

**DATE PRESENTING CLINICAL SIGNS**

3/20/23

PATIENT

Gigi Ratnow

SPECIES

Canine

BREED

Pitbull Mix

SEX

Spayed Female

AGE

3/18/12

WEIGHT

54 Pounds

INTERPRETED BYBeth Johnson, DVM
DACVIM**HOSPITAL NAME**

Everhart VH

REFERRING VET

Dr. Rubinstein

INVOICE

21733

Pt presents for lethargy, weight loss, inappetence, and not improving with antibiotics/supportive care done last week. Pt has history of UTIs in the past but was recently cultured negative. Pt is incontinent and does leak urine. Pt still has significant diarrhea as well. Went to ER which did bloodwork/radiographs - did not find anything significant and sent home with entyce and probiotics and amoxicillin - no improvement. Pt has fever 103.3, lethargic, vulva slightly enlarged but no significant discharge, diarrhea on rectal, normal LN, sinus tachycardia, slightly dehydrated

Current Medications: Amoxicillin for 10 days - Completed 3/19
 entyce – prn, cerenia - started 3/19, metronidazole - started 3/19

Lab Results: Chem from ER 3/11 – wnl. CBC - neutrophils 12.3. Urinary culture - no growth
 Radiographs: 3/11- NSF. Ultrasound- right kidney irregular in architecture.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

Urinary bladder is diffusely mildly thick, measuring 0.74 cm thick, with a hyperechoic irregular mucosa. However, the urinary bladder is only mildly distended/empty. Visible contents are anechoic. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface. This appearance of the bladder wall cannot be fully assessed/interpreted as pathologic, given the nondistended state of the bladder. Having said that, chronic cystitis, polypoid cystitis, etc., cannot be definitively ruled out.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia (in the right kidney), mineral or infarcts observed. The left kidney measured 6.49 cm. The right kidney measured 6.23 cm. Moderate pyelectasia is present, measuring 0.64 cm in the transverse view.

Adrenal Glands

Left adrenal gland is normal in size (2.9 cm long x 0.67 cm at cranial pole and 0.7 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (2.54 cm long x 0.58 cm at cranial pole and 0.62 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

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

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 mild 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 visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with fluid, as well as 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. 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 and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. Caudal abdominal/medial iliac/sublumbar lymphadenopathy is noted. **See measurements provided with images.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Age-related kidney changes with moderate left kidney pyelectasia- Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.
- The bladder is empty, making assessment of the urinary bladder wall challenging. Having said that, there is some concern for polypoid cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely.
- Moderate left kidney pyelectasia- Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.
- Caudal abdominal lymphadenopathy is noted, and both reactive lymphadenopathy, as well as infiltrative neoplasia are differentials and cannot be differentiated without tissue sampling.

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 patients reported history of chronic urinary tract infections, combined with the reported fever and the current pyelectasia, etc., there is some concern for pyelonephritis, which can be present despite a negative culture on urinary bladder obtained urine.

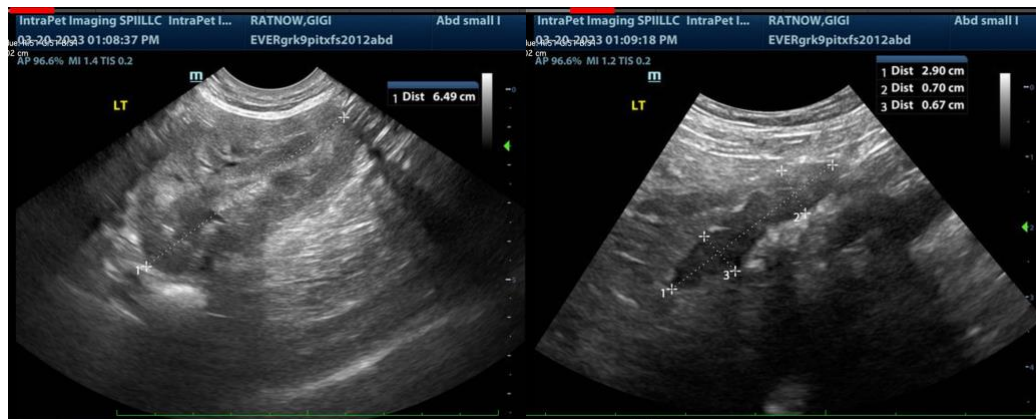
Given the reported gastrointestinal signs, especially diarrhea, concurrent GI disease may also be present.

