

**DATE PRESENTING CLINICAL SIGNS**

2/16/23 Historically elevated Liver values, most recently increased from previous highs. Currently under management for a grade 4 lameness of pelvic limb- suspected CCL rupture.

**PATIENT**

Finn Leach Current Medications: Galliprant, Gabapentin, Discontinued Rimadyl.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Patient sedated with Dexdomitor.

Stat Report: Not requested.

**SPECIES**

Imaging Performed By: Andi Parkinson, BS, RDMS.

Canine

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

Labrador X

The urinary bladder is moderately 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.

**SEX**

Neutered Male

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

**AGE**

12/27/11

The right kidney is normal in size (6.89 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.

**WEIGHT**

85 Pounds

The left kidney is normal in size (7.09 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

**Adrenal Glands**

The right adrenal gland is normal in size (2.6 cm long x 0.90 cm at the cranial pole and 1.0 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Belvedere Vet Center

The left adrenal gland is normal in size (3.23 cm long x 0.92 cm at the cranial pole and 0.94 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**REFERRING VET**

Dr. Moulder

**Spleen**

The 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). No focal nodules or masses are observed. Splenic vasculature appears normal.

**INVOICE**

45311

**Liver**

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. However, in the mid caudal liver, there is a 10. cm x almost 6.0 cm heterogeneous, non-cavitated mass, as well as multiple smaller nodules in the deeper right liver, including several 1.5-2.0 cm hypoechoic nodules and a 1.5 cm x 2.0 cm cystic nodule. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild to moderate suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

### ***Gastrointestinal***

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### ***Pancreas***

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### ***Free Abdomen***

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

## **ULTRASONOGRAPHIC FINDINGS**

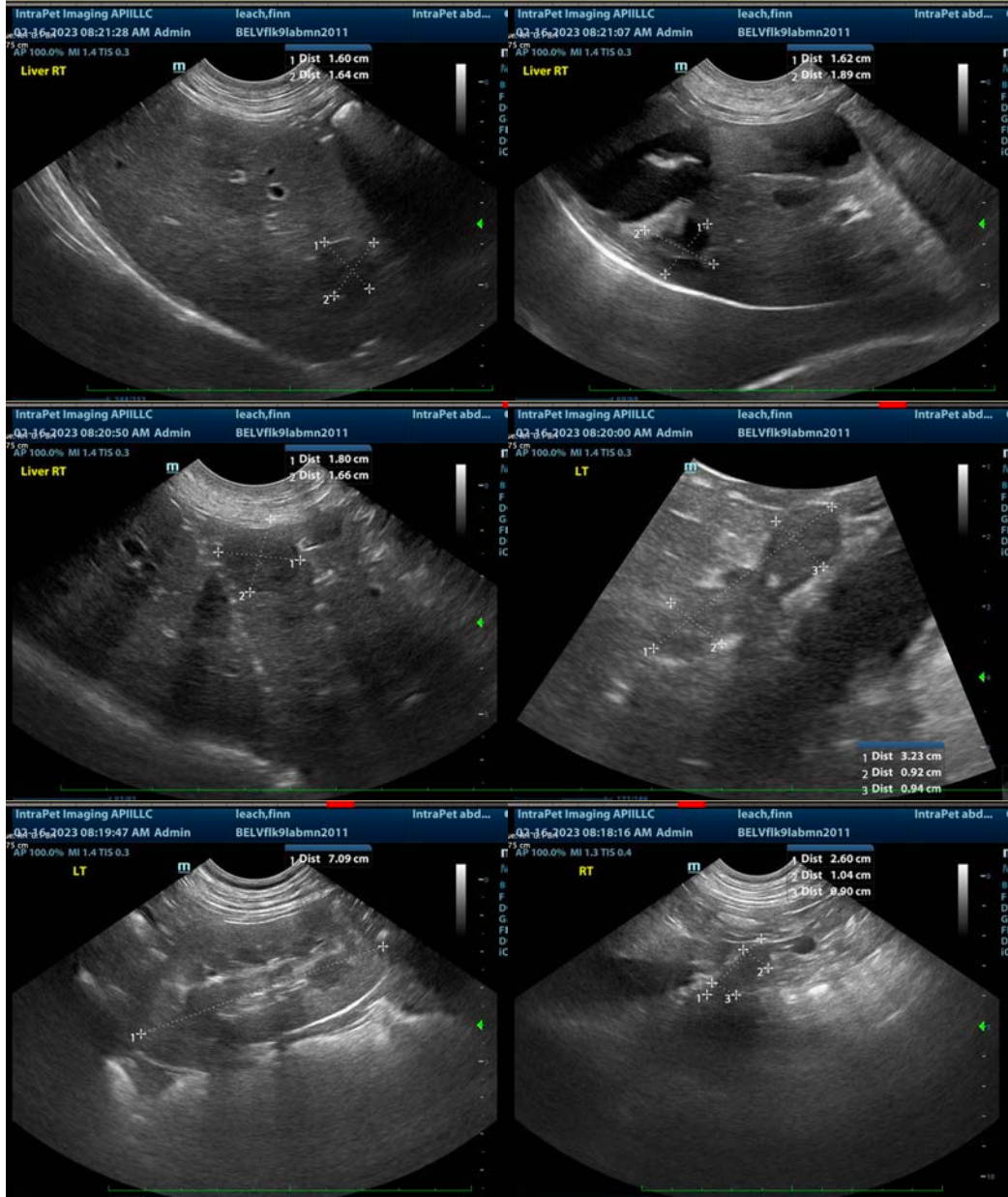
- **Heterogeneous liver mass** – concerning for infiltrative neoplasia such as primary hepatic neoplasia versus round cell neoplasia, sarcoma, or even metastatic disease. A benign change. nodular hyperplasia, chronic inflammatory change, etc. is possibly but considered less likely. The deeper hypoechoic nodules may represent the same underlying etiology or a metastatic process, but are more consistent in appearance with benign nodular hyperplasia, steroid or vacuolar hepatopathy, extramedullary hematopoiesis, etc.
- **Mild to moderate gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

