

**DATE PRESENTING CLINICAL SIGNS**

1/10/23

Elevated liver enzymes, hypercholesterolemia, hypercalcemia, hyperglobulinemia, mild azotemia (no urine so unclear if pre-renal or renal). Liver enzymes elevated since at least Dec 2021 (waiting for that lab work so not clear what progression has been). Pre-dental labs performed 12/1/22 revealed marked cholestatic liver enzyme elevation and other changes as above. Unclear if any clinical signs (none noted in record, case will get a same day scan with first consult).

**PATIENT**

Tilly Busch

**SPECIES**

Canine

Current Medications: None known.

Lab Results: 12/1/22: Glob 4.0, AST 68, ALT 813, ALP 4533, BUN 39, creat 1.5, total Ca 11.7, K 6.1 (normal Na 147), chol 635. CBC--PLT 656K

Date of Previous IntraPet Ultrasound: No previous.

**BREED**

Labrador

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

**SEX**

Spayed Female

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

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**AGE**

6/16/10

The left kidney has a normal shape and size (6.03 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**WEIGHT**

30 kg

The right kidney has a normal shape and size (6.58 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**HOSPITAL NAME**

Nexus Vet Specialists

**Adrenal Glands**

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect.

**REFERRING VET**

Dr. Steele

The right adrenal gland is normal in size measuring 0.80 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**INVOICE**

44062

**Liver**

The liver is large and irregular. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. There is a large, irregular, slightly lobulated, isoechoic mass effect visualized on the left side of the liver, measuring approximately 15.58 cm x 9.49 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

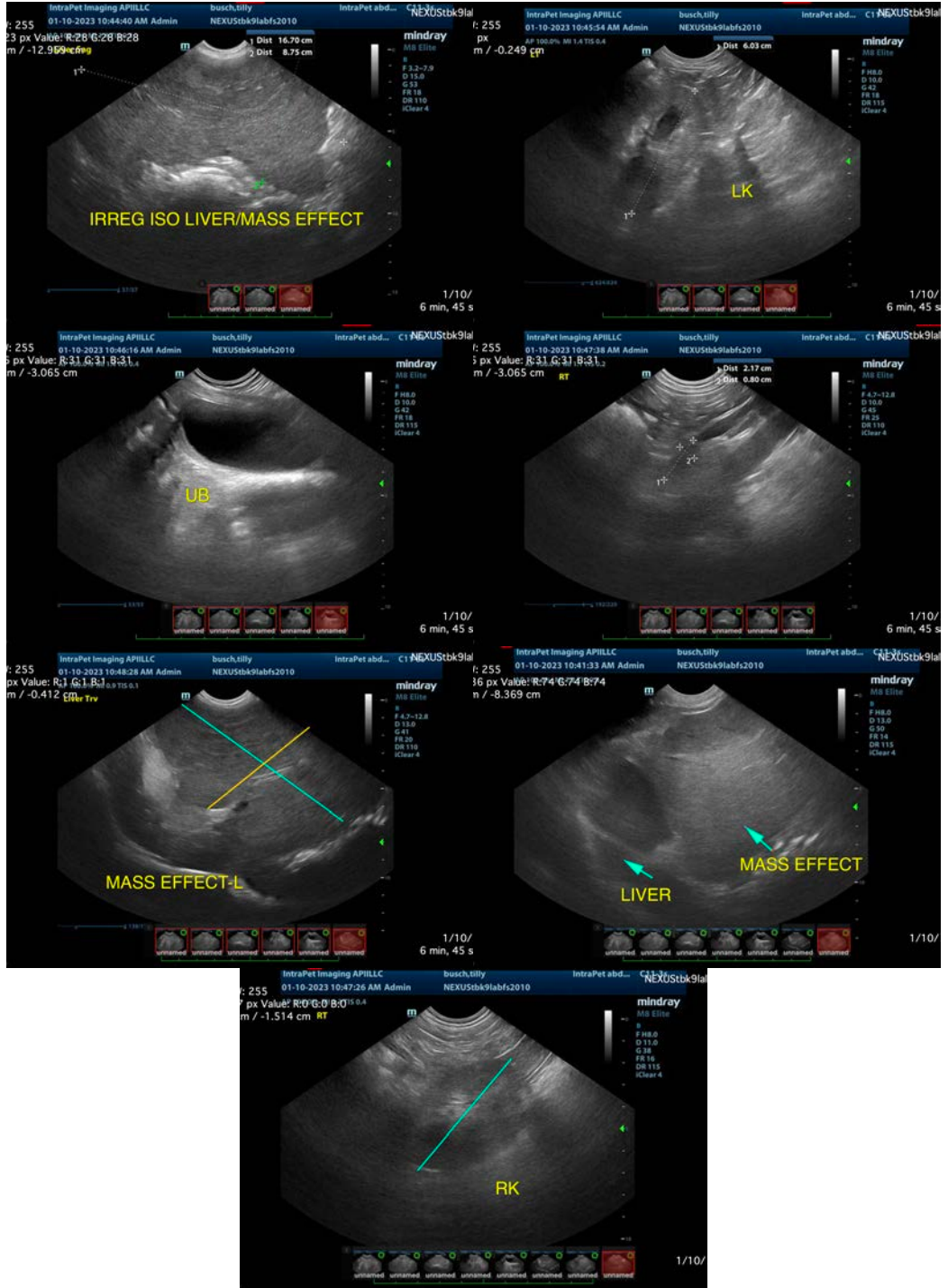
- Large, irregular, isoechoic mass effect on the left side of the liver – Findings are concerning for a primary hepatic mass (adenoma, carcinoma, etc.).

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

On the left side of the liver, there is a large, lobulated, isoechoic area of liver most consistent with a hepatic mass. No significant parenchymal changes are visualized.

Further diagnostic and therapeutic recommendations regarding this exam to be made by Dr. Cara Steele.





**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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)  
kathleen.sennello@sonopath.com