

**DATE PRESENTING CLINICAL SIGNS**

2/15/23 Recheck US/lab work. Large hepatic mass diagnosed 11/8, presumptive hepatocellular carcinoma. Non-surgical based on CT with surgeon following last visit. Clinically stable. Additional history of typical Addison's, managed with pred/DOCP.

**PATIENT**

Billy Yates Current Medications: Prednisone 1.5mg daily, DOCP 0.9mL once monthly, Advantage multi weekly, Weekly baths Biohex shampoo, Anti-itch supplement (started a couple of months ago), Fortiflora once daily Cosequin w/MSM.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: 11/8/22. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Beagle

Imaging Performed By: Andi Parkinson, BS, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Neutered Male

**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**

6/14/09

The prostate is normal in size (1.1 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**WEIGHT**

10.8 kg

The left kidney has a normal shape and size (5.46 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)

The right kidney has a normal shape and size (6.32 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.

**HOSPITAL NAME**

Nexus Vet Specialists

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.27 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.

**REFERRING VET**

Dr. Steele

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

**INVOICE**

45144

**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.

**Liver**

The liver is large and 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 hyperechoic, slightly mixed echogenic, mildly cystic, multilobulated mass effect in the liver. Exact dimensions are

challenging due to its irregular shape and ill-defined margins in some regions. It measures at approximately 5.84 cm x 10.91 cm (previous measurement 11/8 was 7.26 cm x 6.39 cm).

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 echogenic debris with some shadowing, consistent with small stones/sandy debris. 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 is a section of small bowel that appears moderately fluid distended with possible reduced motility. No evidence of an obstructive process is visualized.

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.

## **PRIMARY FINDINGS**

- Large, hyperechoic, irregular, slightly cystic hepatic mass (likely hepatocellular carcinoma) – Measurements are larger on today's exam, but accurate measurement is challenging due to its irregular shape and poorly defined margins.
- Moderate to large gallbladder debris with some shadowing mineralizations (stones/sandy debris) – Correlate with lab work and clinical signs. Ursodiol could be considered.
- Focal area of small intestinal fluid dilation – Correlate with feeding history and possible radiographs. Findings could be consistent with focal ileus, less likely an obstructive process, etc.

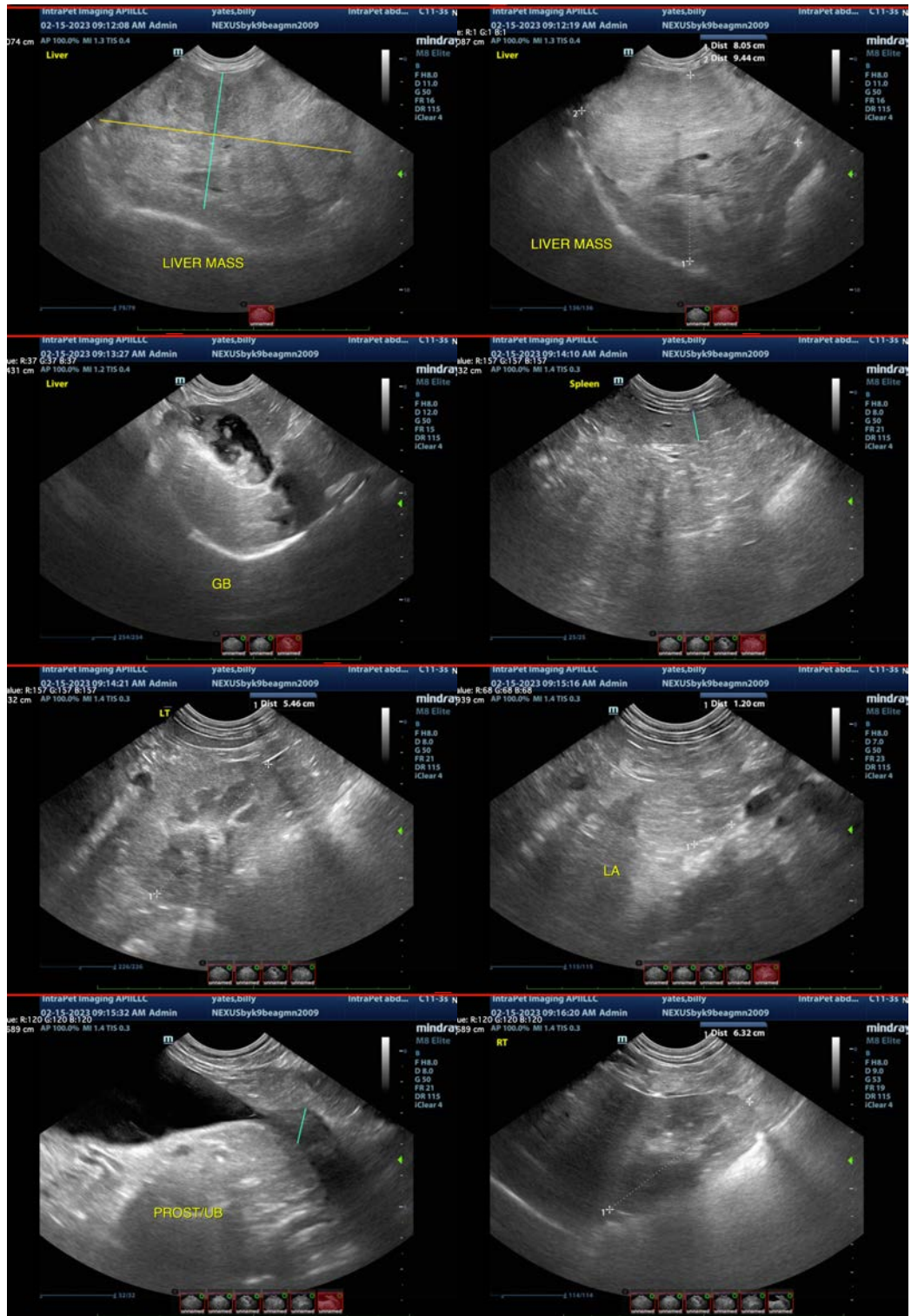
## **SECONDARY FINDINGS**

- Borderline small adrenal glands – This is consistent with the Addison's diagnosis.

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

Ultrasonographic findings include small adrenals, moderate to large, mineralized gallbladder debris, a fluid dilated section of small bowel, and a possibly larger hepatic mass. Subjectively the mass effect appears similar to the previous scan, but measurements on today's exam are significantly larger. There is no evidence of free fluid or metastasis 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.

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