

**DATE PRESENTING CLINICAL SIGNS**

1/18/23 3 day history of PU/PD and decreased appetite. Mucous membranes pink; slightly tacky. Physical exam otherwise unremarkable.

PATIENT

Penny Wojciechowski

Current Medications: LRS 75mL/hr, Pantoprazole 1mg/kg IV BID, Cerenia 1mg/kg IV SID, Unasyn 30mg/kg IV TID, Ondansetron 0.5mg/kg IV BID. All treatments started 24 hours prior to ultrasound. Bloodwork results obtained prior to fluid therapy.

SPECIES

Canine

Lab Results: Creat 2.0, BUN 32, Hypokalemia 3.5, Lymphocytes 5307, Resting cortisol WNL 2.5. USG 1.004 1/17, 1.008 on presentation 1/16, 30mg/dL protein. Blood pressure 190. Urine culture low colony count pending. Urinalysis with reflex urine protein:creatinine ratio pending.

BREED

Hound X

Radiographs:
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Torbugesic IV.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

SEX

Spayed Female

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System****AGE**

12/2/14

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.

WEIGHT

40.1 Pounds

The right kidney is normal in size (6.4 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.

INTERPRETED BYBeth Johnson, DVM
DACVIM

The left kidney is normal in size (6.13 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.

HOSPITAL NAME

Paradise AH

Adrenal Glands

The right adrenal gland is normal in size (2.09 cm long x 0.67 cm at the cranial pole and 0.53 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Pound

The left adrenal gland is normal in size (2.59 cm long x 0.58 cm at the cranial pole and 0.57 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INVOICE

44340

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 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. There is a bright echogenic curvilinear structure that may represent a non-shadowing cholecystolith, measuring 1.4 cm.

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. 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.

Sublumbar lymph nodes are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail. The enlarged lymph nodes are surrounded by enhanced hyperechoic fat.

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

PRIMARY FINDINGS

- **Aggressive sublumbar lymph nodes** – most consistent with infiltrative round cell or metastatic neoplasia. A benign aggressive inflammatory response cannot be ruled out without tissue sampling +/- culture.
- **Reactive mesenteric lymph nodes** – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

