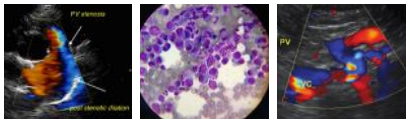
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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**DATE**

8.16.23

**PATIENT**

Bam Bam Rickert

**SPECIES**

Canine

**BREED**

Finnish Hound

**SEX**

Neutered Male

**AGE**

6/3/2011

**WEIGHT**

31.3 lbs

**INTERPRETED BY**

Andrea Nicastro, DMV, Diplomate DACVIM (Small Animal Internal Medicine)

**HOSPITAL NAME**

Paradise AH

**REFERRING VET**

Dr. Twardzik

**INVOICE**

14124

## PRESENTING CLINICAL SIGNS

Presented at emergency clinic recently for hematuria, where he had been treated with antibiotics. On abdominal ultrasound, a possible mass was observed. On exam, there was increased tissue bulk and mild tension noted on abdominal palpation. There was a grade II/VI systolic murmur present. Moderate dental tartar. Right head tilt. Resistant to hip extension bilaterally

Current Medications: Carprofen (2.5 25 mg SID) -- since 2017, Interceptor – chronic, Seresto – chronic, Ursodiol 200 mg SID -- since 2020, Amantadine 50 mg SID in morning -- since 2021, Gabapentin 200 mg SID in evenings -- since 2020

Lab Results: U/A (from emergency clinic): USG = 1.018, > 50 WBC/hpf, > 50 RBC/hpf. Chem (from emergency clinic): Elevated ALP 536 U/L
7/7/2023 bloodwork: ALP 536. USG 1.018 with pyuria and hematuria. CBC unremarkable.

Radiographs: Abdominal US (performed at emergency clinic): apparently abnormally shaped left kidney, small nephrolith right kidney, increased soft tissue opacity cranial abdomen
Date of Previous IntraPet Ultrasound: 9/7/22. See attached.
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*

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of echogenic debris and a scant amount of gravity-dependent mineralized sand is observed within the lumen. No distinct calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (1.33 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (5.11 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. A few cortical cysts are seen. Several, small, nonobstructive nephroliths are visualized. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.36 cm in length) with a normal shape, architecture and smooth peripheral margins. The cortex is isoechoic relative to the spleen. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. Several, small, nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The left adrenal gland is mildly enlarged (0.98 cm at cranial pole) (0.89 cm at caudal pole) (2.57 cm in length) with a relatively normal shape. The parenchyma is subtly heterogenous with some loss of glandular detail at the caudal pole. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is in normal size (0.68 cm at cranial pole) (0.67 cm at caudal pole) (2.34 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

### *Spleen*
The spleen is normal in size (1.21 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

### *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 moderate amount of gravity-dependent, echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### *Gastrointestinal*
The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly to moderately distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecocolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

### *Pancreas*
The right limb is prominent in size with slightly irregular peripheral contours. The parenchyma is hyperechoic relative to surrounding omental fat and mottled in appearance, with a few, small, ill-defined, hypoechoic nodules/areas. The pancreatic duct is not overtly dilated.

### *Free Abdomen*
The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- Urinary bladder debris/sand..
- Bilateral chronic renal changes with nonobstructive nephrolithiasis and trace left pyelectasia.

