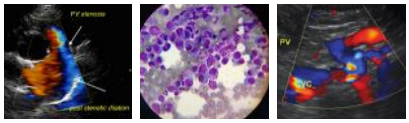
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
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DATE

4/10/23

PATIENT

Scruffy Alley

SPECIES

Canine

BREED

Miniature Poodle

SEX

Intact Male

AGE

1/1/08

WEIGHT

13.9 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Ruby

INVOICE

21928

PRESENTING CLINICAL SIGNS

History: ATO: Walking funny and arching back, shaky. Drinking and eating, urinating and BM are okay. Went to RDVM this am. Known dental disease, oronasal fistula left upper canine. This am falling over, paws felt cold, gums pale, knuckling all four limbs, new murmur 3/6, hunched stance Owner reports weight loss BW: Glucose 68 Creatinine 2.5 BUN 49 Phosphorus 6.9 Cl 106 ALP 264 GGT 27 Bilirubin - Total 2.5 Cholesterol 330 WBC 27.31 Neutrophils 19.97 Xrays- Mild cardiomegaly, enlarged liver

Current Medications: Baytril, Protonix, Cerenia, Gabapentin, Doxycycline, Entyce.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is mildly subjectively over-distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder and trigone are normal in thickness with a smooth mucosal surface. The urethra is mildly subjectively dilated with no evidence of pathology or obstruction, etc.

Prostate is symmetrically enlarged (3.07 cm wide) with smooth margins that are well differentiated from surrounding tissue. Normal bilobed shape is maintained. Parenchyma is heterogenous with scattered hyperechoic foci present. No mineral or cysts are noted.

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 mineral (in the left kidney) or infarcts observed. The left kidney measured 3.9 cm. The right kidney measured 3.89 cm. Pyelectasia is noted bilaterally. Pyelectasia in the left kidney measured 0.33 cm in the sagittal view. Pyelectasia in the right kidney measured 0.33 cm in the sagittal view. Punctate nonobstructive nephroliths are noted in the right kidney.

Adrenal Glands

Left adrenal gland is normal in size (1.86 cm long x 0.58 cm at cranial pole and 0.72 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.63 cm long x 0.52 cm at cranial pole and 0.63 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

Spleen is subjectively large in size with normal smooth margins. Parenchyma is normal in echogenicity with a coarse/heterogenous echotexture. 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. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The visible stomach wall is normal in thickness 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. 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. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no apparent lymphadenopathy. A very scant amount of anechoic free fluid is noted in the caudal abdomen, adjacent to the trigone and prostate.

Other

Both testicles are visualized and demonstrate a slightly nodular heterogenous appearance.

ULTRASONOGRAPHIC FINDINGS

Primary Finding

- Coarse splenomegaly – 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.

- 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.

- Bilaterally heterogenous nodular testicles both benign and malignant differentials are possible.

Secondary Findings

- Benign Prostatic Hyperplasia – Prostatic findings are most consistent with Benign Prostatic Hyperplasia (BPH) and hyperechoic foci consistent with increased vascularity and fibrosis often associated with BPH. Active prostatitis cannot be ruled out. Infiltrative neoplasia cannot be ruled out but is considered less likely.