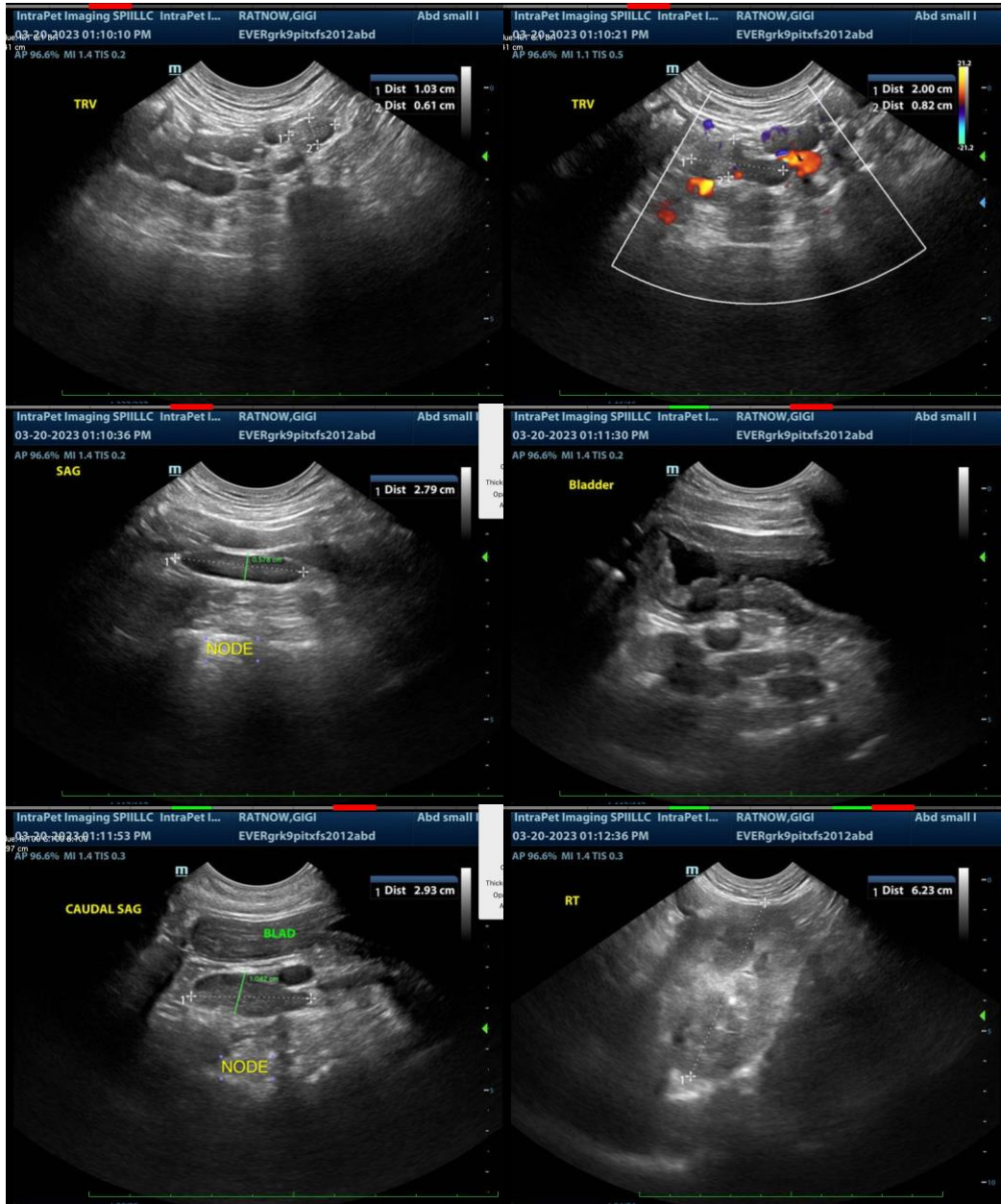
Further diagnostic recommendations include a fecal exam, if not recently evaluated, as well as a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory, for further evaluation of GI and pancreatic function. A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