### Secondary Findings

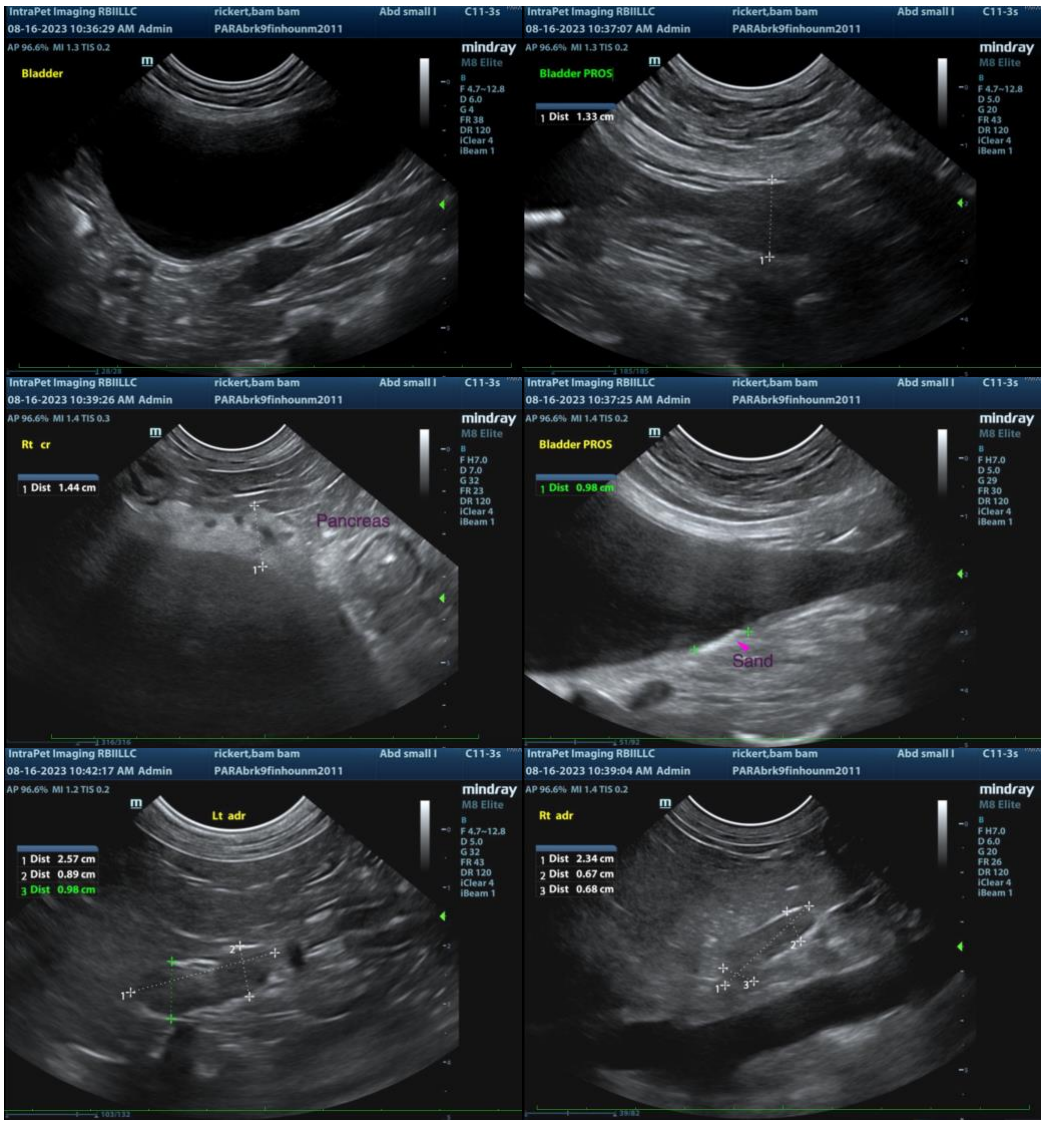
- Mild left adrenomegaly
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- The diffuse hepatic 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.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

- If the patient was fasted for this study, the presence of ingesta within the gastric lumen could suggest delayed gastric emptying.

  *Overall, today's sonograph is similar to the previous sonogram. An obvious cause for the patient's hematuria is not definitively identified in this study. Considerations include occult urinary tract infection, hematuria secondary to nephroliths, benign essential renal hematuria, coagulopathy (less likely), other. There is no obvious evidence of an abdominal mass on today's study.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Give the hematuria, consider a urine culture and sensitivity to assess for occult infection.



**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.

**Andrea Nicastro**, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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