

**DATE PRESENTING CLINICAL SIGNS**

7/19/22

Seen 7/1/2022 for ADR, possible diarrhea and weight loss. Lab work showed elevated WBC, mild anemia, increased globulins. Increased Precious PSL. Initially improved on Cerenia and Metronidazole, then ADR returned.

PATIENT

Glory Rendek

Current Medications: None.

Lab Results: Increased WBC, Glob, PSL.

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Declined.

BREED

Labrador X

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

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

4/2/08

The left kidney has a normal shape and size (6.24 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal. The tissue surrounding the left kidney in the left cranial abdomen is hyperechoic with some scant free fluid.

WEIGHT

45.2 Pounds

The right kidney has a normal shape and size (6.48 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
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Adrenal Glands

The left adrenal gland is normal in size measuring 0.81 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.

IMAGING PERFORMED BY

Stephanie Pearce
RDCS, RVT

The right adrenal gland is normal in size measuring 0.57 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.

HOSPITAL NAME

Abbey AH

Spleen

The spleen is subjectively normal in size, but irregular. The spleen echotexture is heterogenous and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There are multiple hypoechoic lesions visualized within the spleen. One of these is relatively large and cavitated, measuring 1.18 cm x 1.71 cm. This lesion has some free fluid in the area. Additionally, there is a smaller, hypoechoic lesion measuring 1.21 cm visualized in the parenchyma. These lesions deviate the splenic capsule.

REFERRING VET

Dr. Kluttz

Liver

The liver is subjectively normal in size, but is irregular. The parenchyma is severely heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. The liver is very irregular and nodular in shape. There are numerous large, ill-defined mass type lesions arising from the parenchyma in addition to some smaller, more discrete mass lesions and a cavitated mass effect measuring 3.3 cm. The left caudal liver is very abnormal with a lesion measuring 2.1 cm and 1.79 cm. Additionally, there is a mass effect cranial to the right kidney measuring 4.72 cm x 6.57 cm, which could involve the caudate lobe of the right side of the liver.

INVOICE

39644

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are 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 area of 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

There is free abdominal fluid visible, particularly in the left cranial abdomen, but is generalized, and can be seen even at the level of the urinary bladder. There is no significant lymphadenopathy noted, but there is an irregular, hypoechoic mass effect with a cystic region measuring 4.72 cm x 6.57 cm cranial to the right kidney. I suspect this is hepatic in origin, but this cannot be definitively visualized. The omentum is generally hyperechoic, particularly in the left cranial abdomen.

Other

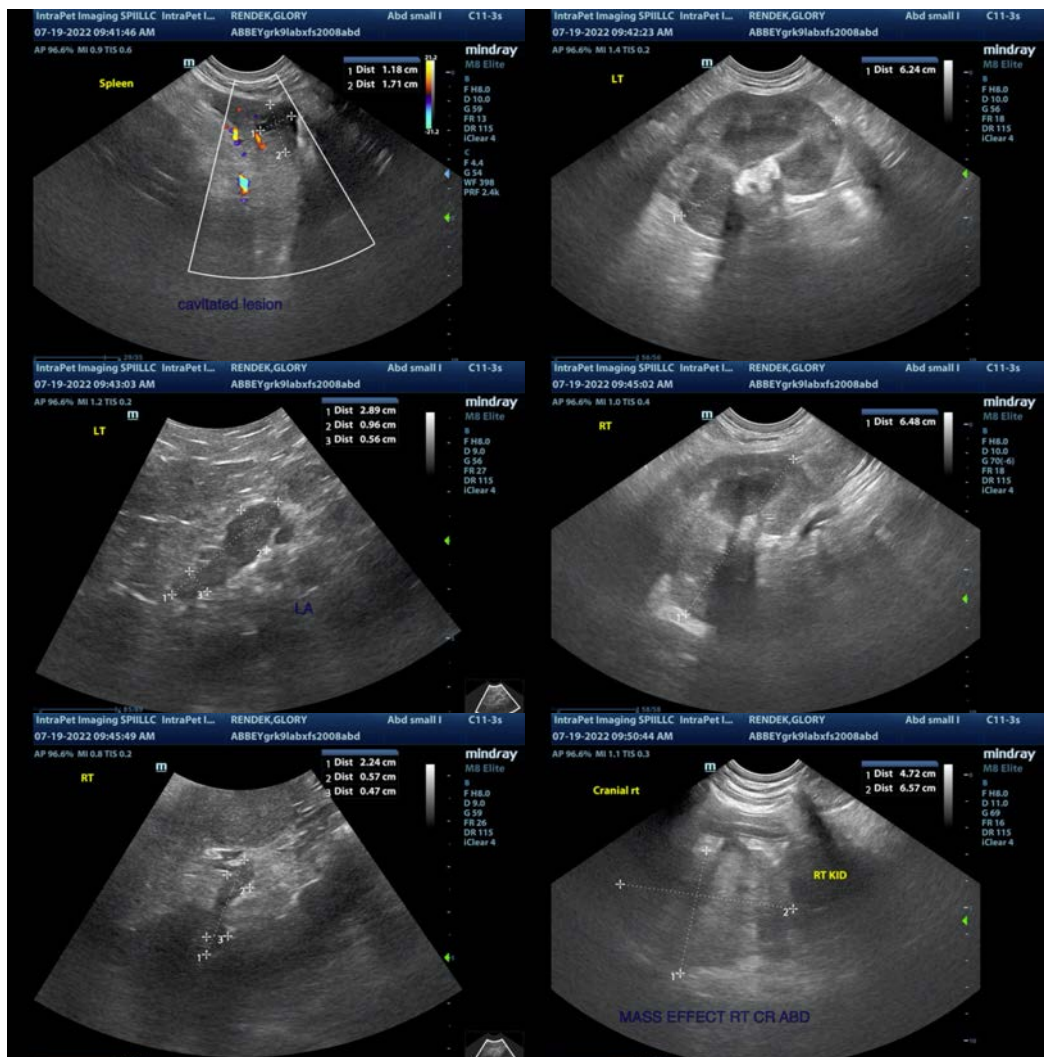
A brief view of the heart was submitted. No significant pericardial effusion was seen.

