

**DATE PRESENTING CLINICAL SIGNS**

5/9/22

Found liver nodules in 7/21. Dog has been clinically doing ok but liver chems rising in the last few months. O would like to make sure nothing else is going on. Hx allergy issues. Being tx for chronic skin infections due to allergies.

**PATIENT**

Larry Larkin

Current Medications: Levothyroxine 0.5mg BID, Baytril 126mg 1.2 SID, Doxycycline 100mg 2 BID, Vitamin D, Herbs for allergies.

Lab Results: 7/21 ALKP 1964, ALT 602, AST 132, GGT 15. 10/21 ALKP 1145, ALT 301, AST 70, GGT 7. 4/22 ALKP 2285, ALT 574, AST 178, GGT 12, T4 3.1, FT4 37.8.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: 7/29/21. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Labrador

Imaging Performed By: Rachel Brillhart, RDMS.

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

Male, neutered

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and the visible portion of the proximal urethra are normal.

**AGE**

9/18/2010

The prostate is normal in size (1.48 cm in width) with a slightly irregular shape. A 1.10 x 0.43 cm irregular hyperechoic nodule is observed within the parenchyma. The lesion causes slight capsular expansion. The remaining parenchyma is homogeneous. The prostatic urethra is not overtly dilated.

**WEIGHT**

86.2 lbs.

The left kidney is normal size (7.53 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

The right kidney is normal size (7.67 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Healing Paws  
 Veterinary Wellness

**Adrenal Glands**

The left adrenal gland is normal size (0.57 cm at cranial pole) (0.63 cm at caudal pole) (2.64 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.

**REFERRING VET**

Dr. Levitsky

The caudal pole of the right adrenal gland is visualized and is upper limits of normal size (0.90 cm in width) with a normal shape, glandular echogenicity and detail. Surrounding vasculature appears normal.

**Spleen****INVOICE**

13322

The spleen is normal in size (1.90 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

**Liver**

The liver is subjectively prominent in size with irregular peripheral contours. Heterogeneous nodules/masses are observed throughout the organ. On the right side, a >14 cm region of coalescing nodules/masses is observed. There is no visibly normal hepatic parenchyma. Vascular and biliary tracts are of normal volume with no evidence of congestion. The portal vein: caudal vena cava ratio is approximately 1:1. The gallbladder 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.

### ***Gastrointestinal***

The gastric lumen is minimally fluid 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. There is slight disruption in the normal 1:3 muscularis:mucosal ratio in some segments. Discrete masses are not identified. The colonic wall is normal. No obstructive disease is noted.

### ***Pancreas***

A portion of the pancreas is obscured by the hepatic pathology. In the visualized portions, no obvious abnormalities are seen.

### ***Free Abdomen***

There is no evidence of free fluid. A 1.91 x 0.63 cm medial iliac lymph node is visualized. The node is normal in shape and echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