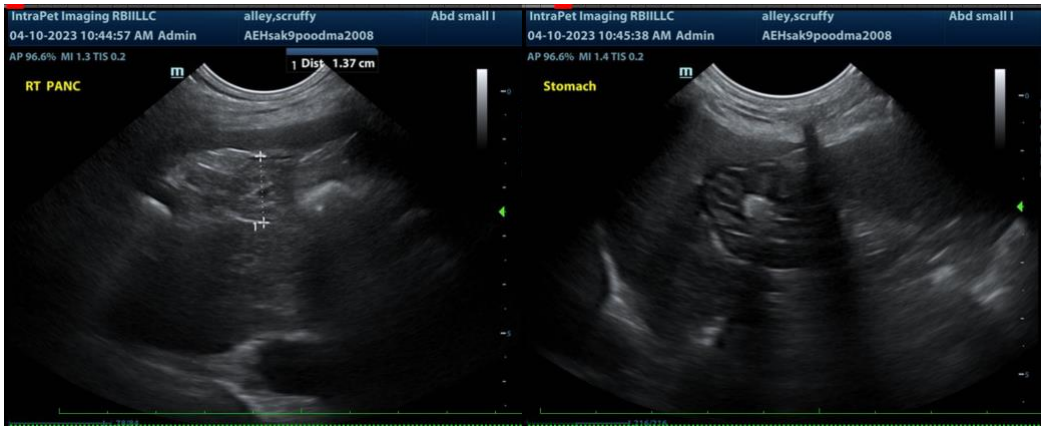
- Age related kidney changes with bilateral mild pyelectasia – Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction. Nonobstructive nephroliths noted in the right kidney.

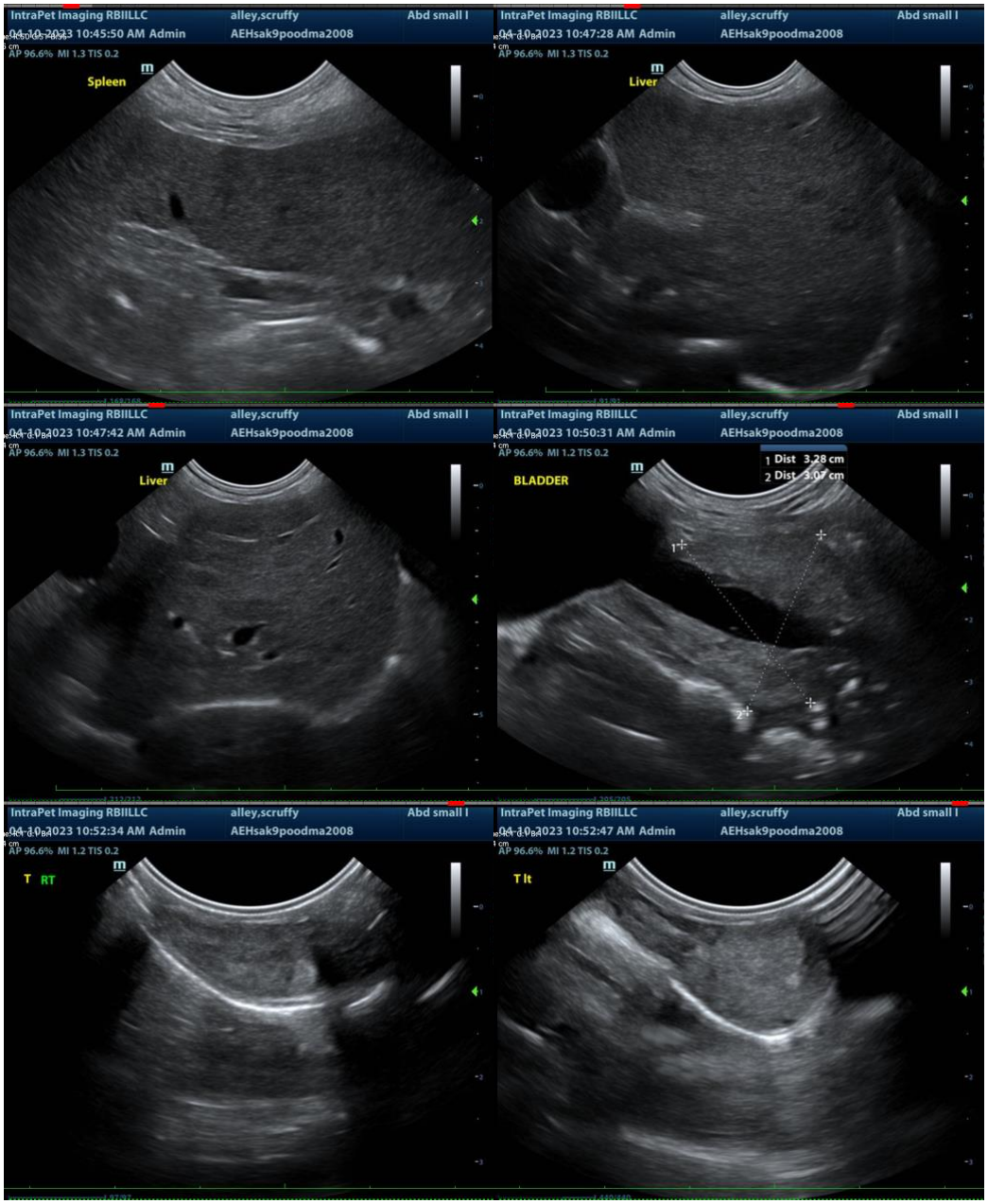
- Pancreatic age-related remodeling – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patients history, presenting complaint, laboratory changes, etc., a hepatopathy induced neurologic or encephalopathic event is a differential and should be considered and ruled out. Bile acid testing is recommended if total bilirubin has returned to normal, and if not, an ammonia level could be considered. Differentials for the hepatopathy include, potentially, a toxic insult, and history regarding that possibility should be obtain, vs potentially infectious disease, such as leptospirosis, for which testing is recommended, vs other benign inflammatory hepatopathies or even infiltrative neoplasia. Therefore, pending results of above, fine needle aspirates of the liver, as well as the spleen, could be considered if patients coagulation status is appropriate. Additionally, if not recently evaluated, urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

