

**DATE PRESENTING CLINICAL SIGNS**

3/8/23

History: Liver and LN changes seen previously, went to NEXUS veterinary specialists for Internal Med consult and they would like a recheck to evaluate for progression of disease.

**PATIENT**

Colby Ives

Current Medications: Carprofen 50 mg PO BID, Doxycycline 4 week course was completed for Anaplasma positive on screening

**SPECIES**

Canine

Tramadol 50mg BID, Cyclosporine ophthalmic, Eye antibiotic BID (BNP w/hydro), Cosequin or dasuquin, Sentinel in warm months, Bravecto in warm month

Date of Previous IntraPet Ultrasound: 12/21/22. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

**BREED**

Cocker Spaniel

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

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

Neutered Male

**Urinary System**

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.

**AGE**

9/11/10

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

**WEIGHT**

54.4 Pounds

Left kidney is normal is size (6.03 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.

**INTERPRETED BY**

Beth Johnson, DVM

DACVIM

Right kidney is normal is size (5.41 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.

**HOSPITAL NAME**

Airpark AH

**Adrenal Glands**

Left adrenal gland is normal in size (2.46 cm long x 0.61 cm at cranial pole and 0.7 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Owens

Right adrenal gland is normal in size (2.61 cm long x 0.73 cm at cranial pole and 0.66 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**INVOICE**

21511

**Spleen**

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). A 1.6 cm x 1.3 cm mildly heterogenous hypo- to anechoic non-capsule-disrupting nodule is noted in the mid body, as well as a second similar appearing, approximately 1.0 cm in diameter nodule near the head of the spleen. Splenic vasculature appears normal.

**Liver**

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### ***Gastrointestinal***

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with 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 and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The observed pancreas 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 evidence of peritoneal effusion. The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail. A representative node measures 0.75 cm thick.

### ***Other***

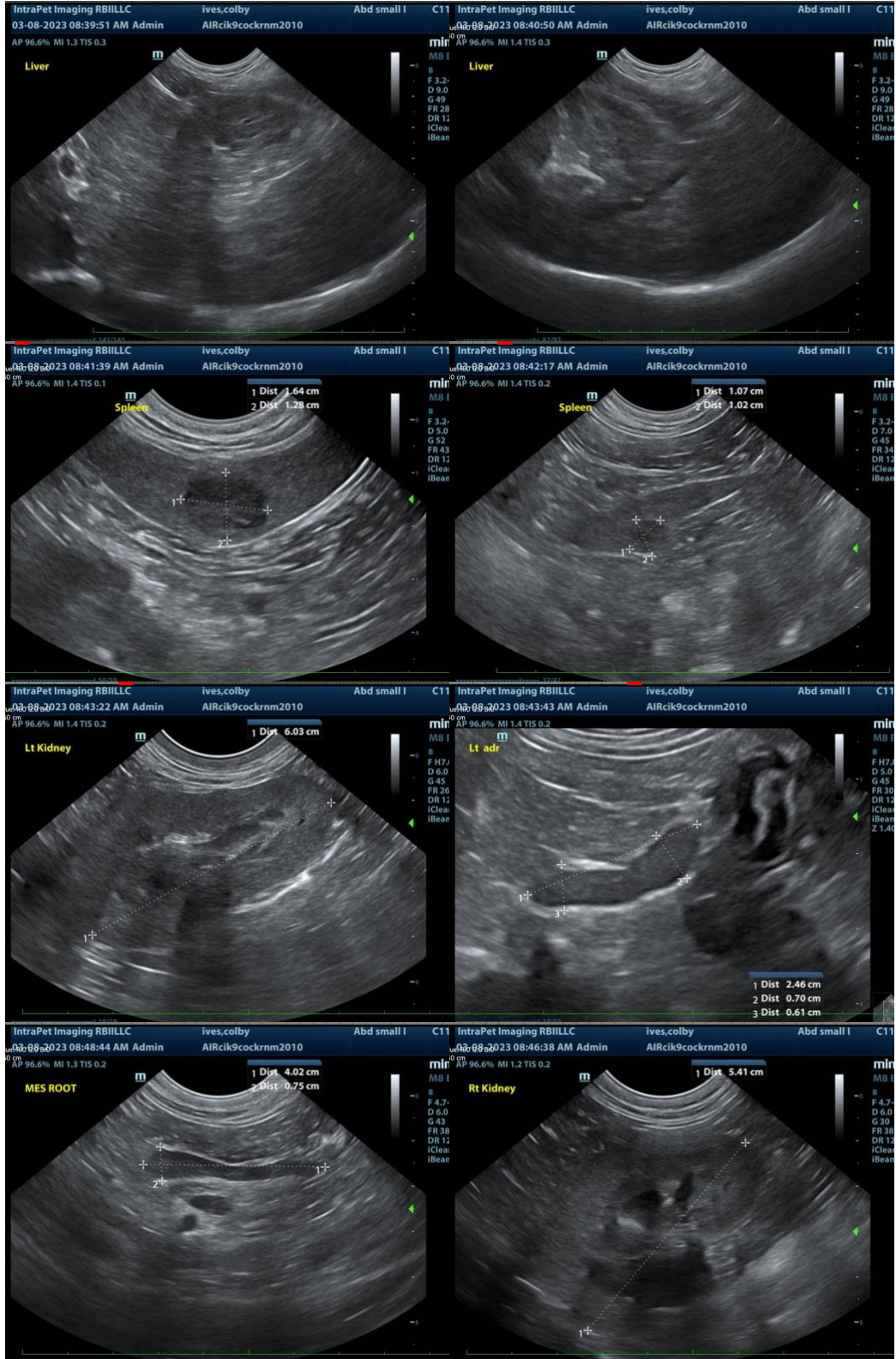
There is no evidence of heart base or pericardial pathology noted in these images at this time. If cardiac function evaluation is desired a full echocardiogram is recommended.