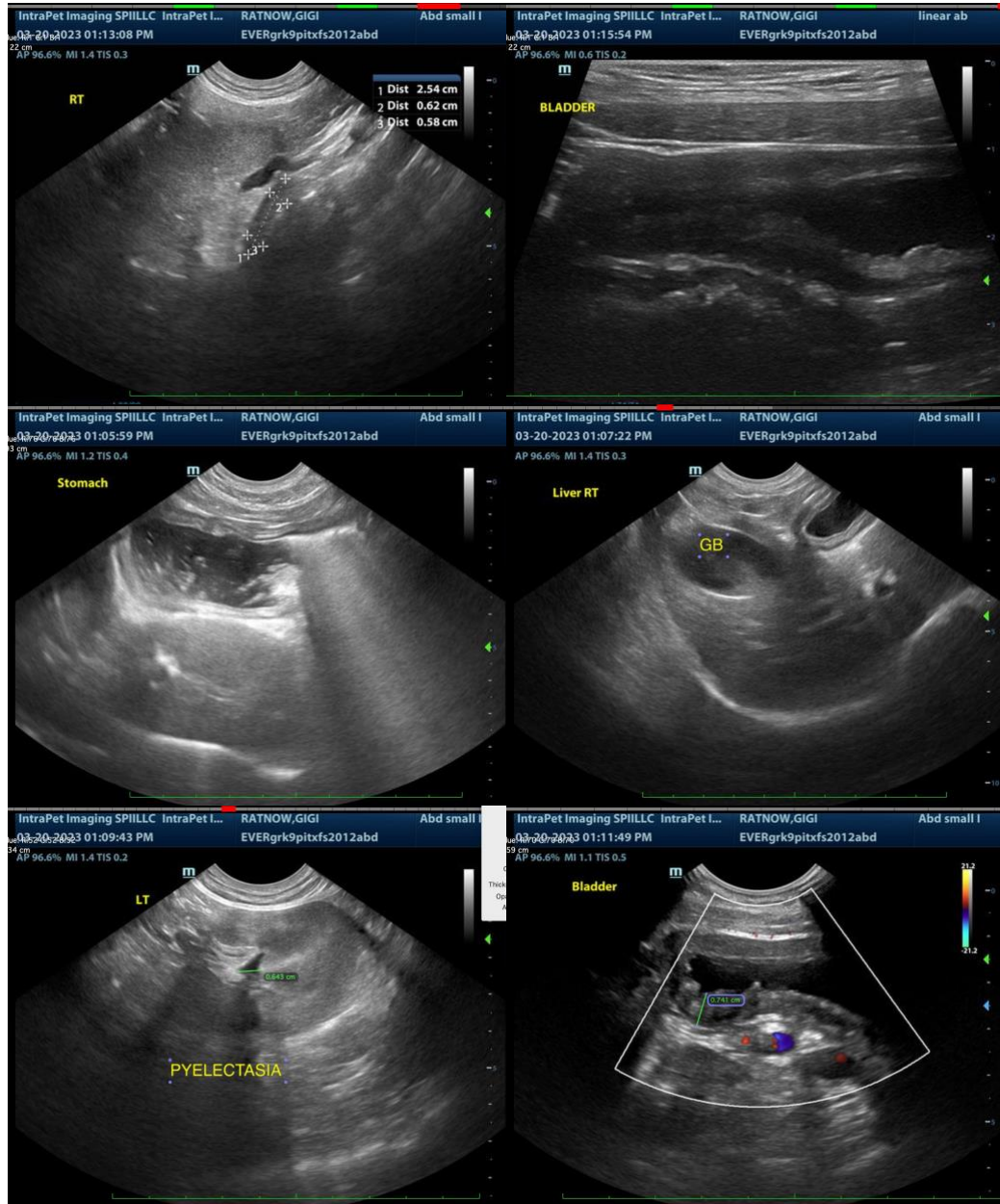
In the meantime, empirical deworming with a 5-day course of Panacur is recommended, in addition to symptomatic support of the clinical signs, and if tolerated, a transition in diet could be considered based on trial-and-error response, beginning, possibly, with a hydrolyzed protein diet or a fiber response colitis diet, etc.

If the caudal abdominal lymph nodes can safely be reached and patients coagulations status is appropriate, fine needle aspirate of the enlarged lymph nodes is also recommended.

Regarding the urinary tract disease, fever, etc., a different empirical antibiotic could be considered, or alternatively, a urine sample directly from the left renal pelvis, with ultrasound guidance for help, could be considered for both cytology and culture. If elected, that test should not be performed within 7-10 days of receiving antibiotics at the risk for false negatives.







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.

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