


**DATE PRESENTING CLINICAL SIGNS**

11/25/25

**Patient History:** Rambo was presented on 11/5/25 to a colleague for having blood in his urine and increased thirst and urination. Urinalysis was diagnostic of a UTI and transitional cells were seen. Additionally, ALT & ALP were increased as well as Ca, Cholesterol and neutrophils. Rambo was started on 102 mg Enrofloxacin PO SID. Rambo had re-check lab. work done on 11/19/25. The urinary infection was resolved and no transitional cells seen. However, Rambo's USG was hyposthenuric, ALP and ALT had mildly progressed, and the clinical signs of increased thirst and urination were persistent. Upon speaking with Mr. Buttion further, Rambo has also had increased hunger and his coat quality has decreased.

**SPECIES**

Canine

**Current Medications:** Enrofloxacin 102 mg PO q 24hr from 11/5 - 11/15

**BREED**

French Bulldog

**Labwork Results:** Labwork attached, reported as: 11/19/25: ALT (SGPT) 500IU/L, ALK PHOS 218IU/L, CREATININE 0.3MG/DL, PHOSPHORUS 6.6MG/DL, CHOLESTEROL 386MG/DL, HGB 22.6G/DL, HCT 65%. Platelet Count 413X1000/UL, Urine Specific Gravity 1.007, Urine Protein 2+.  
11/5/25: ALT (SGPT) 496IU/L, ALK PHOS 178IU/L, CREATININE 0.4MG/DL, CALCIUM 8.5 MG/DL, CHOLESTEROL 394MG/DL, HGB 20.9G/DL, HCT 61%, NEUTROPHILS 12144/uL, Urine Specific Gravity 1.009, Urine Protein 3+, Blood 3+. RBCs 4 - 10/HPF, WBCs 4 - 10/HPF, Bacteria Rods > 100/HPF, Transitional Cells 2-3/HPF

**SEX**

Neutered Male

**Date of Previous IntraPet Ultrasound:** No previous.

**Sedation:** Not required to complete full diagnostic ultrasound.

**Stat Report:** Not approved.

**AGE**

10/21/18

**Imaging Performed by:** Rachel Brillhart, RDMS.

**WEIGHT**

35.6 lbs

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

The 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.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

**INTERPRETED BY**

 Beth Johnson, DVM  
 DACVIM

**HOSPITAL NAME**

 Bel Air Veterinary  
 Hospital

The right kidney is normal is size (5.43 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**REFERRING VET**

Dr. Young

The left kidney is normal is size (5.47 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**
**INVOICE**

72100

The right adrenal gland is normal in size (0.72 cm at cranial pole and 1.0 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. A hyperechoic nodule is noted in the cranial pole. Nodule does not disrupt normal shape and/or architecture. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.77 cm at cranial pole and 0.92 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

### ***Spleen***

The 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.

### ***Liver***

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. 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 visible stomach wall is normal in thickness and layering. The lumen is mildly distended with primarily fluid as well as some echogenic non-shadowing luminal contents and gas consistent with normal chyme. 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 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 observed pancreas is prominent (enlarged) in size, hypoechoic to surrounding tissue and irregular in shape with a swollen undulating contour. Enhanced hyperechoic ill-defined surrounding fat is noted.

### ***Free Abdomen***

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

### **PRIMARY FINDINGS**

- Very mild, potentially emerging versus resolving acute pancreatitis is suspected.
- Moderate 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.

- Otherwise, an obvious cause for the reported increased liver enzymes is not identified in these images. Microscopic disease such as Leptospirosis, bacterial cholangiohepatitis, chronic active hepatitis, copper-associated hepatotoxicity, other hepatotoxicity, other reactive hepatopathy, infiltrative neoplasia (considered unlikely), etc. cannot be definitively ruled out.

## SECONDARY FINDINGS

- Hyperechoic adrenal nodule (cranial pole right adrenal gland) – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

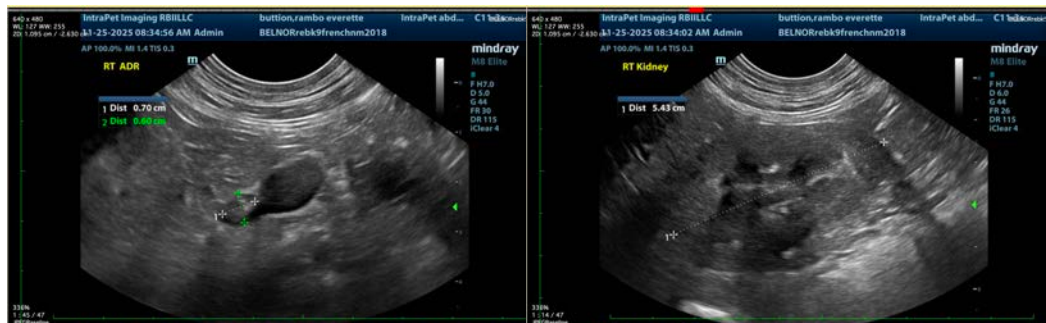
Given patient's reported urinalysis results, a blood pressure is recommended if not recently evaluated. If proteinuria persists in the face of an otherwise quiet sediment, quantification is indicated via a urine protein to creatinine ratio.

