergency clinic - radiographs there stated bladder looked thickened. Current med: Clavamox.

Abnormal PE/Chem/CBC/UA Results: Urine culture and sens. (neg) at emergency clinic. U/A (free catch today): RBC >50, sperm, WBC 2-3/HPF, bili 1+, pH 6.5, USG: 1.050.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder minimally to mildly distended. The wall is thickened (up to 0.70 cm) and irregular. A moderate to large amount of echogenic to mineralized sand, as well as what appear to be, a few distinct cystic calculi (the largest measuring 1.26 cm in length), are observed within the lumen. The region of the trigone and the visible portion of the proximal urethra are normal.

The prostate is enlarged (1.75 cm in length x 1.92 cm in length) with a slightly irregular shape. Thickened parenchyma is hyperechoic relative to surrounding omental fat and mildly heterogenous in appearance. No distinct focal lesions are observed. The prostatic urethra is not overtly dilated.

The left kidney is normal size (4.97 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (5.03 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.44 cm at cranial pole) (0.42 cm at caudal pole) (1.44 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (1.12 cm at cranial pole) (0.49 cm at caudal pole) (1.42 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.49 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The portal vein appears slightly smaller than the caudal vena cava, in terms of diameter.

The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

Other

The testicles are subjectively normal in size and symmetrical with homogenous parenchyma. No obvious pathology is observed. (Left testicle measures 2.93 x 1.32 cm; right testicle measures 2.94 x 1.42 cm.)

