

**DATE PRESENTING CLINICAL SIGNS**

3/20/23 Recent history of elevated kidney levels; suspect chronic kidney disease.

PATIENT

Lily Spence

Current Medications: Royal Canin Renal Support Diet.
 Lab Results: 3/13- BUN 118, Creatinine 2.9. 2/9- BUN >130, Creatinine 2.8, USG 1.024, UA: NSF.
 BP: 138/107 MAP 111.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.
 Imaging Performed By: Rachel Brillhart, RDMS.

SPECIES

Canine

BREED

Pomeranian

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

SEX Urinary bladder is adequately 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.

Spayed Female

AGE

11/16/10

Kidneys are bilaterally small, irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted. Multiple, too numerous to count, nonobstructive nephroliths are noted bilaterally. The left kidney measures 3.13 cm. The right kidney measures 2.41 cm. In the right kidney, scant pyelectasia may be present, but it is difficult to determine given the shadowing from the multiple nephroliths. If present, it is mild and not consistent with ureteral obstruction.

WEIGHT

9.6 Pounds

Adrenal Glands

Left adrenal gland is normal in size (1.41 cm long x 0.48 cm at cranial pole and 0.56 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.3 cm long x 0.59 cm at cranial pole and 0.54 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

INTERPRETED BY

Beth Johnson, DVM
 DACVIM

HOSPITAL NAME

Banfield Timonium

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.

REFERRING VET

Dr. Borrison

Liver

Liver is relatively normal in size and contour. Parenchyma is mildly heterogenous and coarse with mild likely age-related parenchymal remodeling noted. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

INVOICE

21734

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 mildly distended with 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 mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is 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 evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

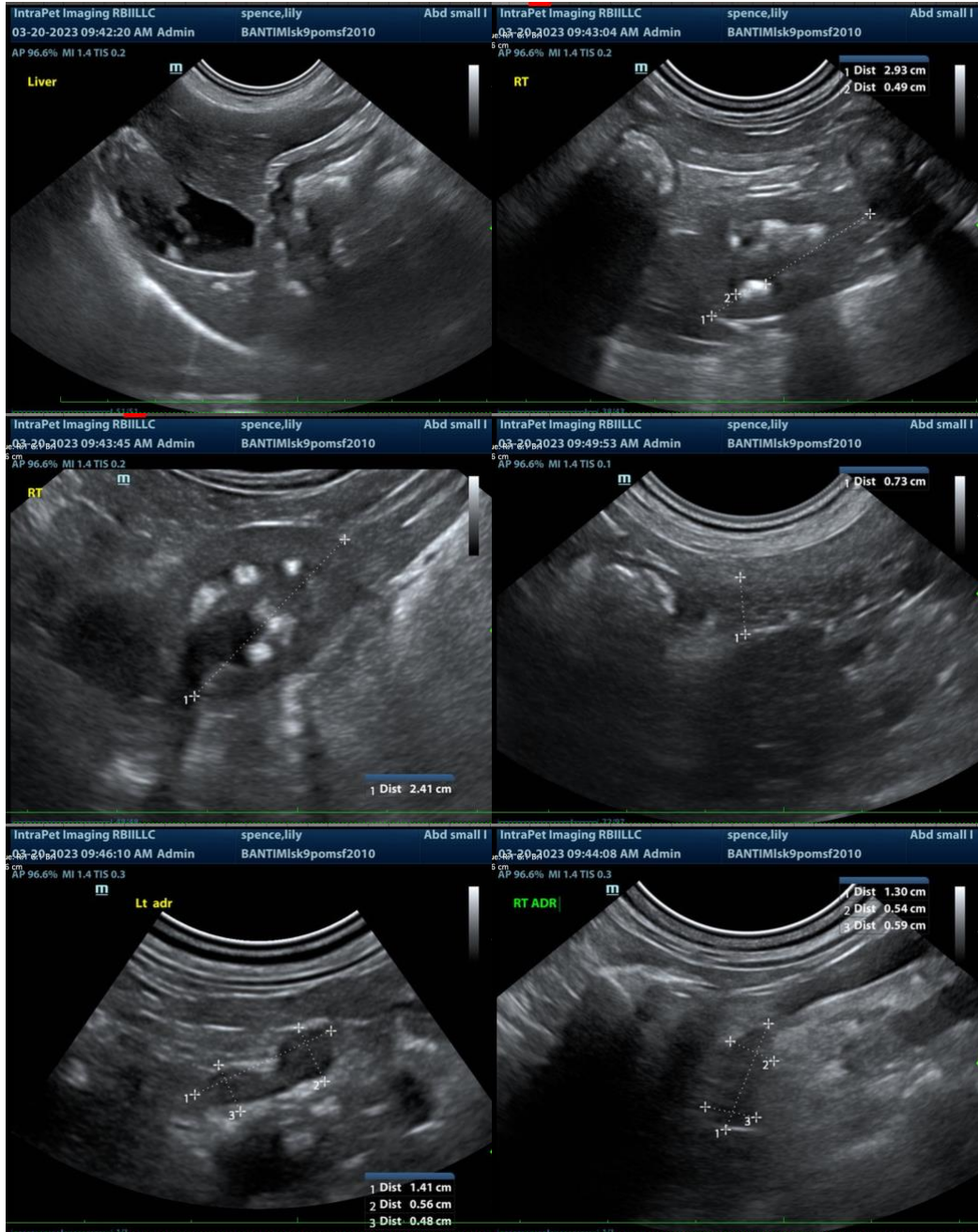
- Chronic Kidney Disease with multiple, too numerous to count, nonobstructive nephroliths noted bilaterally – This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.

