

**DATE PRESENTING CLINICAL SIGNS**

7.21.23 Exam for vomiting and UTI symptoms 6/26/23. Had mildly elevated ALP and hepatomegaly. Also had pyuria and hematuria.

**PATIENT**

Dolly Younce

Current Medications: 200mg Cefpodoxime  
 Lab Results: ALP = 247  
 Date of Previous IntraPet Ultrasound: No previous.  
 Sedation: Not required to complete full diagnostic ultrasound.  
 Stat Report: Not requested.  
 Imaging Performed By: Stephanie Warga RDCS, RVT.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

Basset Hound

**Urinary System**

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Female Spayed

The left kidney is normal in size (6.79 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 mild loss of corticomedullary distinction. Moderate pyelectasia is present is (0.52 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**AGE**

5/19/2014

The right kidney is normal in size (6.51 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 mild loss of corticomedullary distinction. Moderate pyelectasia is present is (0.50 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

58.3 lbs

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size (0.54 cm at cranial pole) (0.61 cm at caudal pole) 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.

**HOSPITAL NAME**

Hickory VH

The right adrenal gland is normal in size (0.77 cm at cranial pole) (0.55 cm at caudal pole) (2.69 cm in length) with an irregular shape. The parenchyma is subjectively hypoechoic and mottled with small, ill-defined cavitated areas. There is loss of glandular detail. The gland appears vascular.

**REFERRING VET**

Dr Silcox

**Spleen**

The spleen is normal in size (1.75 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. Several irregular, coalescing hyperechoic nodules are observed throughout the organ, primarily at the medial aspect. Splenic vasculature is normal.

**INVOICE**

13783

**Liver**

The liver is normal to prominent in size with normal curvilinear peripheral contours. The parenchyma is hyperechoic relative to the spleen and mottled, with numerous, small, ill-defined hypoechoic nodules (the largest measuring 1.42 cm in diameter). Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. 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 not distended. 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 colonic wall is normal. There is no evidence of an obstructive pattern.

### ***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***

There is no obvious evidence of free fluid. A 1.08 cm lymph node is observed at the aortic trifurcation. The node is normal in shape and echogenicity.

### ***Other***

A 1.76 x 0.90 cm irregular thrombus is observed in the caudal vena cava adjacent to the right adrenal gland.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Irregular right adrenal gland with an adjacent thrombus in the caudal vena cava. These findings are concerning for a neoplasia (i.e., adenocarcinoma, pheochromocytoma) with caval invasion.