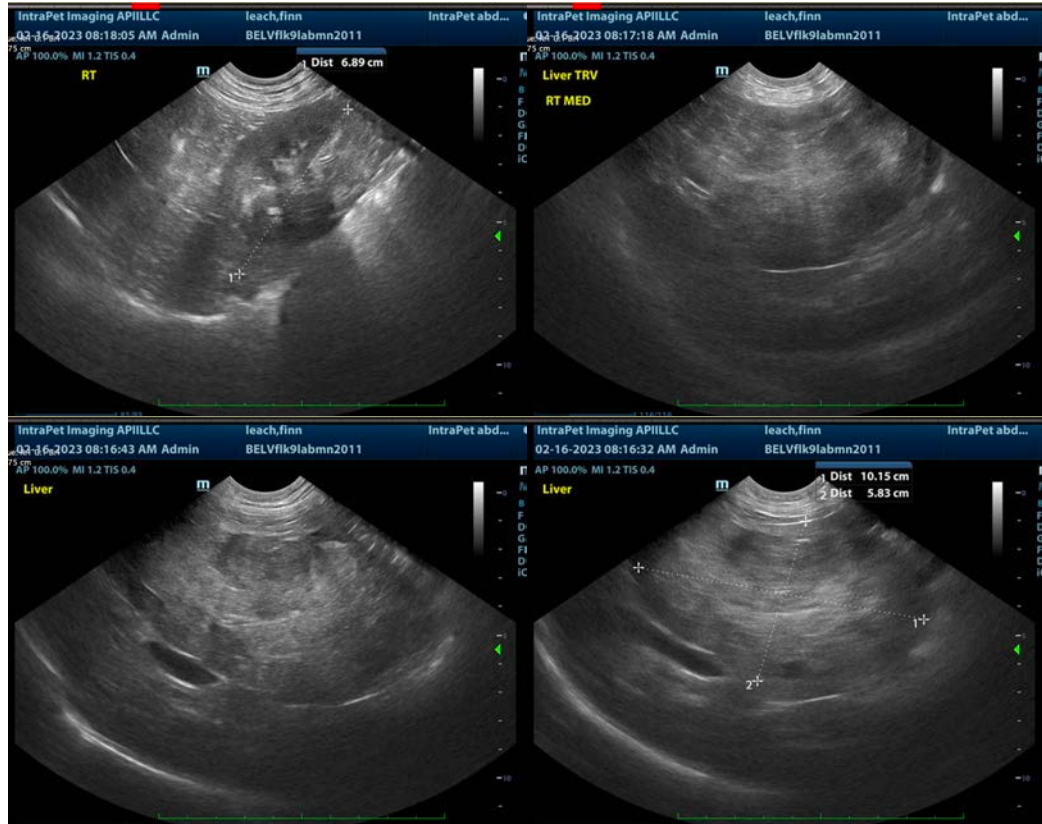
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

Fine needle aspirates of the liver mass as well as the more diffuse heterogeneous change are recommended if patient's coagulation status is appropriate.

While ultrasound can't guarantee resectability, the focal mid caudal liver mass appears resectable if the smaller nodules are not consistent with a metastatic process.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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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