

**DATE PRESENTING CLINICAL SIGNS**

10/20/22

Pet presented on 10/14 for annual exam and vaccination. Exam finding unremarkable but pet tested positive for Ehrlichia on snap 4DX. Bloodwork was taken to check blood counts due to Ehrlichia and pet was found to be Azotemic. Had normal renal values in Jan 2022 when pet presented for FUO and possible prostatitis/pyelonephritis. Culture not run at that time as O had already started antibiotics he had laying around the house from a previous issue.

PATIENT

Thor Stevanus

SPECIES

Canine

Current Medications: Gabapentin 300mg BID for exam, Trazodone 200mg BID for exam
 Lab Results: Ehrlichia positive on snap 4 DX, BUN- 32 (6-31) prev 22 in Jan, Creat- 2.5 (0.5-1.6) prev 1.4 in Jan. UA shows bacteria with urine S.G of 1.058.
 Date of Previous IntraPet Ultrasound: No previous.

BREED

German Shepherd

Sedation: Oral Gabapentin and Trazodone. Butorphanol 10 mg (1 cc) IV and Midazolam 5 mg (1 ml) IV.

SEX

Intact Male

Stat Report: Not requested.

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.

AGE

4/23/18

WEIGHT

111 Pounds

Prostate is symmetrically enlarged with smooth margins that are well differentiated from surrounding tissue. Normal bilobed shape is maintained. Parenchyma is diffusely hyperechoic. Several small anechoic cysts are noted. No mineral is noted.

INTERPRETED BYBeth Johnson, DVM
DACVIM

The right kidney is normal in size (8.12 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. A hyperechoic band parallel to the corticomedullary border is present.

IMAGING PERFORMED BY

Rachel Brillhart RDMS

The left kidney is normal in size (7.6 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. A hyperechoic band parallel to the corticomedullary border is present.

HOSPITAL NAME

Fullerton AH

Adrenal Glands

The right adrenal gland is normal in size (2.57 cm long x 0.97 cm at the cranial pole and 1.1 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Unger

The left adrenal gland is normal in size (2.9 cm long x 1.0 cm at the cranial pole and 1.1 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INVOICE

42247

Spleen

Spleen is subjectively large in size with a mildly swollen but smooth capsule. Parenchyma is normal and homogenous in echogenicity and echotexture. 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 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.

Both testicles are visualized without evident pathology.

PRIMARY FINDINGS

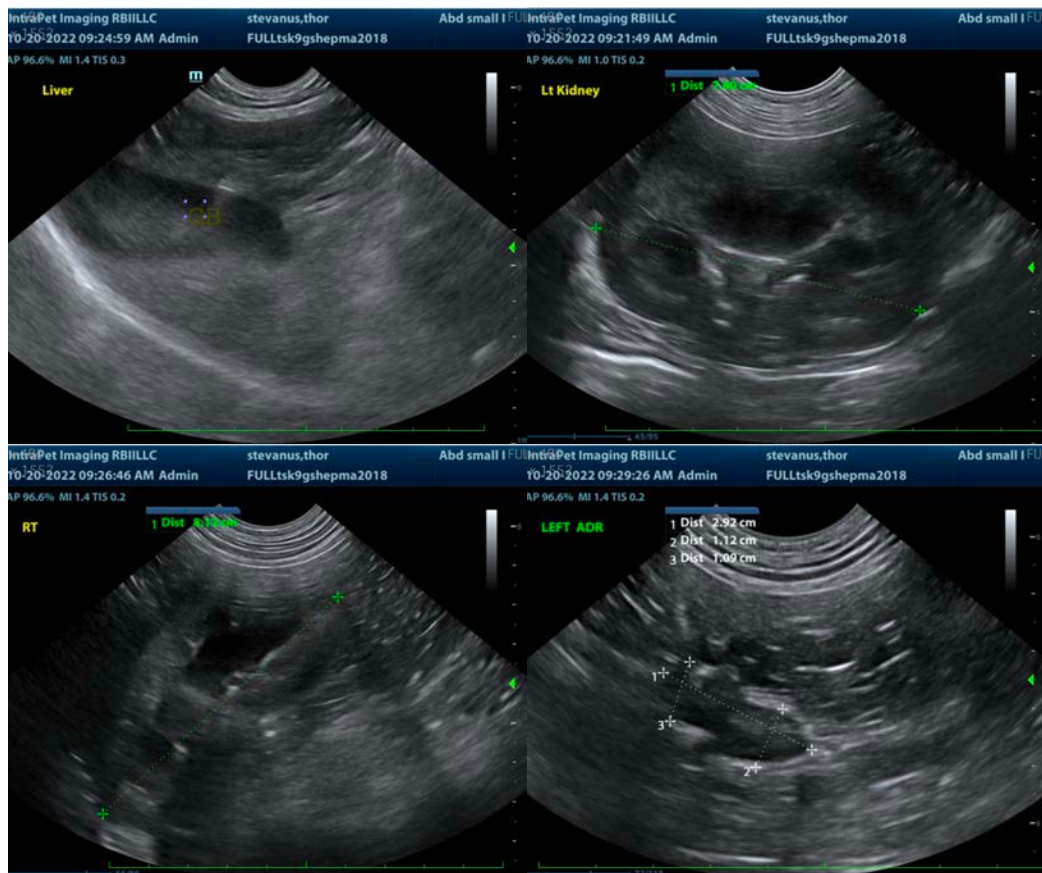
- **Benign Prostatic Hyperplasia with cysts** – Prostatic findings are most consistent with Benign Prostatic Hyperplasia (BPH) and concurrent benign prostatic cysts. Active prostatitis cannot be ruled out. Infiltrative neoplasia cannot be ruled out but is considered less likely.
- **Bilateral medullary 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 FIP, 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.
- **Hypersplenism** – can be associated with congestion caused by sedation (if sedated) but can also be associated with diffuse infiltrative disease. Both benign conditions such as extramedullary hematopoiesis, lymphoid hyperplasia, as well as infiltrative neoplastic diseases such as round cell neoplasia should be considered.

