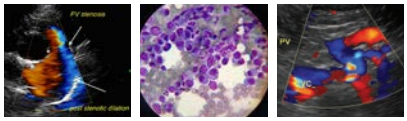
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

12/22/22

PATIENT

Gee Ray

SPECIES

Canine

BREED

Spaniel X

SEX

Neutered Male

AGE

8/30/08

WEIGHT

16.8 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Paradise AH

REFERRING VET

Dr. Pound

INVOICE

43688

PRESENTING CLINICAL SIGNS

Lethargy, Anorexia, Weakness. Acute on chronic renal injury. Mild dehydration, no obvious peripheral LN enlargement or LN enlargement noted on rectal exam. Diffuse cachexia. Gr IV/VI cardiac murmur (under management with cardiologist - mild mitral valve dysplasia). History of chronic kidney disease. Bilateral anal sacculectomy for anal gland anal sac adenocarcinoma removed June 20, 2022.

Current Medications: Gabapentin (50 mg) BID (chronic), Galliprant (20 mg) SID (chronic), Hycodan 5 mg (1/4 - 1/2 PRN for cough) (chronic), Unasyn 230 mg IV Q8h, Baytril 34 mg IV, Cerenia 8 mg IV Q24h, Ondansetron 4 mg IV Q8h
Lab Results: Creat 5.9, Bun 141, Phosphorous 10.4, Calcium 13.2, Potassium 6, Previous resting cortisol elevated, Quiet urine Sediment, Mild anemia, Mild thrombocytopathia.
Radiographs: No previous.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
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.

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

Kidneys are bilaterally small, irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no mineral observed. Pyelectasia noted at 0.44 cm in the transverse view. The left kidney measured 3.27 cm. Multiple small cortical cysts and mild pyelectasia are noted in the right kidney. The right kidney measured 3.32 cm.

Adrenal Glands

The right adrenal gland is normal in size (1.58 cm long x 0.63 cm at the cranial pole and 0.46 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 2.16 cm long x 0.47 cm at the cranial pole and 0.92 cm at the caudal pole.

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

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Additionally, there is a 1.5 cm in diameter cystic nodule in the deep liver, adjacent to the gallbladder. 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. Some mineral/sand debris is suspected. 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

Pancreas is prominent (enlarged) in size and mildly irregular in shape with a slightly undulating contour. Parenchyma is coarse in echotexture and heterogenous to hypoechoic in echogenicity.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

PRIMARY FINDINGS

- **Left adrenomegaly –** consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs potentially an adrenal adenoma vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.

- **Heterogenous Liver –** These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia. A different appearing cystic nodule is present, also trending in appearance towards benign. However, infiltrative neoplasia also cannot be definitively ruled out.

- Chronic active pancreatitis

- **Chronic Kidney Disease –** This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.