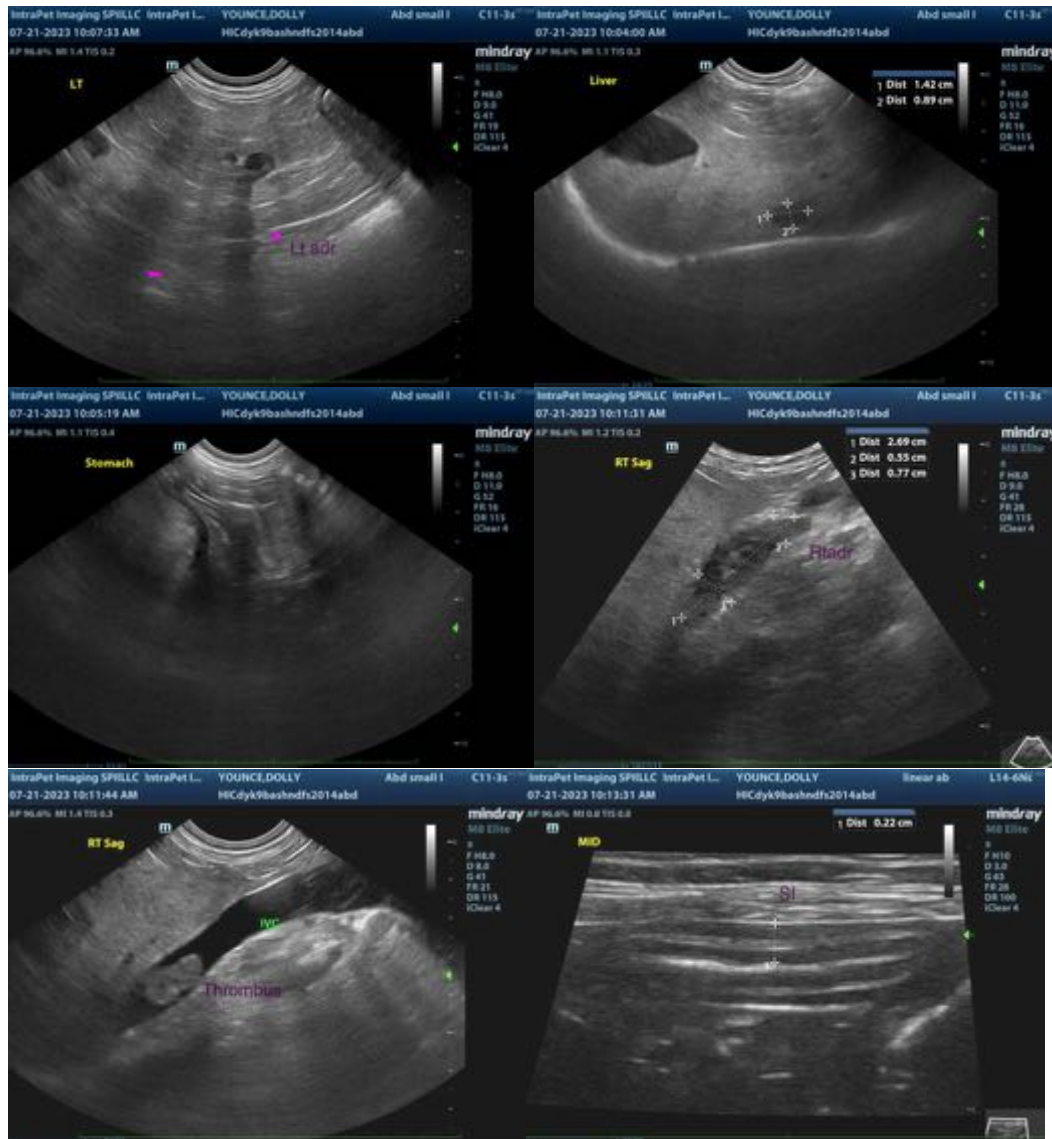
### **Secondary Findings**

- Bilateral chronic renal changes. The bilateral pyelectasia may be secondary to pyelonephritis, age-related remodeling, PU/PD (if applicable) or some combination thereof.
- The hyperechoic lesions adjacent to the splenic vessels are most consistent with myelolipomas. Although a neoplastic process within the spleen cannot be excluded, it is considered unlikely in this patient.
- 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.
- Minor age-related pancreatic remodeling in the right limb
- The prominent lymph node at the aortic trifurcation is likely reactive with a low possibility of emerging neoplasia.

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

- Regarding the right adrenal changes and associated thrombus, consider the following:
  1. Three-view thoracic radiographs are recommended to assess for pulmonary metastatic disease.
  2. Baseline blood pressure measurement
  3. Further testing for a functional tumor (i.e., low-dose dexamethasone suppression test, urine/blood catecholamine levels)

4. +/- an abdominal CT scan to further characterize the pathology in this region
  5. Consider initiation of clopidogrel to help reduce thrombus formation
- Regarding the vomiting, consider the following:
    1. Fecal evaluation for internal parasites
    2. Texas GI panel including serum cobalamin and folate, TLI and PLI
    3. Antiemetic agents +/- acid blocker
    4. If the vomiting persists, and the above diagnostics are inconclusive, a more comprehensive GI work-up (i.e., diet trial, GI biopsies) may be warranted.



**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.

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