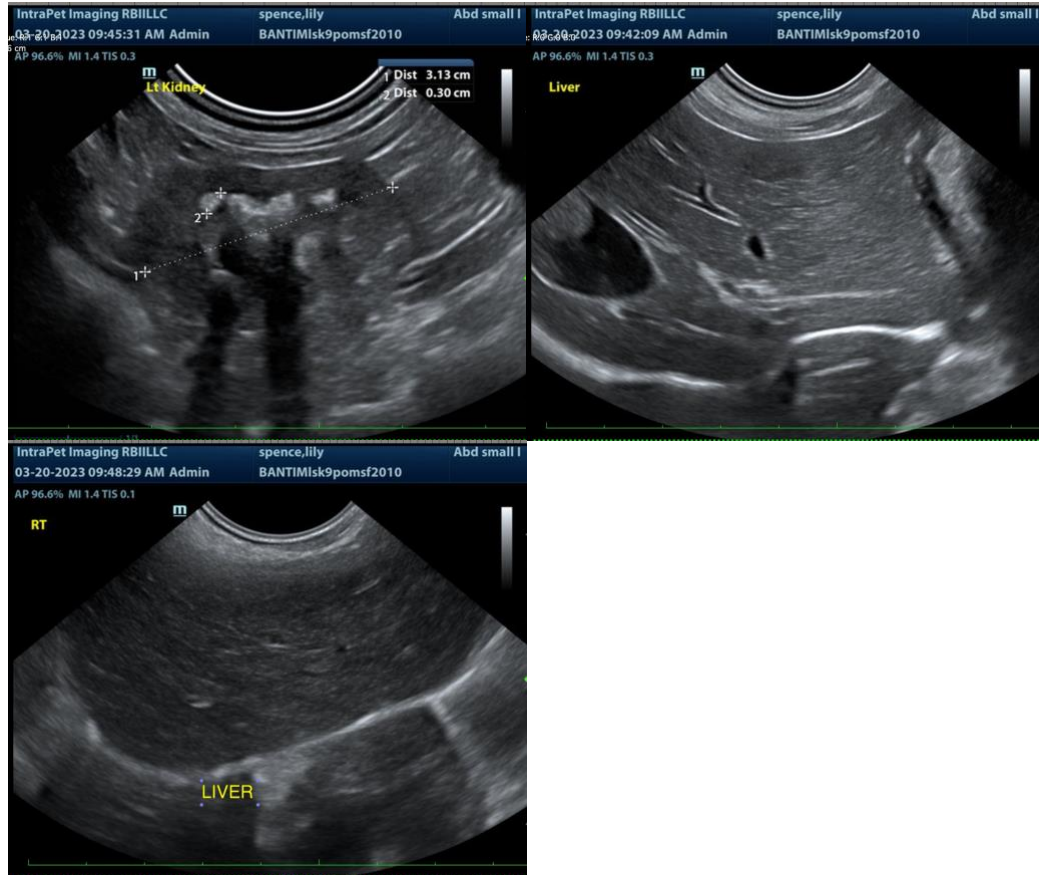
Secondary Findings

- Age-related pancreatic 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.
- Age-related hepatobiliary changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If not recently evaluated, a urine culture could be considered to rule out an occult urinary tract infection. Beyond that, without proteinuria or hypertension, therapeutic recommendations include a kidney friendly diet, which is reportedly already in place, in addition to supportive/symptomatic medical management of clinical signs, if present, or when they arise, such as antiemetics, gastroprotectants, appetite stimulants, etc. If nausea or inappetence become a problem, subcutaneous fluid therapy is recommended, if necessary, etc. Regular monitoring of urine for evidence of proteinuria, as well as blood pressure, are also recommended so that treatment can be initiated when/if necessary.





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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