SECONDARY FINDINGS

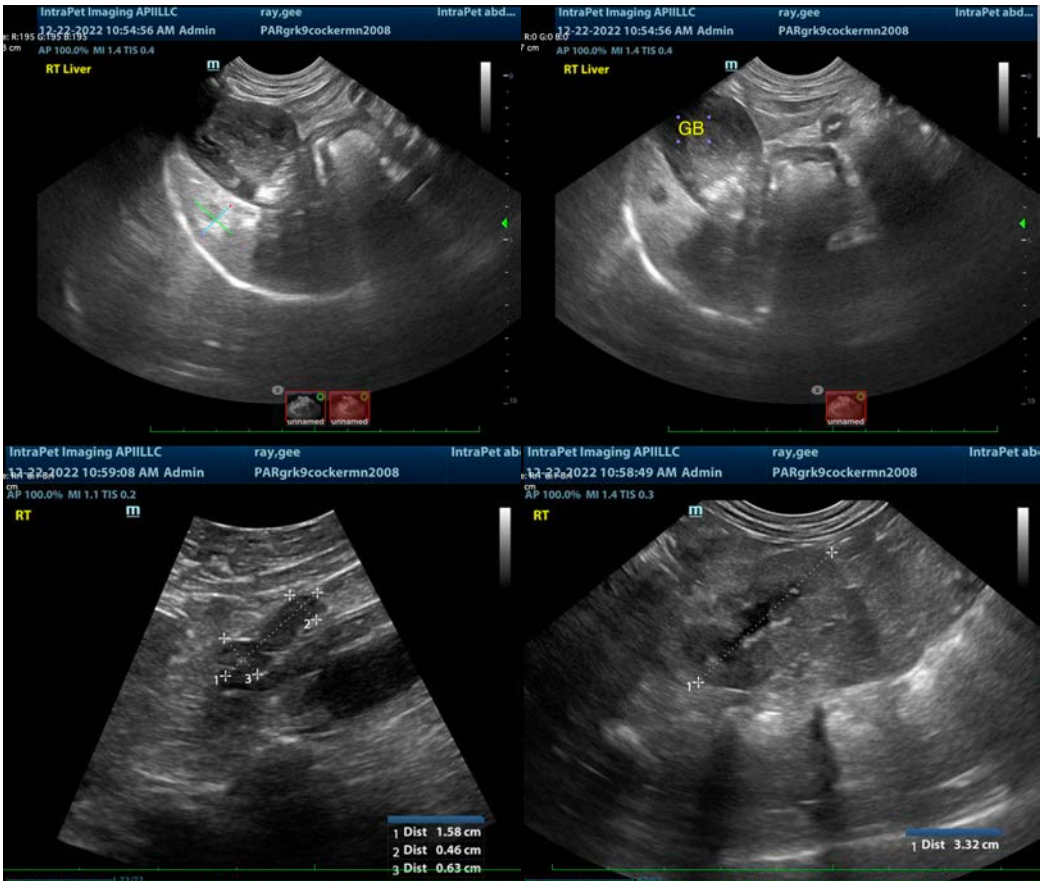
- **Moderate gallbladder debris with some mineral/sand -** Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding 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.

