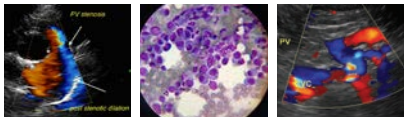
IMAGING PERFORMED BY

IntraPet.com



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

DATE

8/12/22

PATIENT

Fletcher Cherry

SPECIES

Canine

BREED

Weimaraner

SEX

Neutered Male

AGE

8/1/07

WEIGHT

83 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Chadwell AH

REFERRING VET

Dr. Jones

INVOICE

40412

PRESENTING CLINICAL SIGNS

PC: 8/8 for ADR = weak/painful, struggling to get up, panting uncomfortably, urinary accidents. Hx heart murmur 3/6 (no signs of CHF). Hx pancreatitis hospitalized Dec 2021

Current Medications: Orbax 132mg SID started 8/9. Chronic thyroid medication, Denamarin, glucosamine supp, Diet: k/d
Lab Results: BUN 56, creat 2.8, phos 6.5, SDMA 18, Ca 12.3
ALT 309, ALP 357, amy 1530. USG 1.013, pH 5.5, 2+ protein, 30-50 WBC 30-50/hpf, marked rods + cocci.
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.

The area of the prostate is examined without evident pathology.

Kidneys are bilaterally small, irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed. The left kidney measured 6.73 cm. The right kidney measured 4.75 cm. Non-obstructive areas of mineralization/nephroliths are noted in both kidneys. Several anechoic cortical cysts noted in the right kidney.

Adrenal Glands

Adrenal glands are largely normal in size, shape and contour. Some parenchymal heterogenicity is present without concerning capsular distortion. These changes are likely normal for this age but should be monitored if there is any suspicion of adrenal disease. The left adrenal gland measures 3.54 cm long x 0.91 cm at the cranial pole and 0.96 cm at the caudal pole. The right adrenal gland measures 3.97 cm long x 1.1 cm at the cranial pole and 1.02 cm at the caudal pole.

Spleen

The spleen is normal in size. A 4.6 cm mixed heterogeneous, partially cavitated, capsule disrupting mass is noted in the mid body of the spleen, as well as a second smaller, approximately 2.0 cm diameter, similar appearing nodule is noted near the tail of the spleen. 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. 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.

No evidence of pericardial effusion or heart base tumor in these images.

PRIMARY FINDINGS

- **Large, mixed heterogeneous splenic mass** – Top differential is infiltrative neoplasia such as sarcoma versus round cell neoplasia versus other. Benign lesions can mimic malignant lesions, but can't be ruled out without tissue sampling.

- **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.

- **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.

- Chronic kidney disease with bilateral non-obstructive nephrolithiasis noted.

SECONDARY FINDINGS

- Age related adrenal gland changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

A fine needle aspirate of the spleen could be considered if the patient's coagulation status is appropriate. However, given the risk of hemorrhage, etc., an alternative approach may be more aggressive intervention in the form of a splenectomy.

This patient's presenting complaint, however, of urinary accidents, etc. is likely less related to the splenic mass and more related to the reported bacteriuria, suspect kidney disease, and hypercalcemia.

Given the increased liver enzymes as well as the azotemia, recommendations include testing for Leptospirosis if not recently evaluated.