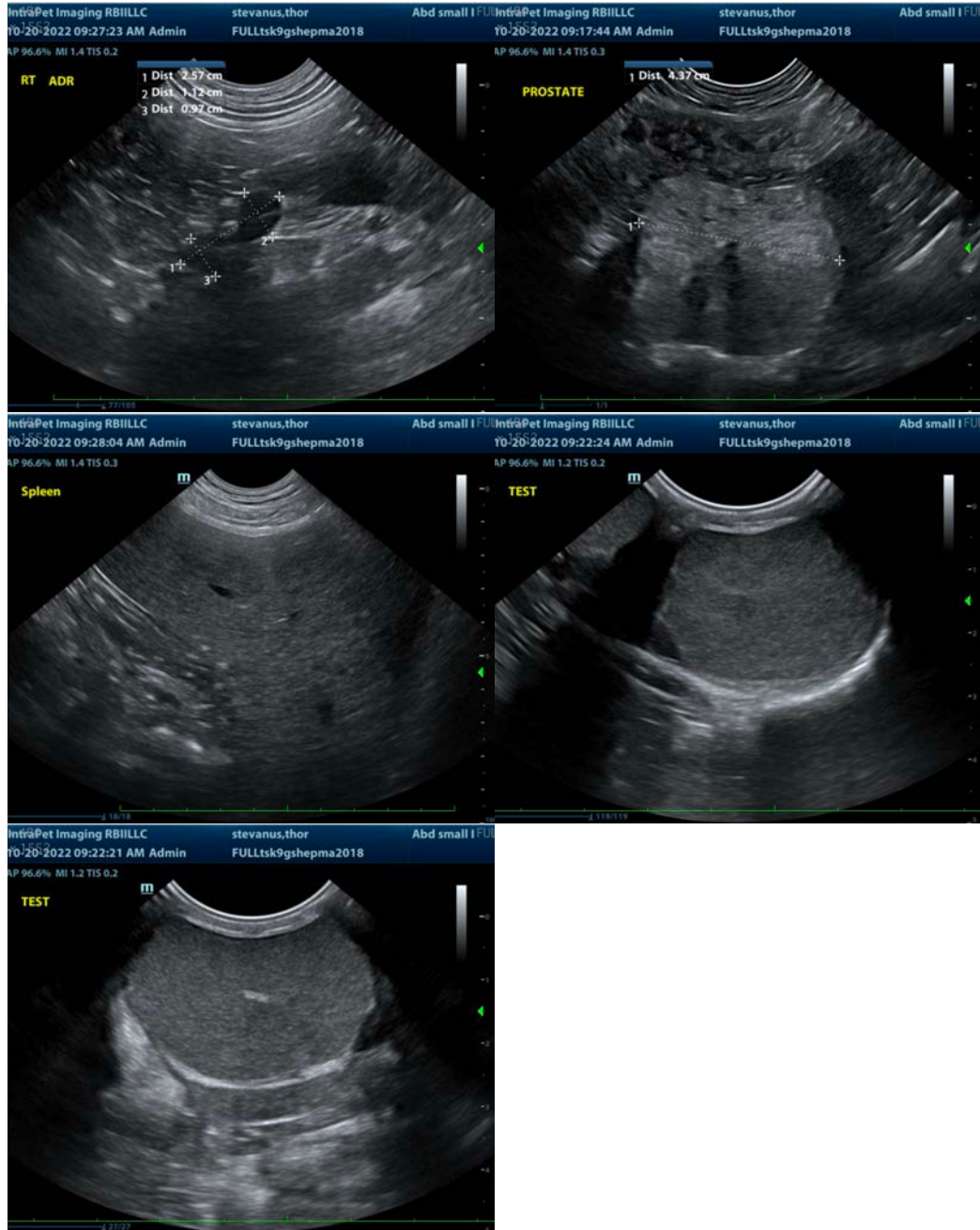
SECONDARY FINDINGS

- **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

Given this patient's highly concentrated urine, true renal azotemia/decreased kidney function is less likely. Therefore, recommendations are to obtain a sterile urine sample for culture, and then treat the suspected urinary tract infection/possible prostatitis with monitoring of the azotemia for improvement. Given that this is reportedly the second episode of possible prostatitis, neutering is recommended to prevent future problems.





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.

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