



## PATIENT

Stella Nkemdiri

## SPECIES

Canine

## BREED

Boston Terrier X

## SEX

Spayed Female

## AGE

10 years

## WEIGHT

9.5 kg

## INTERPRETED BY

Beth Johnson, DVM  
DACVIM

## IMAGING PERFORMED BY

Dr. Sarah Barthelemy

## HOSPITAL NAME

Royal Loop Vet

## REFERRING VET

Dr. Hawley

## INVOICE

11196

## DATE

1/29/2026

## PRESENTING CLINICAL SIGNS

- polyphagia
- thin haircoat

Abnormal PE/Chem/CBC/UA Results: ALP marked elevation 1900. Proteinuria LDDST supports hyperadrenocorticism Heart murmur - grade 2.

## 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.

The right kidney is normal is size (4.56 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.

The left kidney is normal is size (4.59 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

Adrenal glands are subjectively mildly plump in size for a small dog. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. Left adrenal measures 0.71 cm at the cranial pole and 0.64 cm at the caudal pole. Right adrenal measures 0.6 cm at the cranial pole and 0.72 cm.

### 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 contains an approximately 4.4 cm x 7.0 cm mildly heterogenous, largely cystic, isoechoic mass in the mid to right caudal liver.

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. Additionally, there is an approximately 1.8 cm x 2.0 cm in size echogenic, vascular density that appears adhered or extending from the inner wall.

### Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of



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obstruction, foreign material, or infiltrative disease; however, visualization is partially inhibited by gas. 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 pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### **Free Abdomen**

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

There is no apparent pathologic lymphadenopathy noted in these images.

### **ULTRASONOGRAPHIC FINDINGS**

- Very mildly/subjectively bilateral adrenomegaly – In a patient diagnosed with hyperadrenocorticism, this finding is most consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism. This finding can also be seen with stress and/or normal patient variant. Interpret in combination with clinical signs of hyperadrenocorticism and/or other adrenal disease.
- The cystic liver mass could represent a benign change such as nodular hyperplasia, extramedullary hematopoiesis, a cystic hepatoma/adenoma versus other. Or infiltrative neoplasia including a well differentiated carcinoma, sarcoma, round cell neoplasia, or even metastatic lesion can't be ruled out without sampling.
- Similarly, the gallbladder density described above demonstrates vascularity suggestive of a tissue density, both benign polyps as well as malignancy i.e. carcinoma versus other, are differentials and can't be ruled out without tissue sampling.

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

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

Fine needle aspirates of the liver mass and gallbladder nodule could be considered if patient's coagulation status is appropriate. Alternatively, or if a cytologic diagnosis is unable to be obtained, an exploratory laparotomy for planned excisional biopsies/liver lobectomy, and cholecystectomy could be considered. If elected, presurgical planning abdominal CT staging may be helpful.

Regarding the suspicion for hyperadrenocorticism, if it's been diagnosed and the result is believed to be clinically accurate, then pituitary dependent diseases most likely based on imaging. Having said that, in the face of the concurrent pathology, false positives are also possible with either the liver mass



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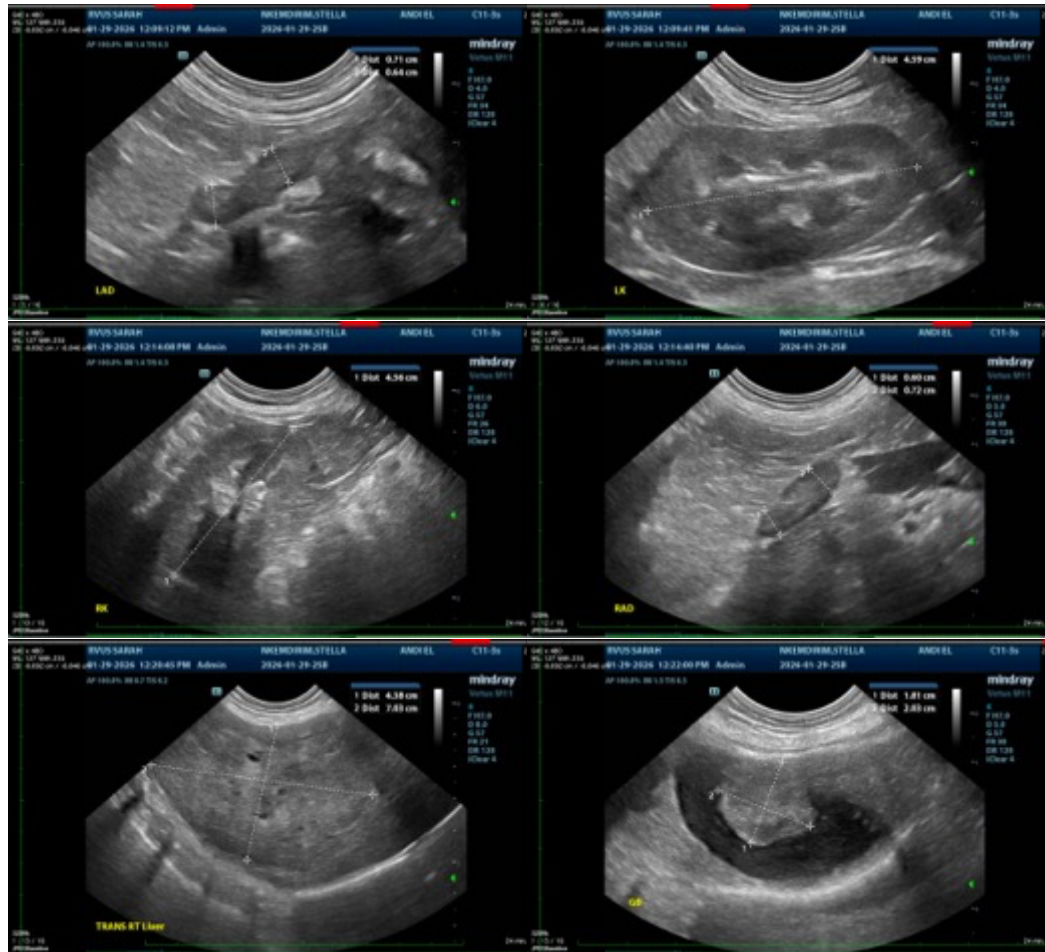
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or gallbladder nodule, potentially contributing to reported alkaline phosphatase changes. Regardless of clinical signs, a blood pressure is recommended if not recently evaluated as is a urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.



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  
info@sonopath.com