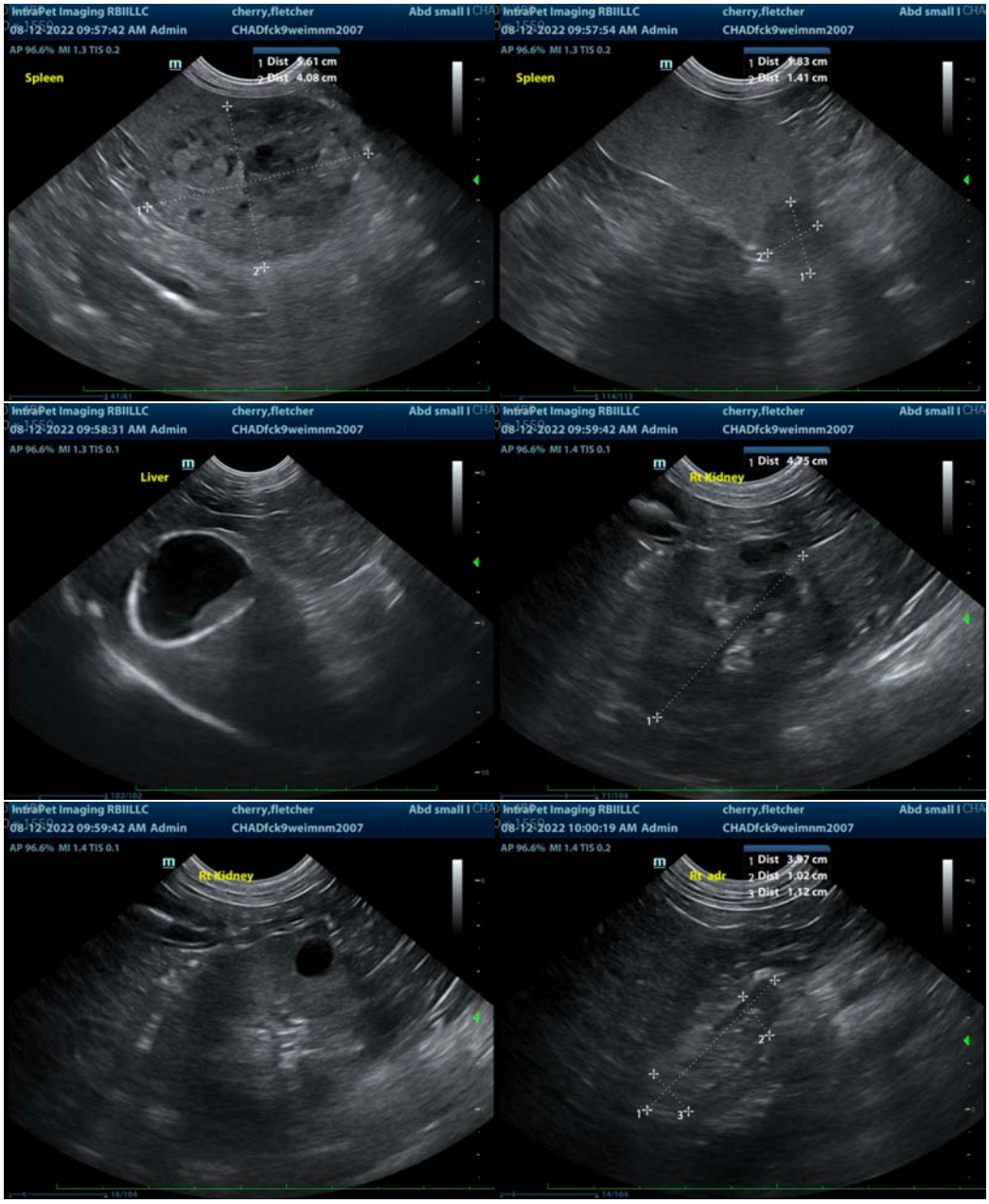
Given the bacteriuria and reported accidents, a urine culture is recommended with treatment directed at culture and sensitivity results. Following resolution of the urinary tract infection, once the urinary sediment is clear, if protein is still present, a urine protein to creatinine ratio to quantify proteinuria and direct treatment of the kidney disease is recommended.