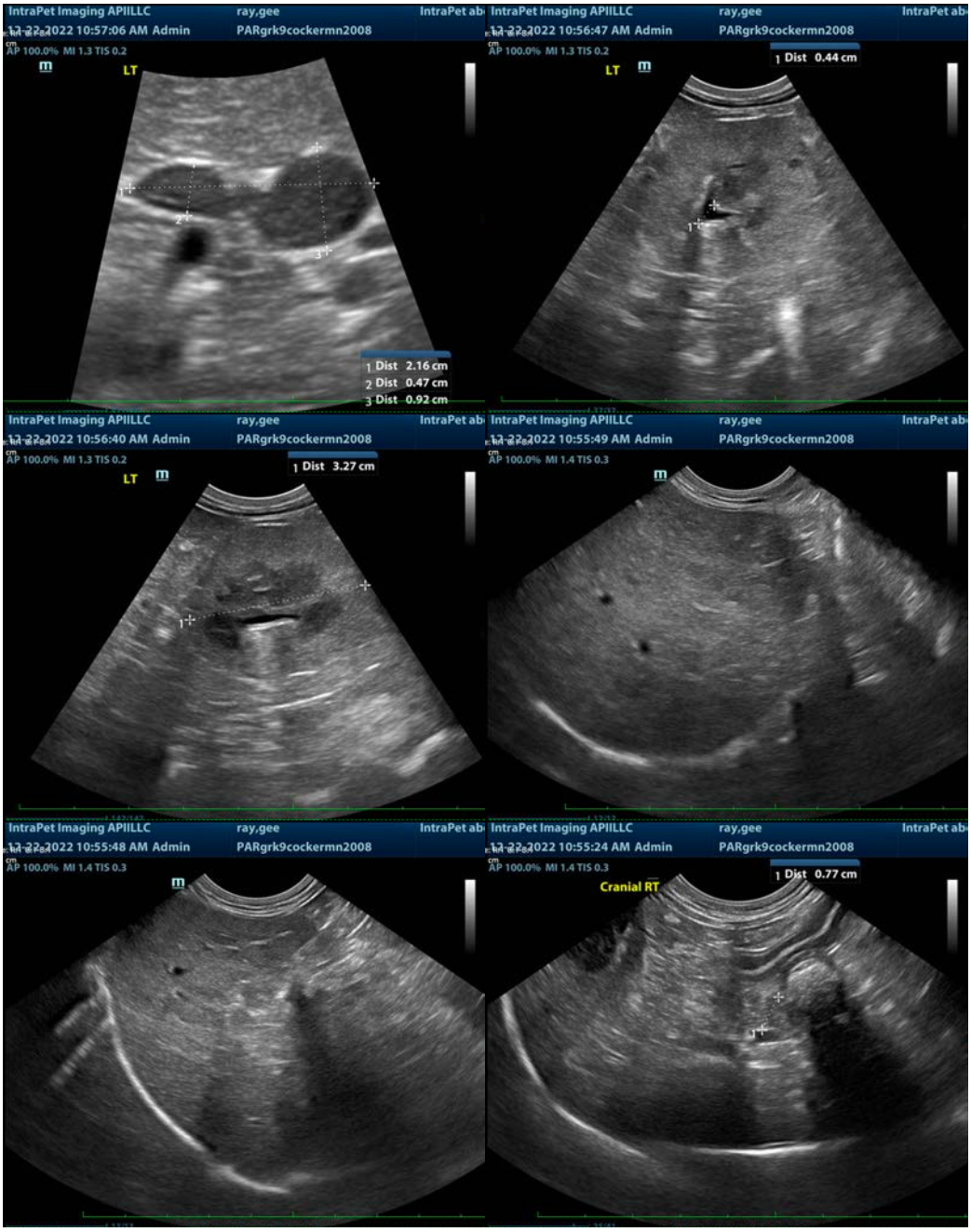
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

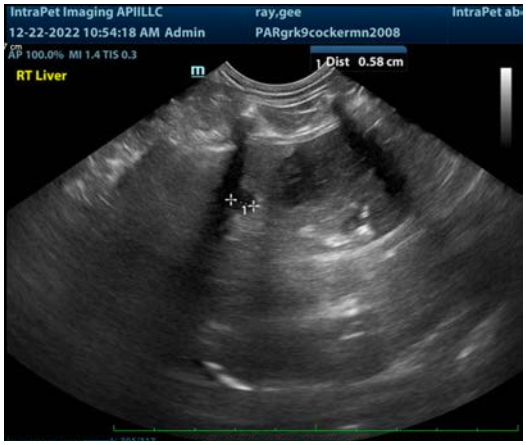
Given this patient's reported acute on chronic kidney disease combined with the mild pyelectasia, etc., if not already evaluated, a urine culture is recommended.

Additionally, testing for Leptospirosis could be considered.

The ultrasound pathology described above could represent concurrent hyperadrenocorticism. However, further testing and/or treatment of hyperadrenocorticism is not recommended in the face of an acute illness. Recommendations include supportive/symptomatic medical management of the kidney disease, including diuresis, as needed antiemetics, gastroprotectants, appetite stimulants if necessary, electrolyte management, proteinuria and/or hypertension management if necessary, etc. prior to pursuing any additional workup.




IntraPet Imaging APIILLC
ray,gee
PARgrk9cockermn2008
AP 100.0% MI 1.3 TIS 0.2
LT
1 Dist 2.16 cm
2 Dist 0.47 cm
3 Dist 0.92 cm
1 Dist 0.44 cm
1 Dist 3.27 cm
AP 100.0% MI 1.4 TIS 0.3
Cranial RT
1 Dist 0.77 cm



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
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