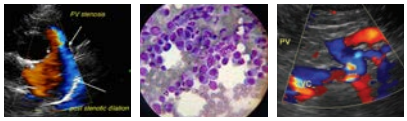
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

2/28/23

PATIENT

Huck Robison

SPECIES

Canine

BREED

Springer Spaniel

SEX

Neutered Male

AGE

1/24/17

WEIGHT

48.5 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Timonium AH

REFERRING VET

Dr. McIntyre

INVOICE

45584

PRESENTING CLINICAL SIGNS

Persistent hematuria since Jan 2023, no response to empirical abx (Cefpodoxime).

Current Medications: Carprofen 100 mg PO SID, long term
Cefpodoxime 200 mg PO SID x 14 days (completed 2-3 weeks ago).
Lab Results: Jan 20 2023: CBC WNL. Chem WNL, T4 2.2. UA (FC) 1.024, TNTC RBC, WBC 10-15/HPF.
2/24/23: UA (FC) 1.034, TNTC RBC, WBC 18/HPF.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Patient sedated with Torbugesic.
Stat Report: Not requested.
Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

The kidneys are bilaterally normal in size. The left kidney measured 6.38 cm. The right kidney measured 5.69 cm. Both kidneys are mildly/subtly irregular in shape. Normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction is maintained. However, a hyperechoic band parallel to the corticomedullary border is subtly present bilaterally. There is no evidence of pyelectasia, mineral, or distinct infarcts.

Adrenal Glands

The right adrenal gland is normal in size (2.56 cm long x 0.67 cm at the cranial pole and 0.64 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.73 cm long x 0.47 cm at the cranial pole and 0.58 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.

Gallbladder is moderately distended with anechoic bile as well as moderate suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

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

- **Subtly irregular kidneys bilaterally with subtle bilateral medullary rim sign -** This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.

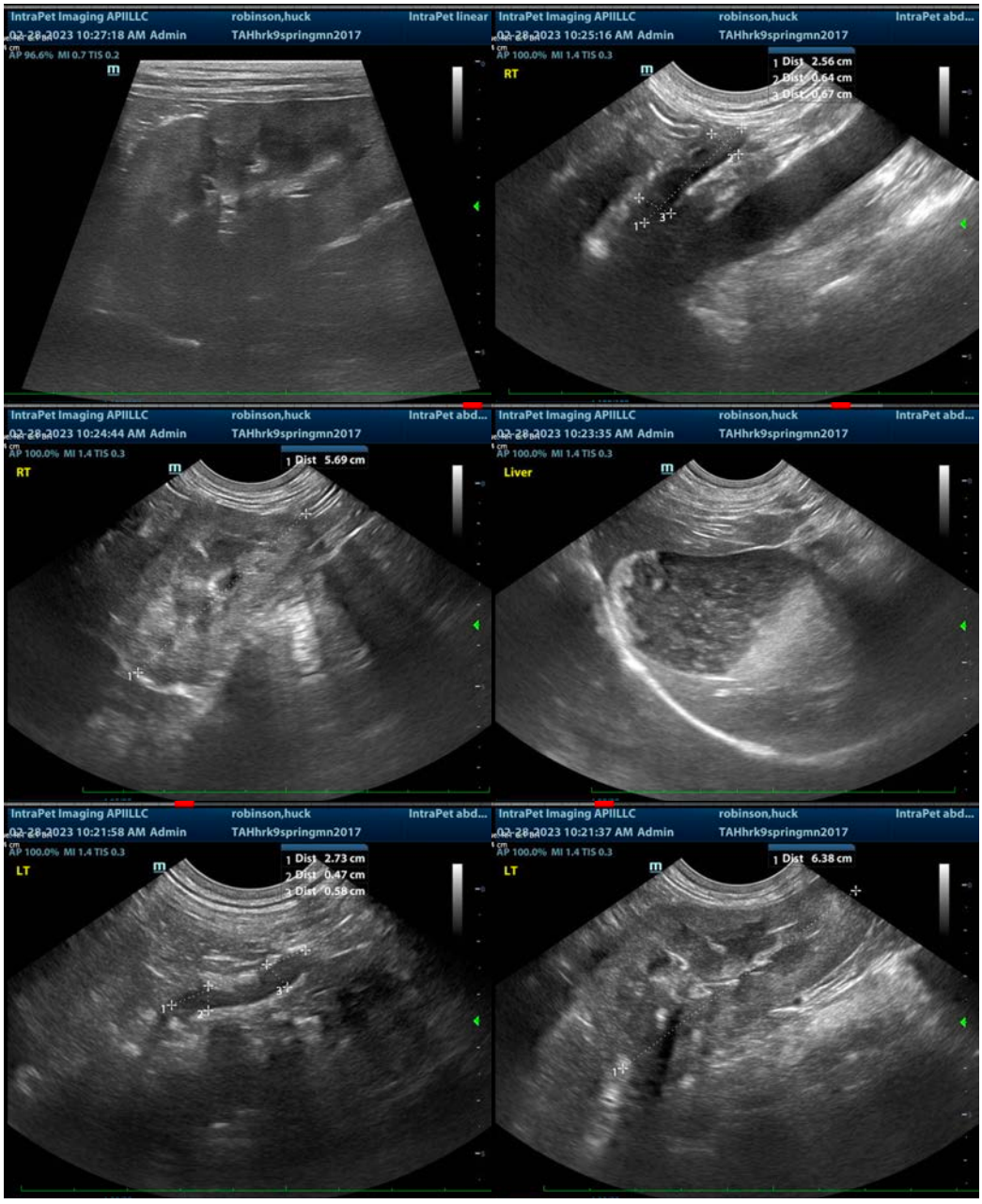
- **Moderate gallbladder debris -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is not an ultrasonographically visible definitive cause to explain this patient's hematuria. However, there are subtle kidney abnormalities that may or may not be significant. Further diagnostic recommendations include a urine culture (allowing at least a week to 10 days after previous antibiotics before culturing the urine) to rule out an occult urinary tract infection. Additionally, full assessment of coagulation status is warranted, as is a blood pressure. Testing for Leptospirosis could be considered.

