

IMAGING PERFORMED BY

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**DATE PRESENTING CLINICAL SIGNS**

11/15/22

Follow-up ultrasound to monitor for any liver mass growth. If growth has occurred then guided FNA to be performed.

**PATIENT**

Cookie Smith

Current Medications: None.  
Date of Previous IntraPet Ultrasound: 8/9/22. See attached.  
Sedation: IV sedation.  
Stat Report: Not requested.

**SPECIES**

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

DSH

**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.

**SEX**

Spayed Female

The left kidney has a normal shape and size (3.85 cm). Overall echogenicity is slightly hyperechoic with mildly reduced 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.

**AGE**

6/18/10

The right kidney has a normal shape and size (3.75 cm). Overall echogenicity is slightly hyperechoic with poor 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**

13 Pounds

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.53 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.53 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.

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**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.

**HOSPITAL NAME**

Bel Air Vet Hospital

**Liver**

The liver is subjectively normal in size but irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a large hypoechoic superficial mass lesion towards the caudal aspect of the liver, measuring 7.57 cm x 3.54 cm (previous measurement 8.52 cm x 3.13 cm on 8/9/22), and a deep hypoechoic nodule measuring 1.38 cm x 0.94 cm (previous measurement 1.58 cm x 0.86 cm).

**REFERRING VET**

Dr. Young

**INVOICE**

42786

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The proximal bile duct appears mildly dilated and tortuous at 0.25 cm.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm 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 uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.23 cm. 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. There are mildly enlarged mesenteric lymph nodes, examples measure 0.43, 0.28, and 0.38 cm. The omentum is of normal echogenicity.

## **PRIMARY FINDINGS**

- Mildly heterogeneous liver with a hypoechoic mass effect and focal hypoechoic nodule – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy. Both lesions appear relatively stable and have not changed significantly in size or appearance.
- Moderate gallbladder debris with a mildly prominent bile duct – Dilation of the common bile duct could be consistent with a functional obstruction (i.e. primary hepatic disease resulting in hepatocellular swelling) or with an extrahepatic bile duct obstruction (ie. choledocholith, bile duct tumor, pancreatic disease, other).
- Prominent mesenteric layer to the small intestine – The small intestinal wall changes could be consistent with an underlying inflammatory process. These types of changes can sometimes be seen in normal older cats. Correlate with clinical signs.
- Mildly enlarged mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely. While these lymph nodes are not severely enlarged, they appear somewhat more prominent than they did on the last scan.