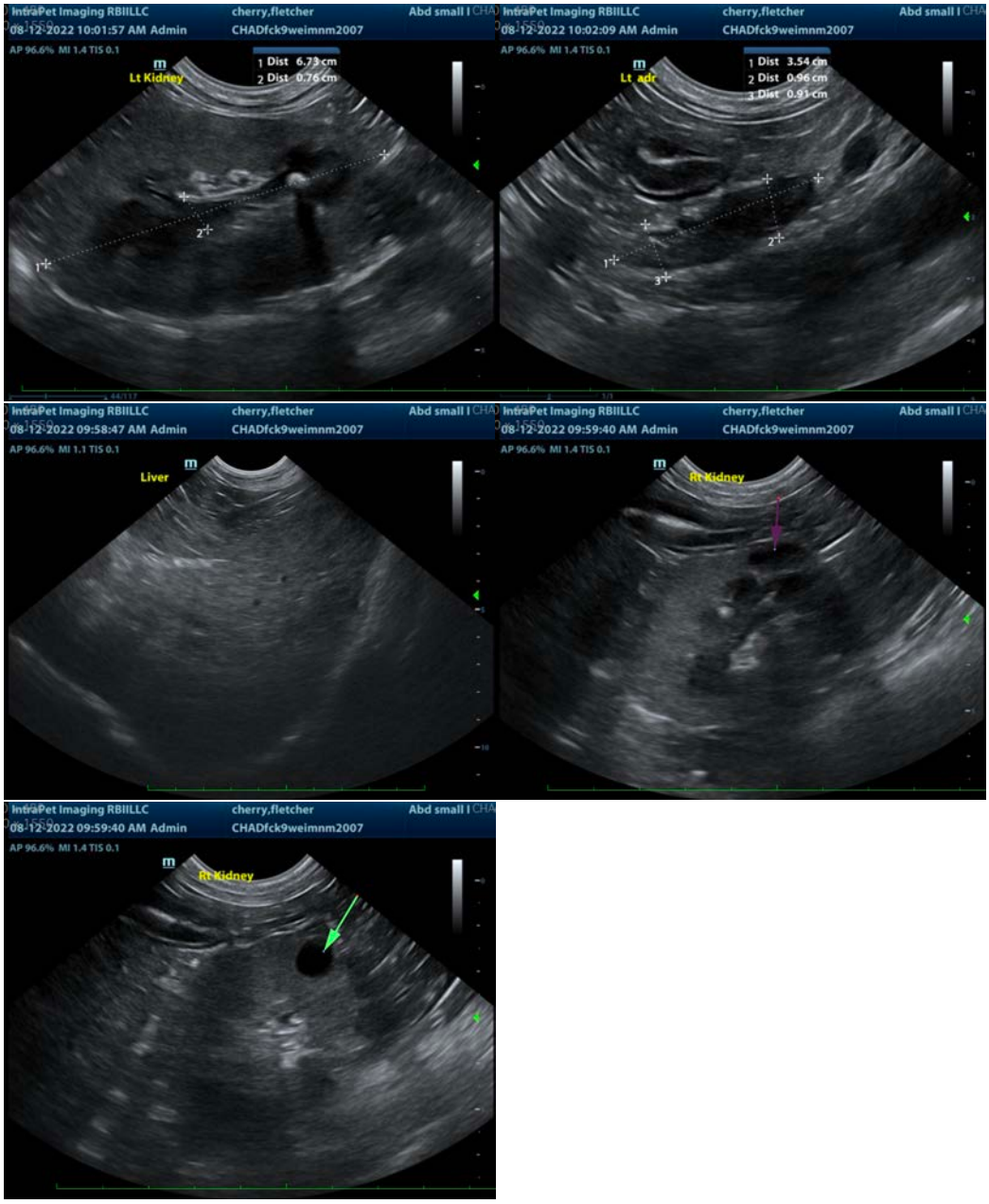
Blood pressure is recommended if not recently evaluated.

A PTH, PTHrP and ionized calcium is recommended to further differentiate the hypercalcemia as secondary to the kidney disease versus primary, caused potentially by the suspect neoplasia versus hyperparathyroidism versus other.

In the meantime, supportive/symptomatic care/medical management of the urinary tract infection and kidney disease, etc. with fluid therapy, broad-spectrum antibiotics, antiemetics, and gastroprotectants, if indicated, potentially pain management given this patient's reported mobility issues and panting, etc. is recommended.

If this patient is hypertensive, the addition of amlodipine is recommended, and if proteinuria persists beyond resolution of the urinary tract infection, an ACE inhibitor such as benazepril is also warranted.


IntraPet Imaging RBIILLC
cherry,fletcher
Abd small I CHA
08-12-2022 09:57:42 AM Admin
CHADfck9weimnm2007
AP 96.6% MI 1.3 TIS 0.2
Spleen
1 Dist 5.61 cm
2 Dist 4.08 cm
IntraPet Imaging RBIILLC
cherry,fletcher
Abd small I CHA
08-12-2022 09:57:54 AM Admin
CHADfck9weimnm2007
AP 96.6% MI 1.3 TIS 0.2
Spleen
1 Dist 1.83 cm
2 Dist 1.41 cm
IntraPet Imaging RBIILLC
cherry,fletcher
Abd small I CHA
08-12-2022 09:58:31 AM Admin
CHADfck9weimnm2007
AP 96.6% MI 1.3 TIS 0.1
Liver
IntraPet Imaging RBIILLC
cherry,fletcher
Abd small I CHA
08-12-2022 09:59:42 AM Admin
CHADfck9weimnm2007
AP 96.6% MI 1.4 TIS 0.1
Rt Kidney
1 Dist 4.75 cm
IntraPet Imaging RBIILLC
cherry,fletcher
Abd small I CHA
08-12-2022 09:59:42 AM Admin
CHADfck9weimnm2007
AP 96.6% MI 1.4 TIS 0.1
Rt Kidney
IntraPet Imaging RBIILLC
cherry,fletcher
Abd small I CHA
08-12-2022 10:00:19 AM Admin
CHADfck9weimnm2007
AP 96.6% MI 1.4 TIS 0.2
Rt adr
1 Dist 3.97 cm
2 Dist 1.02 cm
3 Dist 1.12 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
Beth.Johnson@sonopath.com