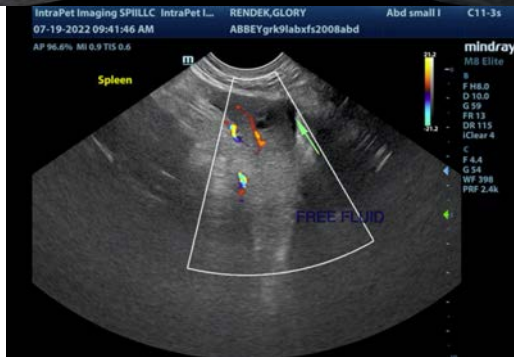
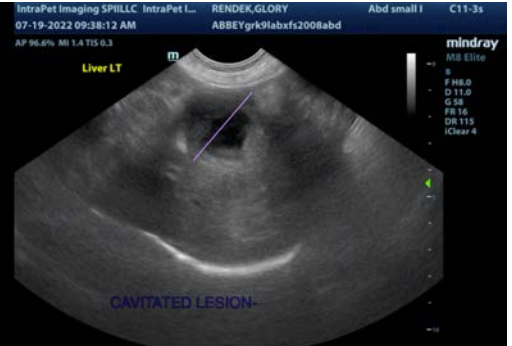
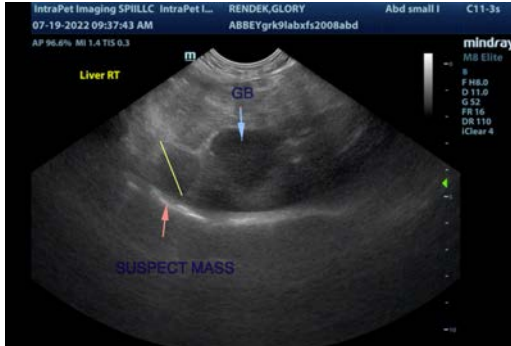
ULTRASONOGRAPHIC FINDINGS

- Irregular, heterogeneous liver with hypoechoic and cystic/cavitated liver masses/nodules – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The multiple irregular lesions are concerning for possible metastatic disease although benign lesions are possible. Consider a fine needle aspirate.
- Hypoechoic (some cavitated) splenic nodules – Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. The cavitated appearance and free fluid in the region of the spleen is more concerning for a possible neoplastic lesion.
- Large, irregular, cystic/cavitated mass lesion cranial to the right kidney – This could be hepatic in origin, an atypical/metastatic lymph node, etc. Consider a fine needle aspirate.
- Mild amount of free abdominal fluid – recommend fluid analysis and cytology, evaluation for possible hemorrhage(?).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Both the liver and spleen are very irregular with numerous mass lesions. Some appear somewhat cavitated in appearance. Additionally, there is a mass lesion cranial to the right kidney, which could be hepatic in origin or originating from some other location. Recommend a fine needle aspirate of a more solid looking hepatic and splenic lesion, as well as a more solid region of the mass in the right cranial abdomen. Recommend 3-view thoracic radiographs, as the concern for a metastatic lesion is high. If a cytologic diagnosis cannot be obtained, consider obtaining surgical biopsies with the intention for a splenectomy, etc. There is concern that the fluid in the abdomen could represent a mild hemoabdomen. Recommend sampling and evaluation.





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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