## **SECONDARY FINDINGS**

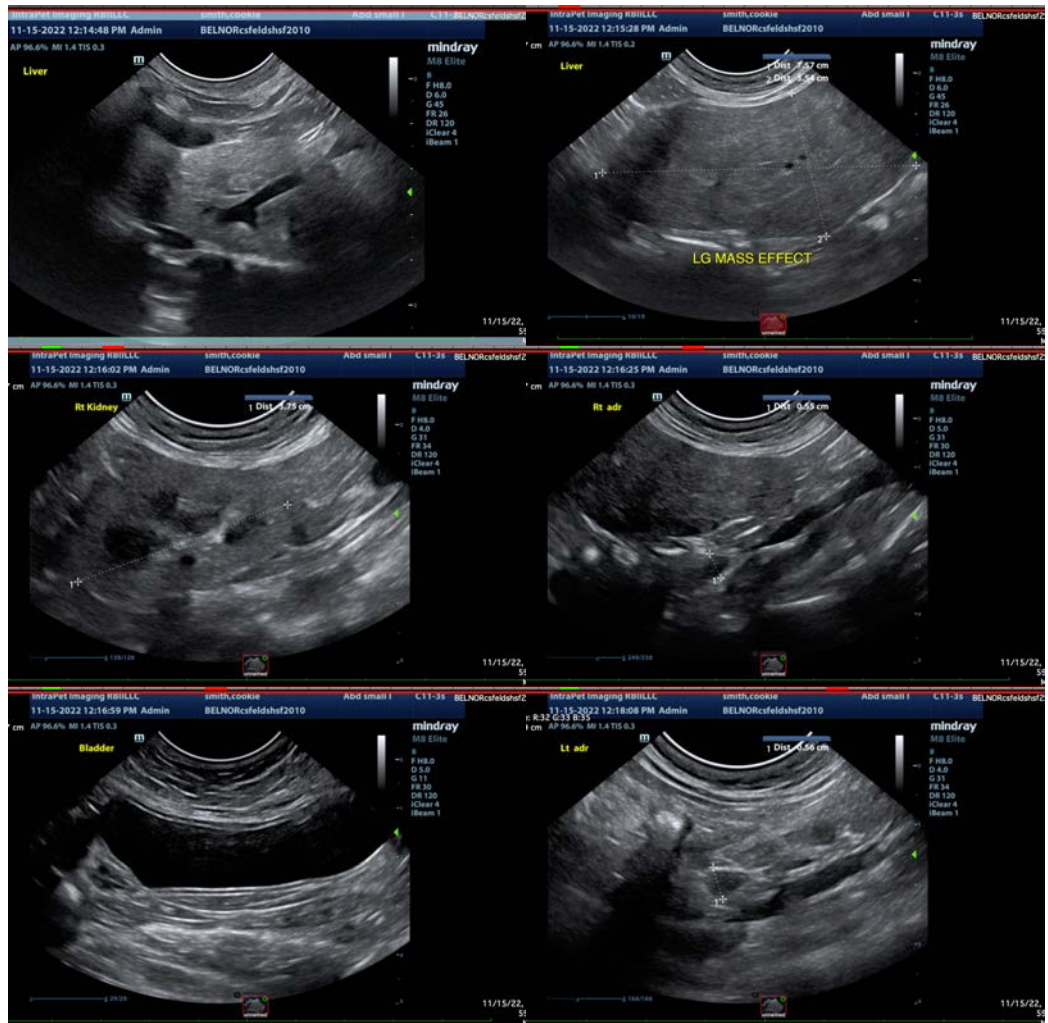
- Mildly reduced corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.

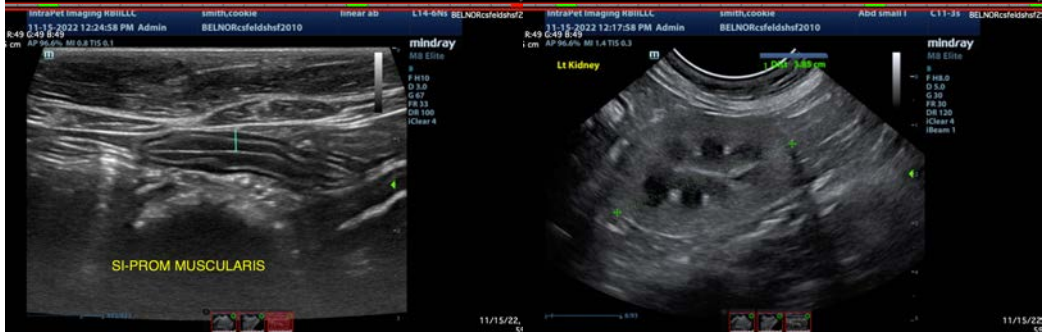
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The liver mass lesion and the hypoechoic nodule appear relatively stable in size and appearance. A fine needle aspirate of the larger mass was performed during today's scan for cytologic evaluation.

Additionally, the renal changes are stable, and the changes observed in the small intestine. If there are no significant GI signs, then a prominent muscularis layer can be normal for some older cats.

The mesenteric lymph nodes appear slightly more prominent on today's scan than on the previous scan. If this patient is losing weight or not doing well, a fine needle aspirate of a larger lymph node could be considered. Options moving forward would include further evaluation for possible surgical intervention/removal of the mass lesions, etc., or continued monitoring with ultrasound. If your cytologic evaluation is supportive of a neoplastic process, consider consultation with a veterinary oncologist.





**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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