

**DATE**

2/3/22

**PRESENTING CLINICAL SIGNS**

History: Patient presented on 1/24/2022 for an annual exam. Elevated liver values present on senior bloodwork.

**PATIENT**

Reese Cook

**SPECIES**

Canine

**BREED**

Mixed Breed

**SEX**

Neutered Male

**AGE**

6/29/10

**WEIGHT**

45.6 Lbs.

**INTERPRETED BY**

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

**HOSPITAL NAME**

Eastern HA

**REFERRING VET**

Dr. Frere

**INVOICE**

13748

Lab Results: Total Protein- 8.8, Albumin- 5.5, AST- 68, ALP- 768, Total Bilirubin- 0.8, Magnesium- 2.8, Cholesterol- 357, Triglycerides- 592, Precision PSL- 248.

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Stephanie Pearce RDCS, RVT.

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

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (1.28 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney presented normal size (6.77 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. A small cortical cyst is observed at the lateral aspect. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney presented normal size (6.40 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal size (0.53 cm at cranial pole) (0.66 cm at caudal pole) (1.93 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.64 cm at cranial pole) (0.61 cm at caudal pole) (1.95 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**Spleen**

The spleen is normal in size (1.54 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few tiny hyperechoic nodules are observed throughout the organ. Splenic vasculature is normal.

### ***Liver***

The liver is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits a finely heterogeneous pattern. No focal lesions are observed. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal.

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is gas distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

### ***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***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

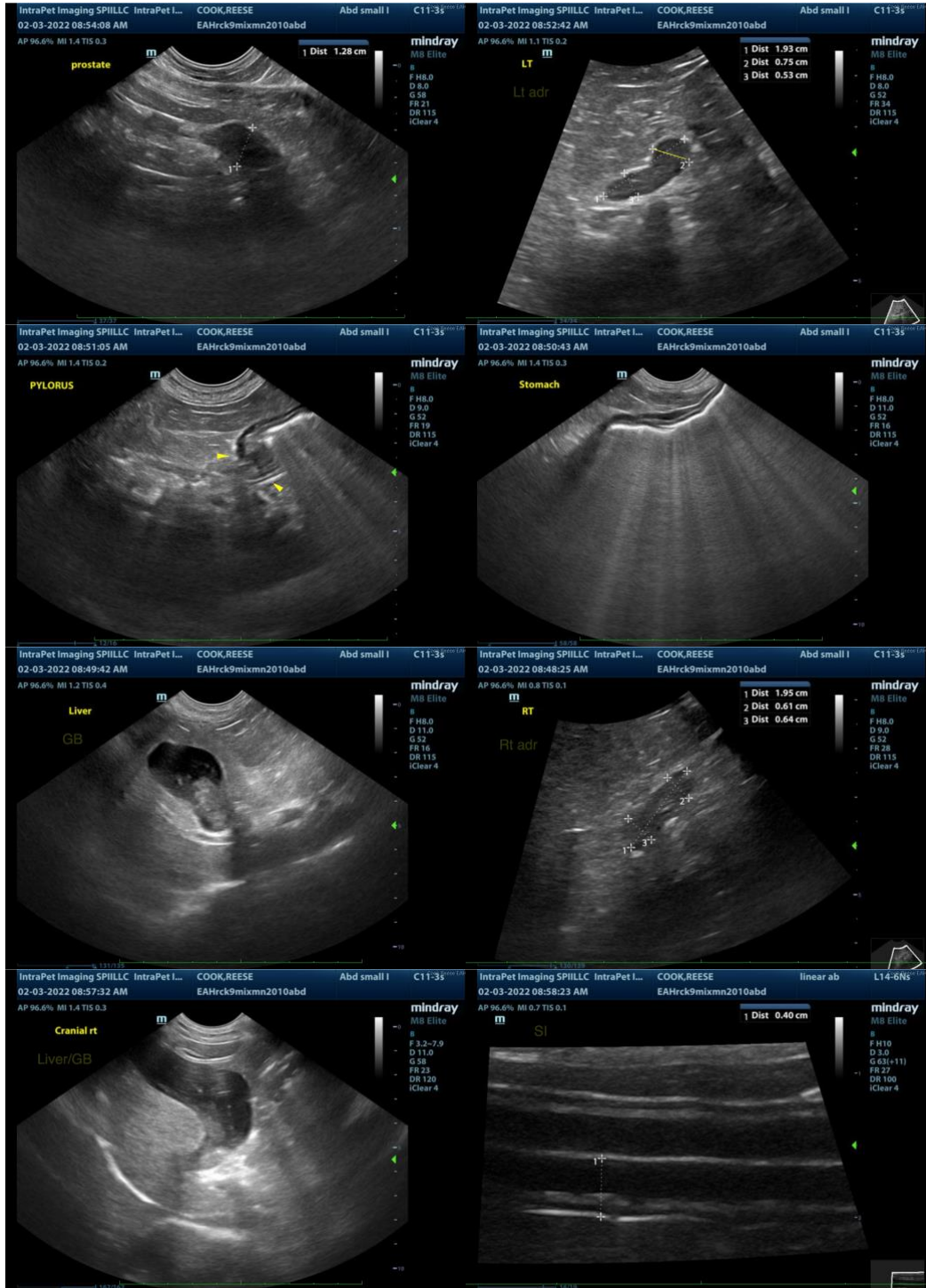
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered unlikely. The slightly elevated total bilirubin in this patient may be artifactual due to sample hemolysis. Consider repeating this test to ensure accuracy.
- Gallbladder debris, non-mucocele