In the meantime, treatment recommendations include fluid therapy, antiemetics, appetite stimulants (if necessary), hepatic nutraceuticals, such as Ursodiol and/or Denamarin, and broad-spectrum antibiotics, as well as dextrose support if indicated. Additionally, empirical deworming with a 5-day course of Panacur could be considered.

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Spleen
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Liver
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1 Dist 3.28 cm
2 Dist 3.07 cm
BLADDER
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T RT
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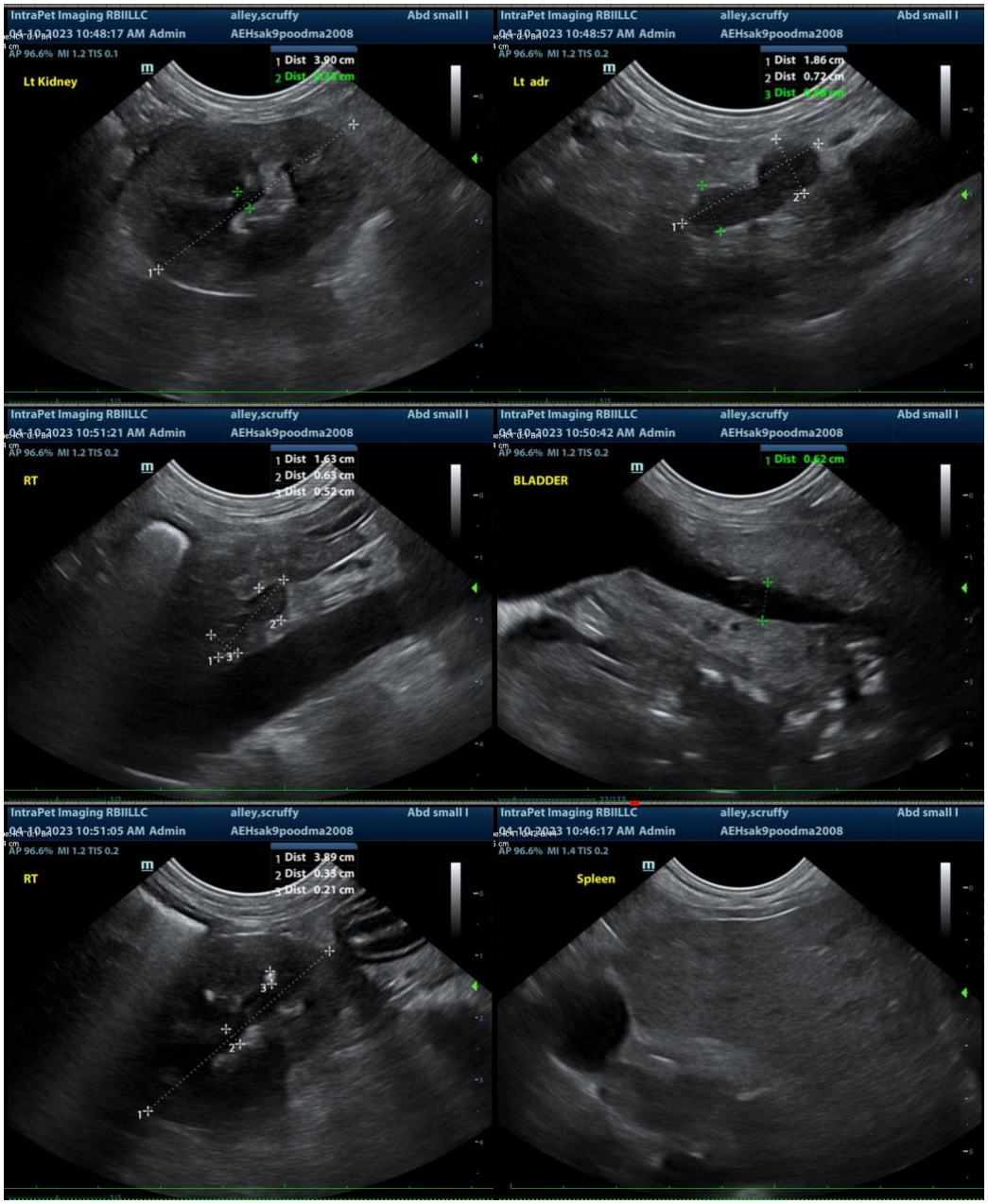
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Lt Kidney
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Abd small I
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Lt adr
1 Dist 1.86 cm
2 Dist 0.72 cm
IntraPet Imaging RBIILLC
alley,scruffy
Abd small I
04-10-2023 10:51:21 AM Admin
AEHsak9poodma2008
AP 96.6% MI 1.2 TIS 0.2
RT
1 Dist 1.63 cm
2 Dist 0.63 cm
3 Dist 0.52 cm
IntraPet Imaging RBIILLC
alley,scruffy
Abd small I
04-10-2023 10:50:42 AM Admin
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AP 96.6% MI 1.2 TIS 0.2
BLADDER
1 Dist 0.62 cm
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alley,scruffy
Abd small I
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AP 96.6% MI 1.2 TIS 0.2
RT
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2 Dist 0.38 cm
3 Dist 0.21 cm
IntraPet Imaging RBIILLC
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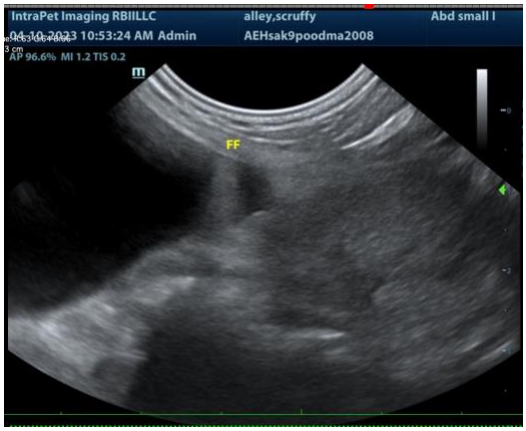
Spleen



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.

Beth Johnson, DVM DACVIM
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