

**DATE PRESENTING CLINICAL SIGNS**

2/28/23

Rising ALT and ALP. Otherwise clinically normal. Maintaining weight, eating well, no GI upset. Significant dental disease and chronic otitis, but otherwise healthy for age on exam.

PATIENT

Remy Becker

Current Medications: Denamarin since 1/3/2023, Clavamox 13.75 mg/kg BID starting 2/24/23, Metronidazole 10mg/kg BID starting 2/24/23

Lab Results: 2/24/2023: ALT >1000, ALP 1925. 1/26/2023: ALT 585, ALP 1915. 12/13/2022: A:T 633, ALP 1746, GGT 23, ALbumin 4.1

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Shih Tzu

Imaging Performed By: Rachel Brillhart, 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

11/8/07

The prostate is normal in size (1.05 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

13.6 Pounds

The left kidney has a normal shape and size (4.15 cm) with small cortical cysts. 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 hydronephrosis. 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 (2.85 cm) with small cortical cysts. 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 hydronephrosis. Renal vasculature is normal.

HOSPITAL NAME

Greenbrier Vet Clinic

Adrenal Glands

The left adrenal gland is normal in size measuring 0.90 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. Whitfield

The right adrenal gland is normal in size measuring 0.66 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.

INVOICE

45565

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 homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. On the left side of the liver, there is a large, irregular, mixed echogenic mass effect measuring >7.71 cm x 6.57 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.

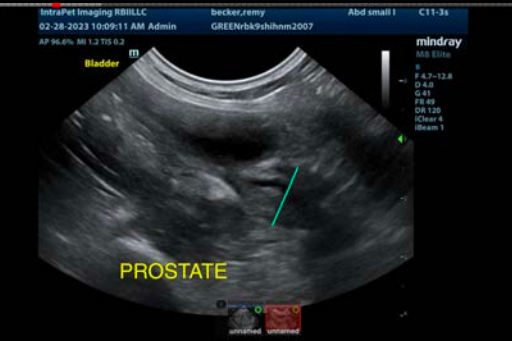
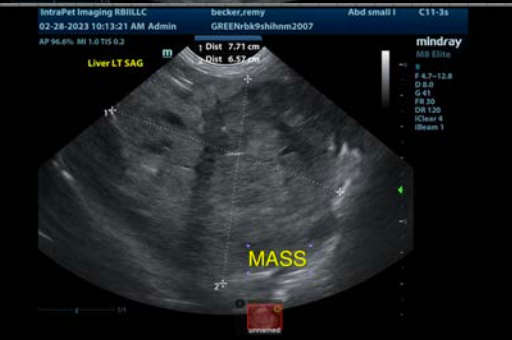
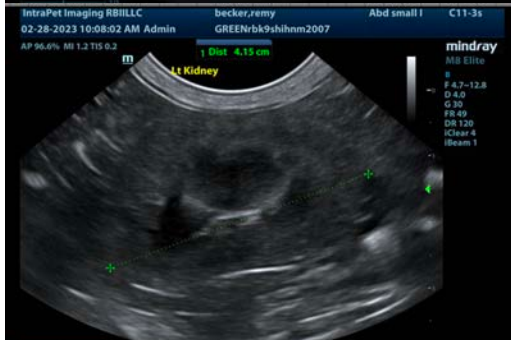
ULTRASONOGRAPHIC FINDINGS

- Decreased corticomedullary distinction in both kidneys with small cortical cysts – The bilateral renal findings are consistent with age-related change.
- Large, irregular, heterogeneous left-sided hepatic mass – Findings are most consistent with a primary hepatic mass (adenoma, carcinoma, etc.).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large left-sided hepatic mass lesion visualized. This is the likely cause for the liver enzyme elevations reported. This is most consistent with a primary hepatic mass, most commonly either an adenoma or carcinoma. These lesions typically grow relatively slowly and are slow to metastasize. If able to surgically resect these lesions, they can be cured. Consider a fine needle aspirate of the mass lesion to rule out an unexpected diagnosis such as round cell neoplasia, etc., and consider a contrast CT scan to try and determine if this lesion can be surgically resected.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.



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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