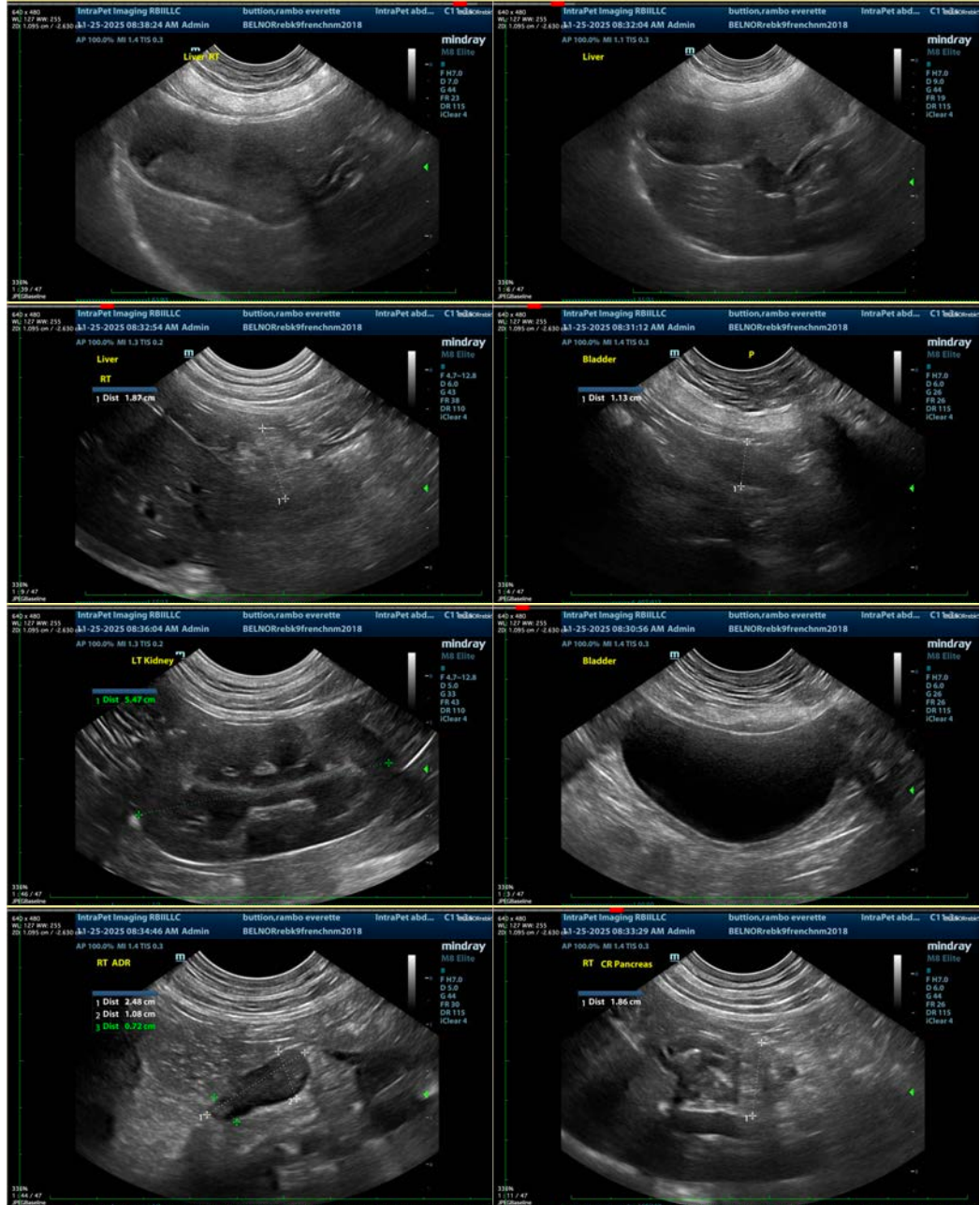
Given the liver enzyme ratio, primarily hepatocellular injury pattern with an increased ALT, if it is not secondary to mild pancreatitis, I worry more about a primary hepatopathy at this junction and would rule it out prior to pursuing hyperadrenocorticism. Therefore, given the concern for possible pancreatitis, a quantitative PLI is recommended if not already evaluated.

If liver enzymes don't improve with supportive/symptomatic medical management of clinical signs and suspect pancreatitis, etc., bile acids would be recommended if patient's total bilirubin is not increased.

Testing for Leptospirosis is recommended.

In the meantime, in addition to supportive/symptomatic medical management of clinical signs, empirical hepatic nutraceuticals could be considered while monitoring for improvement.







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**  
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