

**DATE PRESENTING CLINICAL SIGNS**

3/14/23

Elevated ALT started in November.

**PATIENT**

Roger Gunzelman

Current Medications: Simparica Trio.

Lab Results: 11/22 ALT 144, 3/6/23 ALT 190 (10-125).

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Patient sedated with Alfaxalone &amp; Torbugesic.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**SPECIES**

Canine

**BREED**

Labradoodle

**SEX**

Male, neutered

**AGE**

3/26/2011

**WEIGHT**

53 lbs.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
 Diplomate ACVIM  
 (Small Animal Internal  
 Medicine)

**HOSPITAL NAME**

Perry Hall AH

**REFERRING VET**

Dr. Hatzigiannakis

**INVOICE**

14741

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

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately 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 (0.94 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (5.94 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (5.41 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**Adrenal Glands**

The left adrenal gland is normal size (0.71 cm at cranial pole) (0.52 cm at caudal pole) (1.73 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 (0.87 cm at cranial pole) (0.68 cm at caudal pole) (1.98 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 (2.16 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**Liver**

The liver is subjectively normal in size with slightly irregular peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely heterogeneous with ill-defined, small hyperechoic nodules throughout the organ. There is a subtle increase in portal markings. Vascular is 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 mostly gravity-dependent echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

### ***Gastrointestinal***

The gastric lumen is not distended. The gastric wall is 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. There is no evidence of an obstructive pattern.

### ***Pancreas***

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional 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:**

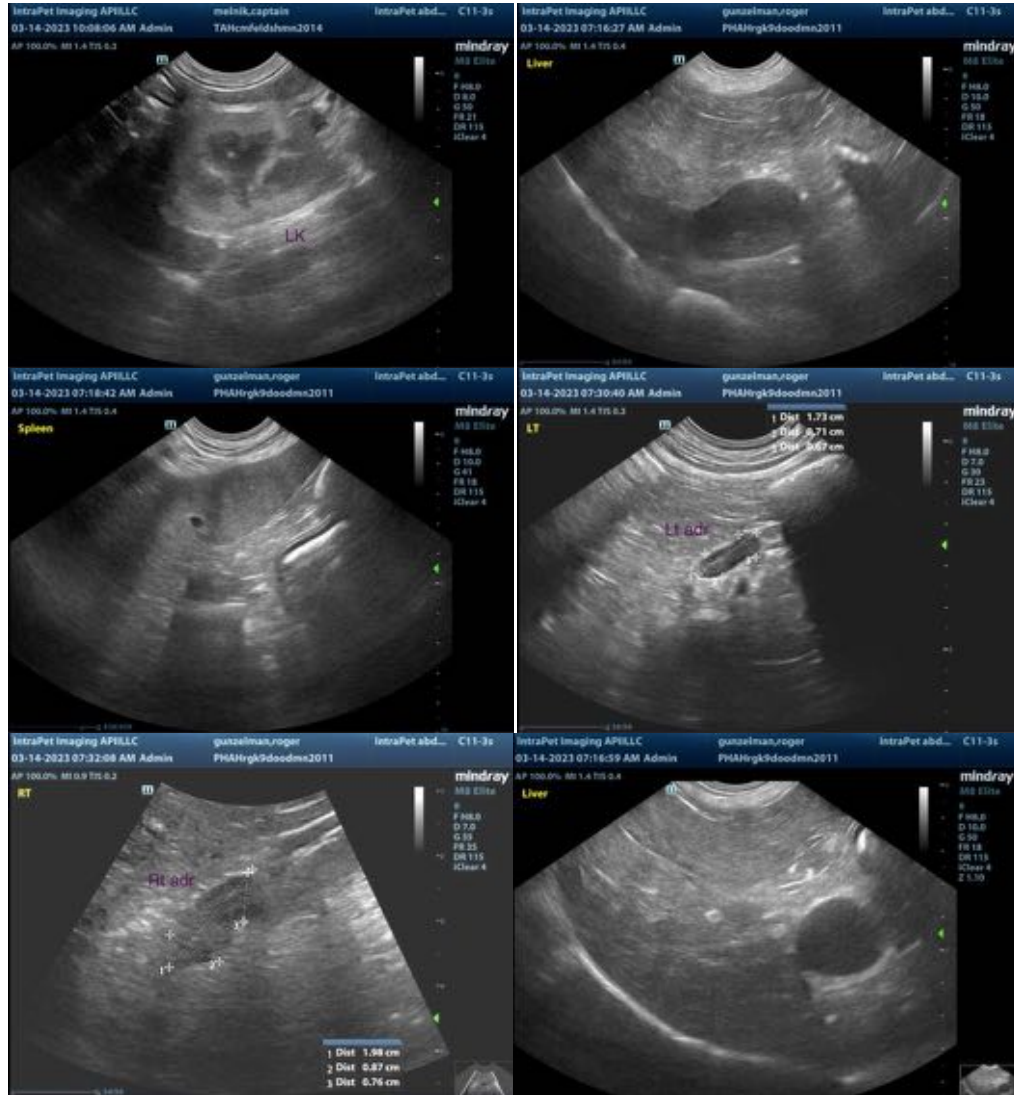
- The hepatic changes could be consistent with diffuse inflammatory disease (i.e., chronic hepatitis, bacterial cholangiohepatitis), fibrosis, regenerative nodular hyperplasia, vacuolar hepatopathy, infiltrative neoplasia, other hepatopathy or some combination thereof.
- Gallbladder debris- incidental.

### **Secondary Findings:**

- Bilateral, non-specific chronic age-related renal changes.

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

- Per the sonographer, fine needle aspiration of the liver is not a viable option due to poor accessibility. Therefore, in order to obtain a definitive diagnosis, laparoscopic or surgical hepatic biopsies would be necessary. If pursued, hepatic copper quantitation is also recommended along with aerobic and anaerobic bile cultures.
- Leptospirosis testing can also be considered. However, the sonographic appearance suggests chronicity, making Leptospirosis less likely.



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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