

**DATE**

12/21/21

**PRESENTING CLINICAL SIGNS**

History: Cardiomegaly. Wandering Pacemaker. Cardiomegaly by voltage on EKG Irregularly irregular rhythm, Wandering Pacemaker, Mild left axis deviation, Hypertension, Severe dental disease and Cataracts. Current Medications: Amlodipine 2.5mg 1/4 pill BID, Denamarin 90mg 1 pill SID, Meloxicam 1.5mg/ml Syringe dose for 10# dog SID PRN, Clindamycin Liquid 25mg BID, Hills z/d 1 1/4 can or 1 5/8 cup dry food per day, Vitamin B12 Injection 0.25ml Once a month.

**PATIENT**

Bruno Rosinsky

Lab Results: Mildly elevated BUN. Borderline low albumin at 2.2. ALT 151. Borderline anemia at 33%. Normal T4.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: 3-30-2021.

Sedation: Not required for a full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Rat terrier

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

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth.

The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Male, neutered

**AGE**

3/28/2006

The prostate is normal in size (0.98 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**WEIGHT**

10 lbs.

The left kidney is normal in size (4.02 cm in length) with a slightly irregular shape. There is poor corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Mild pyelectasia is present (0.28 cm in the transverse plane). There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal. A few cortical cysts are present, one of which results in capsular expansion.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(Small Animal Internal  
Medicine)

The right kidney is normal in size (4.00 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Mild pyelectasia is present (0.39 cm in the transverse plane). There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal. Several cortical cysts are seen.

**IMAGING PERFORMED BY**

Stephanie Pearce  
RDCS, RVT

**Adrenal Glands**

The left adrenal gland is normal size (0.53 cm at cranial pole) (0.45 cm at caudal pole) (1.66 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Friendly Paws VC

The right adrenal gland is normal size (0.54 cm at cranial pole) (0.52 cm at caudal pole) (1.70 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Price

**Spleen**

The spleen is normal in size (0.82 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**INVOICE**

12751

### *Liver*

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of suspended echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### *Gastrointestinal*

The gastric lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. A several cm segment of small intestine is plicated. The lumen within this region appears empty. The wall in this region is mildly thickened (up to 0.45 cm) and there appears to be retention of the normal layering pattern. Surrounding mesentery is reactive. The remaining small intestinal segments are normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal.

### *Pancreas*

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### *Free Abdomen*

A small amount of free fluid is present. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- The significance of the plicated bowel segment is unclear. It was observed on the previous scan. There is regional peritonitis associated with this segment.

### **Secondary Findings:**

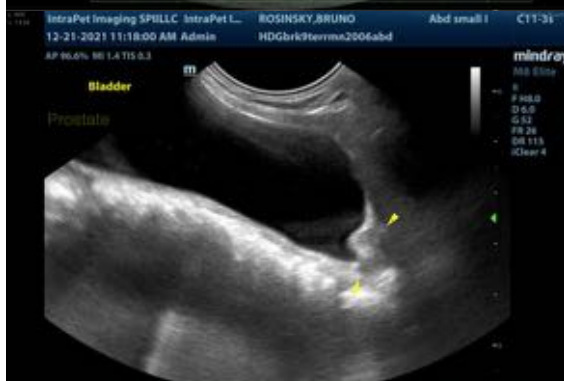
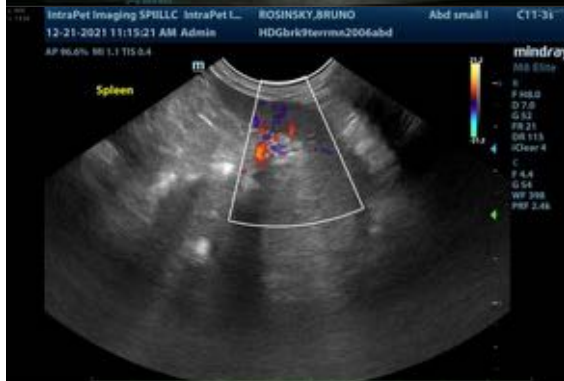
- Bilateral age-related renal changes with dystrophic mineralization, trace pyelectasia and cortical cysts (changes are similar to the previous scan).
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- Age-related pancreatic remodeling +/- fibrosis. Low-grade inflammation may be present, particularly if the patient is uncomfortable on cranial abdominal palpation. Correlation with clinical findings is recommended.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Continued monitoring of the patient's renal values is recommended to assess for progression of the renal disease.
- Given the borderline hypoalbuminemia, consider a UPC (if proteinuria is present) and pre- and post-prandial serum bile acids.
- If the patient appears uncomfortable on cranial abdominal palpation and an aggressive approach is

desired an abdominal exploratory with biopsy +/- resection of the plicated segment of bowel can be considered. However, given the lack of substantial change since the previous sonogram, surgery may or may not be of benefit to the patient.





**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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)  
Andrea.nicastro@sonopath.com