ULTRASONOGRAPHIC FINDINGS

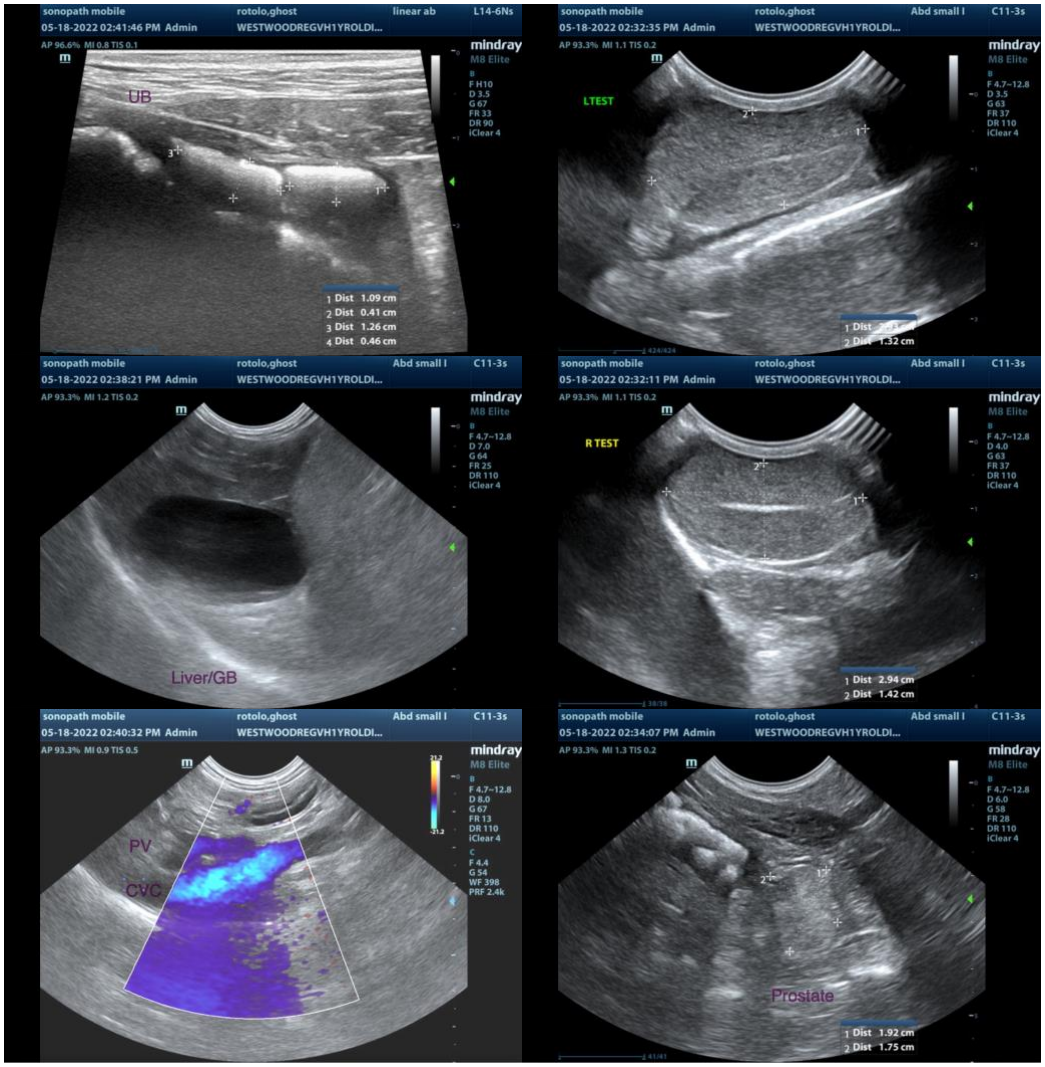
Primary Findings

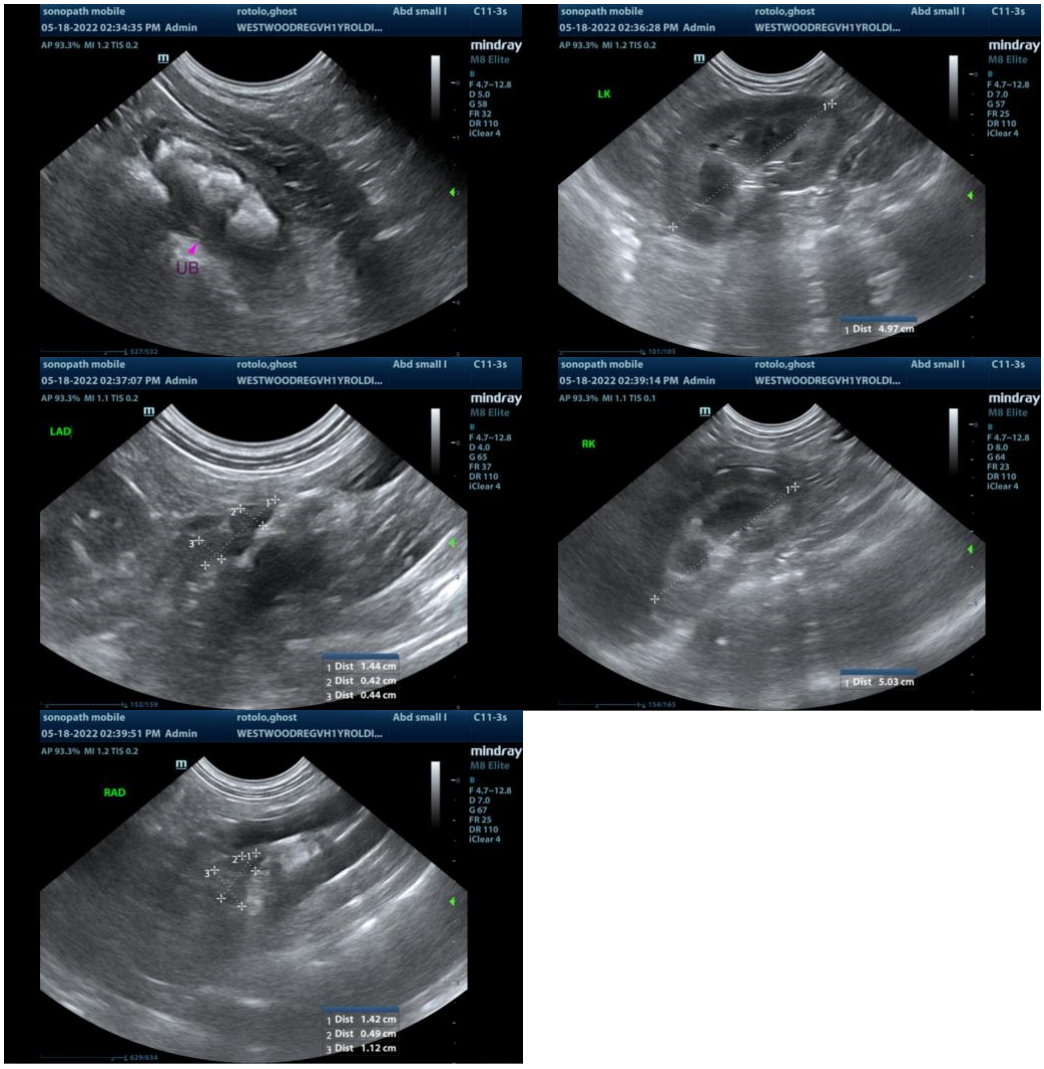
- Urinary bladder sand with suspected, distinct cystic calculi. The bladder wall changes are suggestive of cystitis. However, the thickening may be somewhat artifactual due to lack of full repletion.
- The prostate changes are most consistent with a young, intact male. Concurrent bacterial prostatitis is also possible, particularly given the patient's lower urinary tract signs.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Cystic calculi and bladder wall changes consistent with cystitis (although some of the wall thickening may be artifactual due to lack of full luminal distension). Given the presence of cystic calculi in such a young patient and a possible small portal vein, consider pre-and postprandial serum bile acids to screen for a congenital portosystemic shunt.
- With regard to the urinary bladder stones, a cystotomy with stone removal analysis and culture is recommended.

- If a more conservative approach is desired, an attempt at medical dissolution (i.e., via a prescription urinary diet and broad-spectrum antibiotics) can be considered. However, if no improvement in the stones is seen within 4 weeks of initiating therapy, a cystotomy should be reconsidered. If cystotomy is pursued, concurrent castration is also 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.

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com