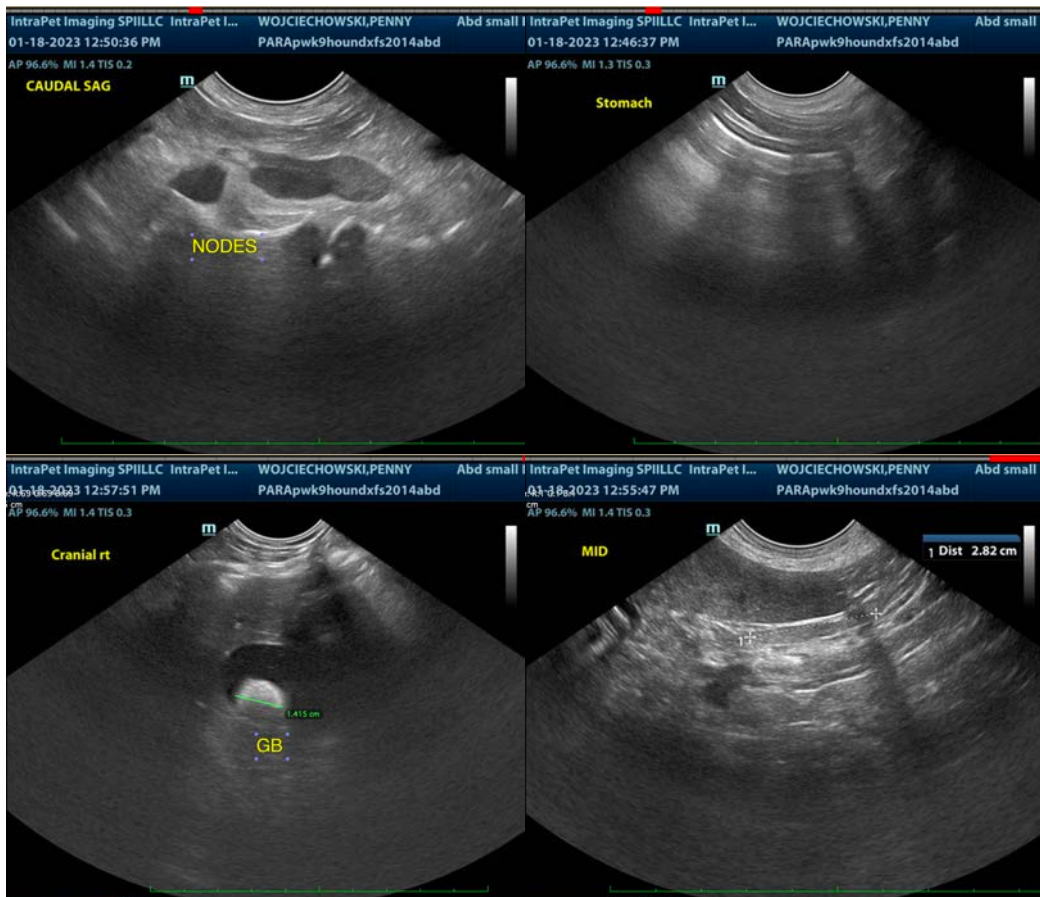
SECONDARY FINDINGS

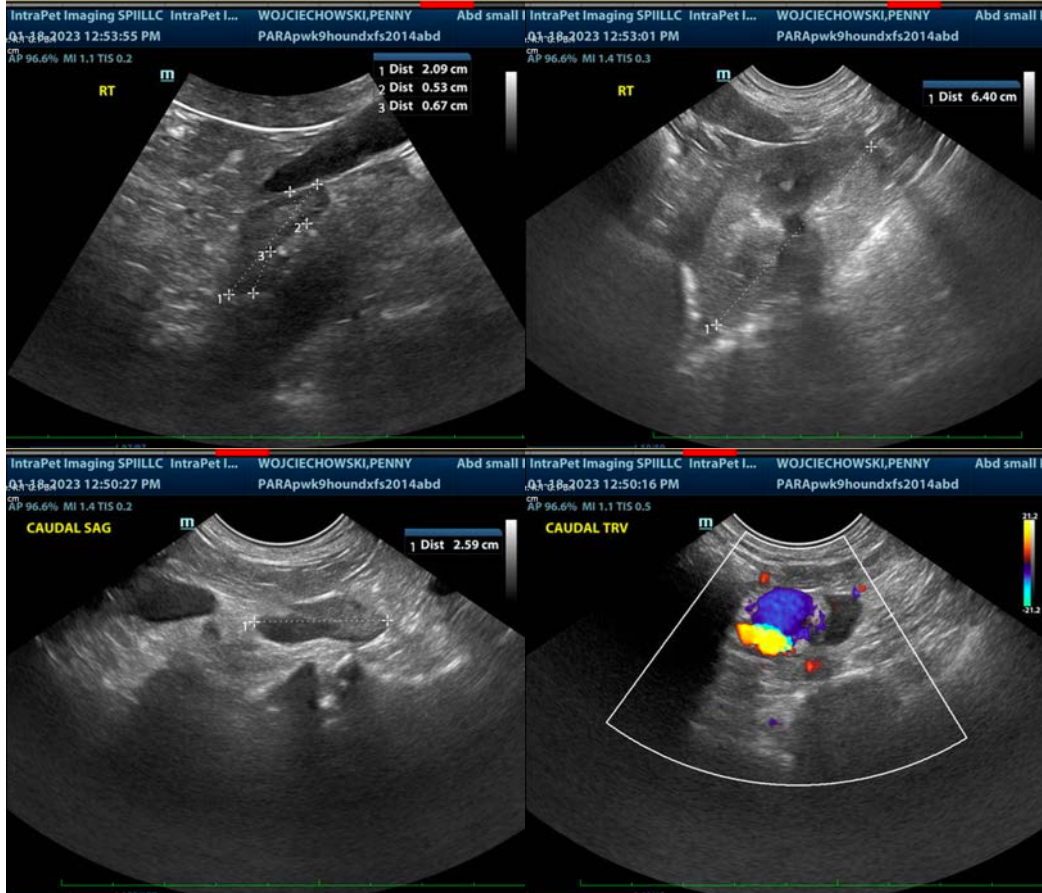
- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted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