In the meantime, empirical deworming with a 5-day course of Panacur is recommended, as parasitic disease can result in urinary signs if affecting the urinary system.

Finally, renal hematuria is considered a differential if another underlying cause can't be found, and ultimately cystoscopy for further evaluation may be necessary.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robinson,huck
IntraPet linear
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2 Dist 0.64 cm
3 Dist 0.67 cm
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Liver
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2 Dist 0.47 cm
3 Dist 0.58 cm
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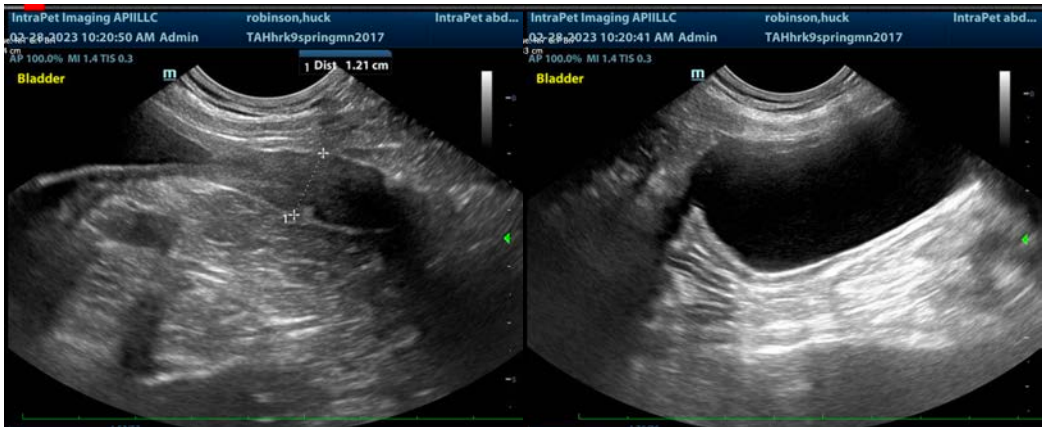

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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