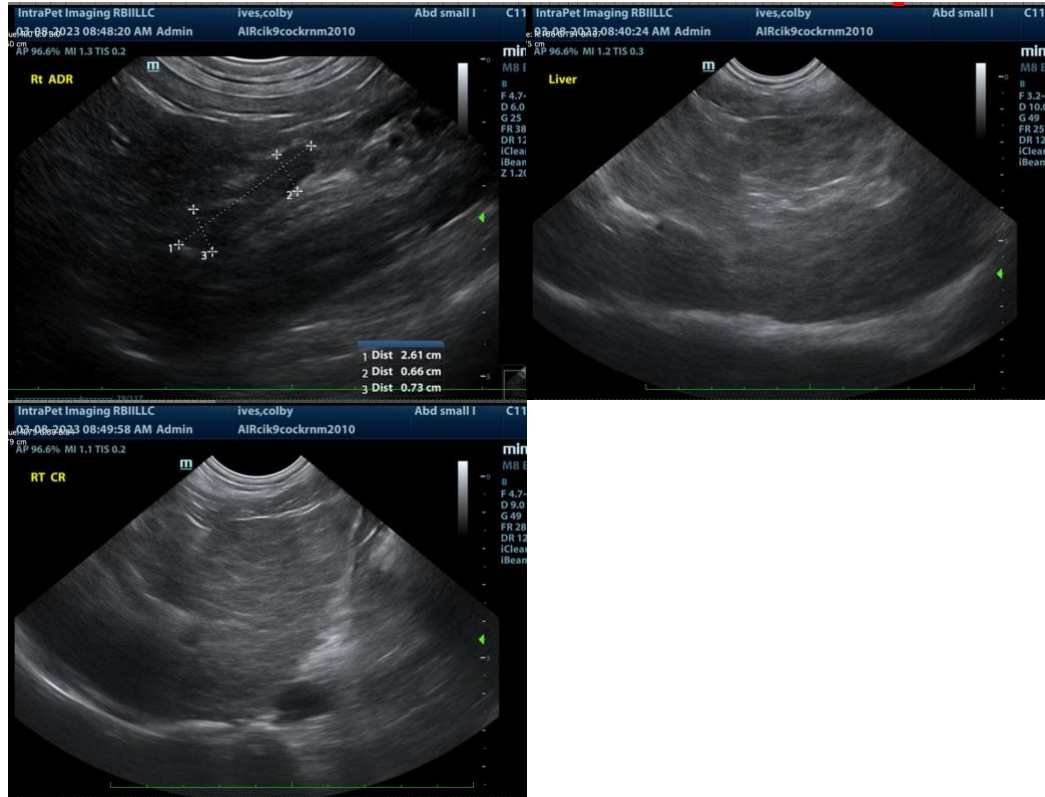
## **ULTRASONOGRAPHIC FINDINGS**

- Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia. This finding is subjectively mildly progressive with an almost lacey or nodular appearance to the liver.
- Hypo to anechoic splenic nodules – likely represent a benign lesion such as cysts, hematomas, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out. While the appearance of the spleen trends toward benign, the previous study revealed one nodule, and today there are two, so it's considered mildly progressive.
- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely. This is a static finding.

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

This patient is reportedly under the management of internal medicine and recommendations should defer to that management. Having said that, given the mildly progressive nature of this ultrasound, fine needle aspirates of the liver +/- the spleen, could be considered if patients coagulation status is appropriate.





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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