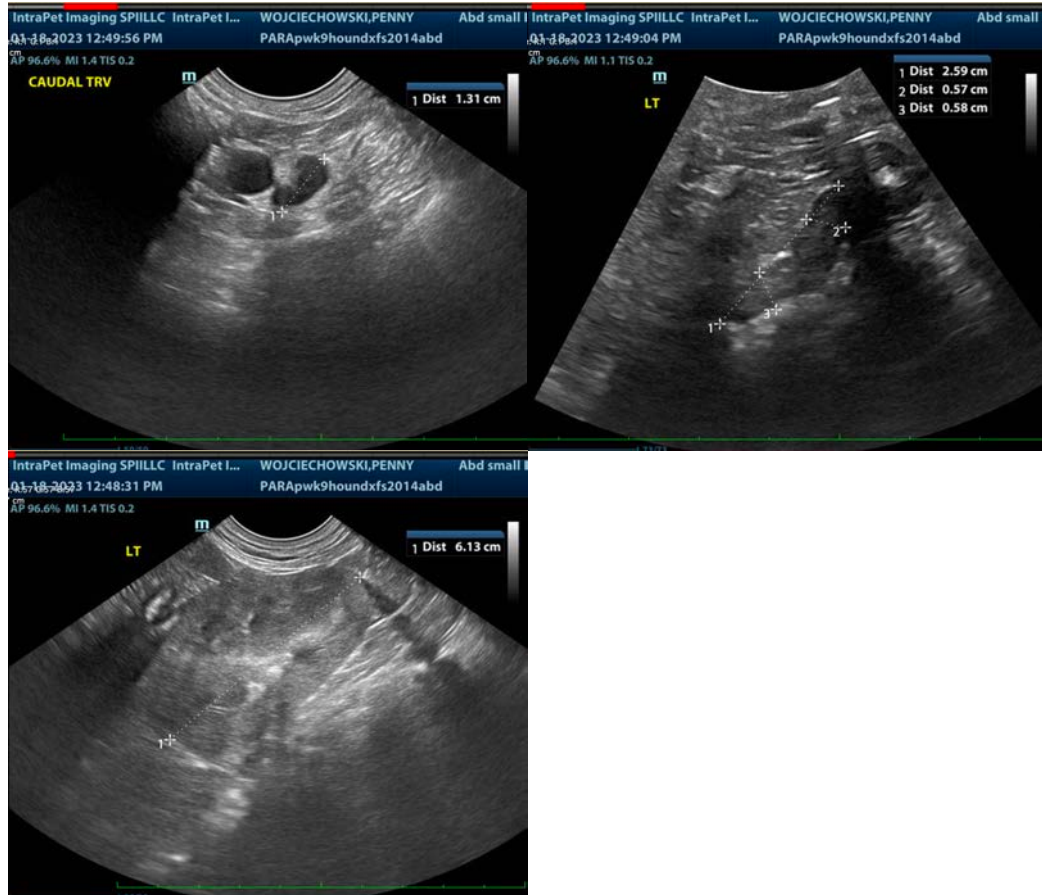
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient's presenting signs and laboratory changes are consistent with a mild acute kidney insult, which is not ruled out by the lack of kidney pathology on ultrasound. Therefore, as is reportedly already pending, a urine culture, and if indicated following that, a urine protein to creatinine ratio, are recommended. Additionally, testing for Leptospirosis is recommended.

The sublumbar lymphadenopathy may or may not be related to the urinary tract disease. Recommendations include a thorough perianal and rectal exam if not already evaluated to look for primary pathology such as an anal gland tumor versus other, followed by a fine needle aspirate of the sublumbar lymph nodes if patient's coagulation status is appropriate.







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