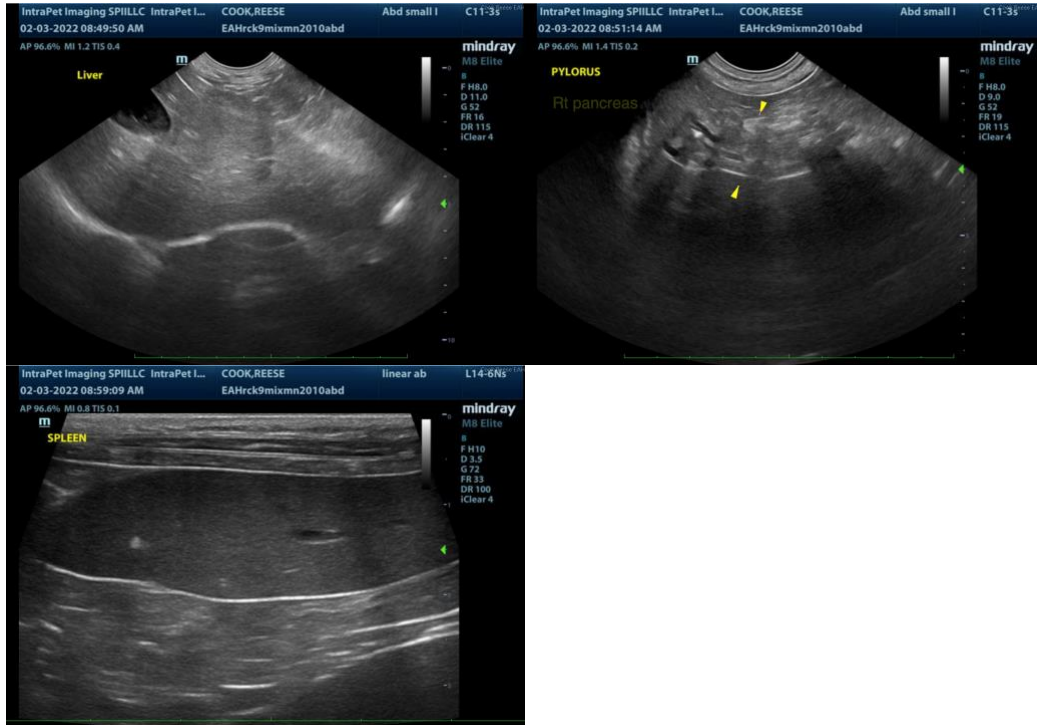
### **Secondary Findings**

- Age-related pancreatic and renal changes
- The splenic nodules are likely benign (i.e., myelolipomas)

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

- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. Consider repeating a total bilirubin at this time to determine if the original slight elevation is artifactual due to hemolysis. If liver values continue to increase, repeat abdominal ultrasound +/- hepatic tissue sampling may be warranted.





**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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