

**DATE**

3/9/22

**PRESENTING CLINICAL SIGNS**

Diagnosed with hemolytic anemia 12/23/21, presumed immune mediated and have not found any obvious primary cause. Tick PCR negative. Thoracic and abdominal rads unremarkable. Did not have a full abdominal ultrasound at that time, just a FAST scan. Put on immune suppressive Prednisone, Doxycycline, and Mycophenolate at the Pet ER. PCV has returned to low normal, anemia no longer reads as regenerative. Had to stop mycophenolate due to severe diarrhea. Want to make sure there isn't an underlying cause for the IMHA.

**PATIENT**

Coco Rulo

Current Medications: Prednisone 20mg AM, 10mg PM (have slowly tapered).

Lab Results: See attached.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**

Labrador Mix

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Spayed Female

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

**AGE**

6/4/10

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 7.26 cm. The left kidney measured 6.2 cm.

**WEIGHT**

76 lbs

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**Adrenal Glands**

The right adrenal gland revealed a hyperechoic nodule in the cranial pole measuring 1.03 x 1.07 cm and the caudal pole measured 0.61 cm and 2.97 cm in length. This is most consistent with right adrenal adenoma. The left adrenal gland measured 2.56 x 0.79 cm at the caudal pole and 0.65 cm at the cranial pole.

**HOSPITAL NAME**

Airpark AH

**Spleen**

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

**REFERRING VET**

Dr. Owens

**Liver****INVOICE**

96723

Exam of the cranial abdomen demonstrated excessive **liver** size and swollen contour. Mild, coarse architecture was noted with increased portal markings and minor parenchymal remodeling is suggestive of an inflammatory component. Minor excessive GB debris was noted with the presence gall bladder dilation and precipitate without the overt formation of mucocele but this may be an issue in the future. This type of liver presentation typically is associated with slow and gradual SAP elevations with low-grade ALT rise. USG-FNA sampling is encouraged if more aggressive LE profiles are present such as ALT > 200 or rapid rise in SAP. These presentations are usually reactive hepatopathies owing to other disease processes either endocrine (Diabetes, Hypothyroidism, Cushing's disease), "antigen surveillance" from the gut/pancreas, or idiopathic breed predisposed progressions.

### ***Gastrointestinal***

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

### ***Pancreas***

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

### ***Heart***

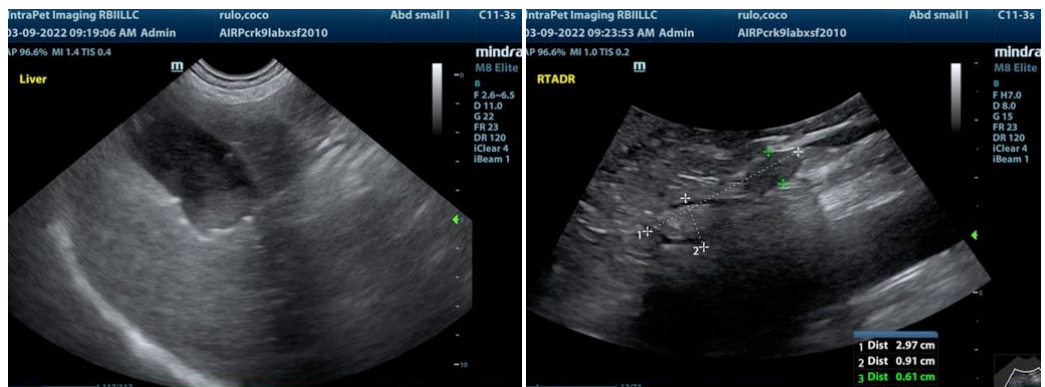
Rapid view of the heart revealed no evidence of pathology.

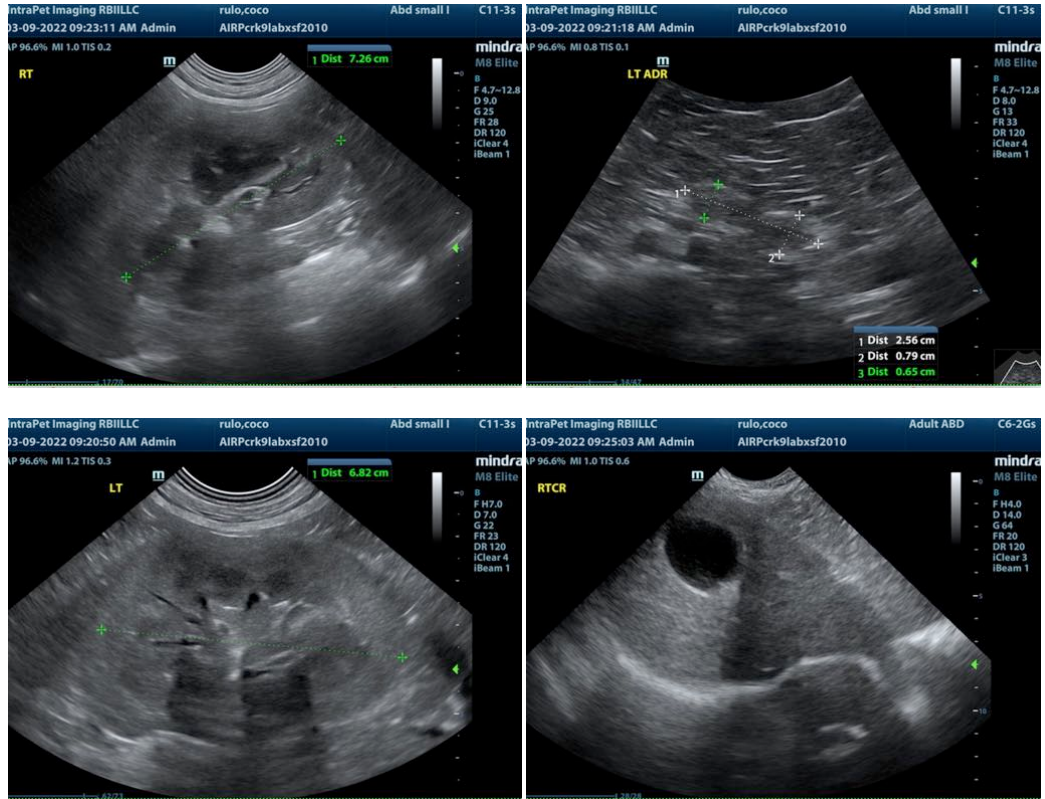
## **ULTRASONOGRAPHIC FINDINGS**

Subjectively benign hepatopathy with inflammatory component and mild remodeling.  
Right adrenal adenoma.  
Otherwise, unremarkable abdomen.

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

There was no evidence of cause of anemia or inciting visceral disease to the current clinical profile. Coagulation panel and FNA of the liver could be considered for further definition, yet subjectively appears benign. CBC path review +/- bone marrow aspirate would be appropriate given the patient's history.





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.

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