

**DATE PRESENTING CLINICAL SIGNS**

2/21/23 1 mo hx elevated liver enzymes, unchanged after 30-day course of Denamarin and amoxicillin. Presented for evaluation of SQ mass (cytology shows basal cell tumor).

PATIENT

Gracie Dempsey

Current Medications: None currently.

Lab Results: ALT 323 (10 - 125) prev. 330, 365, AST 80 (0 - 50) prev. 63, 56

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

BREED

Golden Retriever X

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.

SEX

Spayed Female

The left kidney has a normal shape and size (4.8 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.

AGE

9/20/14

WEIGHT

24.8 Pounds

The right kidney has a normal shape and size (4.72 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)

Adrenal Glands

The left adrenal gland is normal in size measuring 0.68 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.

HOSPITAL NAME

Timonium AH

The right adrenal gland is normal in size measuring 0.72 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.

REFERRING VET

Dr. Montessi

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

45369

Liver

The liver is normal in size but slightly irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. On the right side of the liver, there is a large, isoechoic region that appears rounded and subtly mass-like. Findings are most consistent with a large isoechoic hepatic mass or right-sided focal "bulge"/irregularity.

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. Jejunum wall measures 0.28 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, 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.

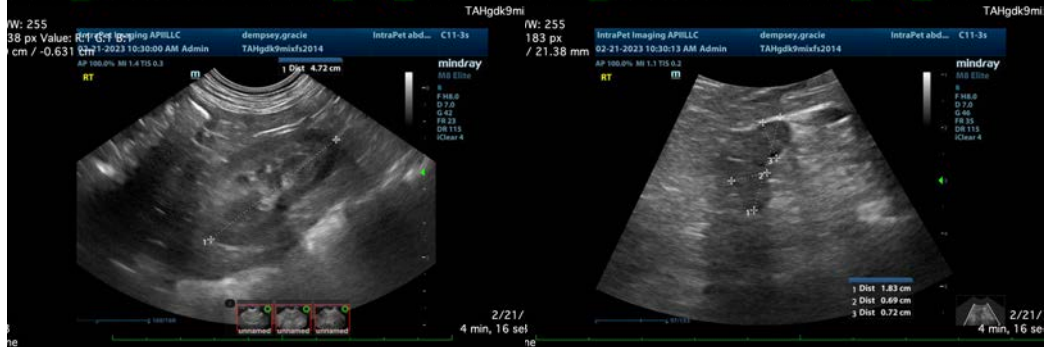
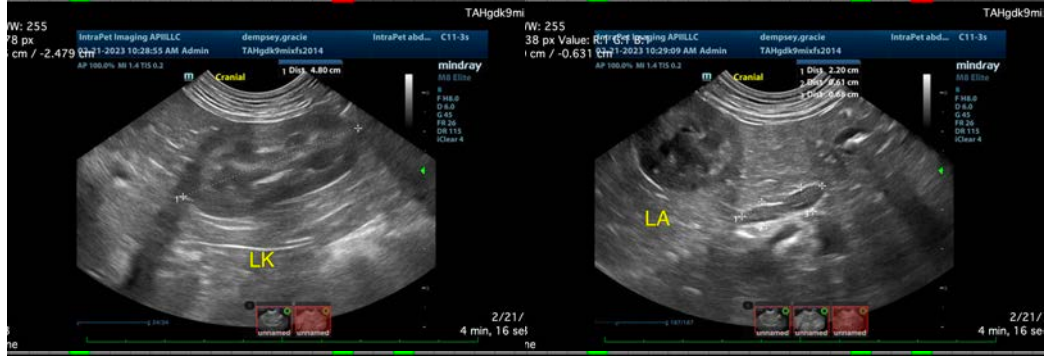
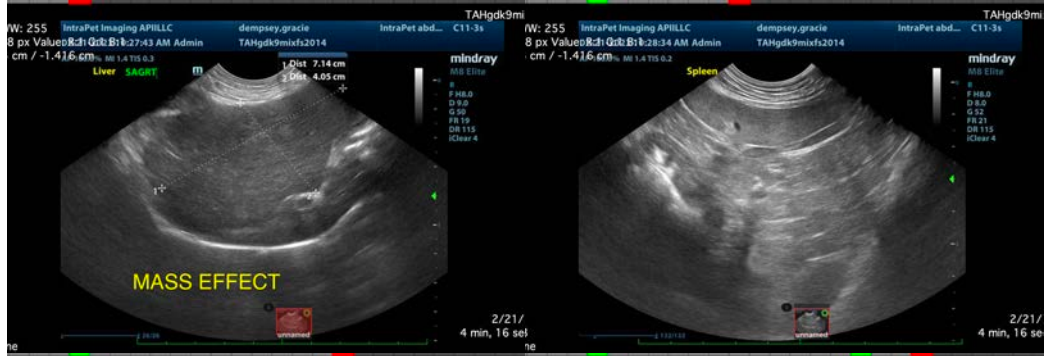
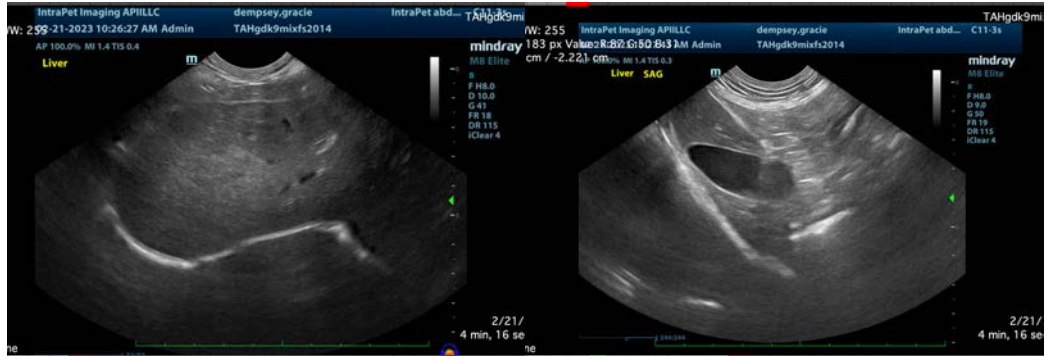
ULTRASONOGRAPHIC FINDINGS

- Slightly irregular, heterogeneous liver with right-sided mass effect – There is a subtle isoechoic mass effect/bulge in the right side of the liver. Findings are most consistent with a hepatoma, less likely carcinoma, or focal parenchymal irregularity.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The right side of the liver appears somewhat rounded, and there is a subtle isoechoic mass effect visualized on that side. These findings are most consistent with a hepatoma, although other types of mass lesions are possible, or this could represent anatomic variation and no significant lesion. Additionally, the liver itself is slightly heterogeneous, which could be a factor in the ALT elevation. Consider a fine needle aspirate from the right side of the liver. If this is concerning, you could consider a contrast CT scan to provide a more global view of the liver to try and assess if further intervention is warranted. Based on the appearance of this lesion, an aggressive neoplastic lesion seems unlikely, but there could be a large benign lesion present.

- Recommend a fine needle aspirate of the right side of the liver (provided coagulation parameters are normal).
- Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.
- Consider screening for Leptospirosis and performing a liver function test.
- Additionally, you could consider a fine needle aspirate of the liver from a “normal” region for the cytologist to contrast.



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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