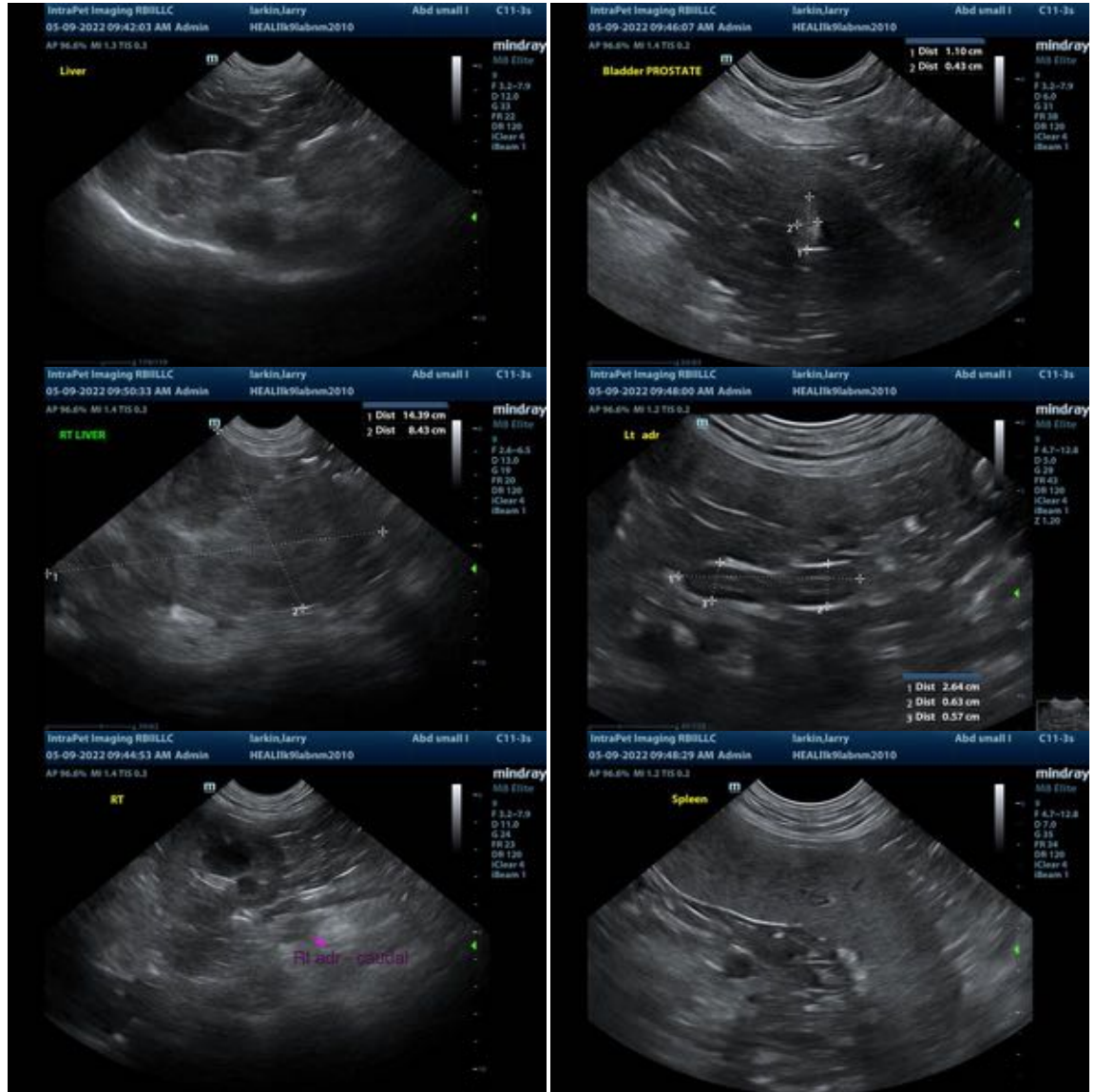
- Diffuse hepatic nodules/masses. Neoplasia is suspected with a lower possibility of multifocal inflammatory disease or other hepatopathy. The changes are similar to somewhat more advanced compared to the previous sonogram.
- The hyperechoic prostatic nodule may represent a benign, age-related pathology (i.e., hyperplasia). Alternatively, an early neoplastic process may be present. However, neoplasia is considered less likely given the lack of progression since the previous scan.

### **Secondary Findings:**

- Minor age-related renal changes.
- The splenic parenchyma changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis or splenitis with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- The prominent medial iliac lymph node is likely reactive with a low possibility of emerging neoplasia.
- The small intestinal wall changes could be consistent with inflammatory bowel disease. However, correlation with the patient's clinical history is recommended.

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

- Thoracic radiographs (three-view) are recommended to assess for pulmonary metastatic disease.
- Given the diffuse hepatic pathology and the likelihood of neoplasia, palliative care is recommended.



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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