

IMAGING PERFORMED BY

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DATE PRESENTING CLINICAL SIGNS

2/17/22 History: Screening for pre-op dental. 2/6 systolic murmur, PML L Apex. History of echocardiogram in July in 2020. Mild mitral, moderate tricuspid regurgitation with no heart enlargement and no cardiac medications needed. Mild SLKP elevations and worsening proteinuria, advise bi cavitory prior to dental cleaning.

PATIENT

Benny Wallace Current Medications: Revolution Monthly.

SPECIES

Canine

Lab Results: 02/10/2022: ALT 131, Trig 208, SG 1.024, Pro 3+. 10/25/2019 ALT 122, SG 1.040, Pro 2+. Attached separately.
Date of Previous IntraPet Ultrasound: 07/16/2020.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

BREED

Chihuahua

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

2/2/09

The prostate is normal in size (0.70 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

12.69 Pounds

The left kidney has a normal shape and size (4.48 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 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 (4.7 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 perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

IMAGING PERFORMED BY

Andi Parkinson RDMS

Adrenal Glands

The left adrenal gland is normal/borderline large in size measuring 0.92 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

Everhart Vet Hospital

The right adrenal gland is normal/borderline large in size measuring 0.77 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. Notarangelo

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

35734

Liver

The liver is large in size, and normal in echogenicity with smooth peripheral margins. 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 mid parenchymal hepatic cyst visualized measuring 1.4 cm x 1.2 cm. Additionally, there is a mass effect deep on the left side of the liver measuring 1.2 cm in diameter.

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. Duodenum wall measured 0.41 cm. Jejunum wall measured 0.21 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.

PRIMARY FINDINGS

- Heterogeneous liver with a liver cyst and left-sided mass effect – 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 mass effect visualized is extending from the hepatic margins and is concerning for a possible benign or cancerous neoplasm. Consider fine needle aspirate.

SECONDARY FINDINGS

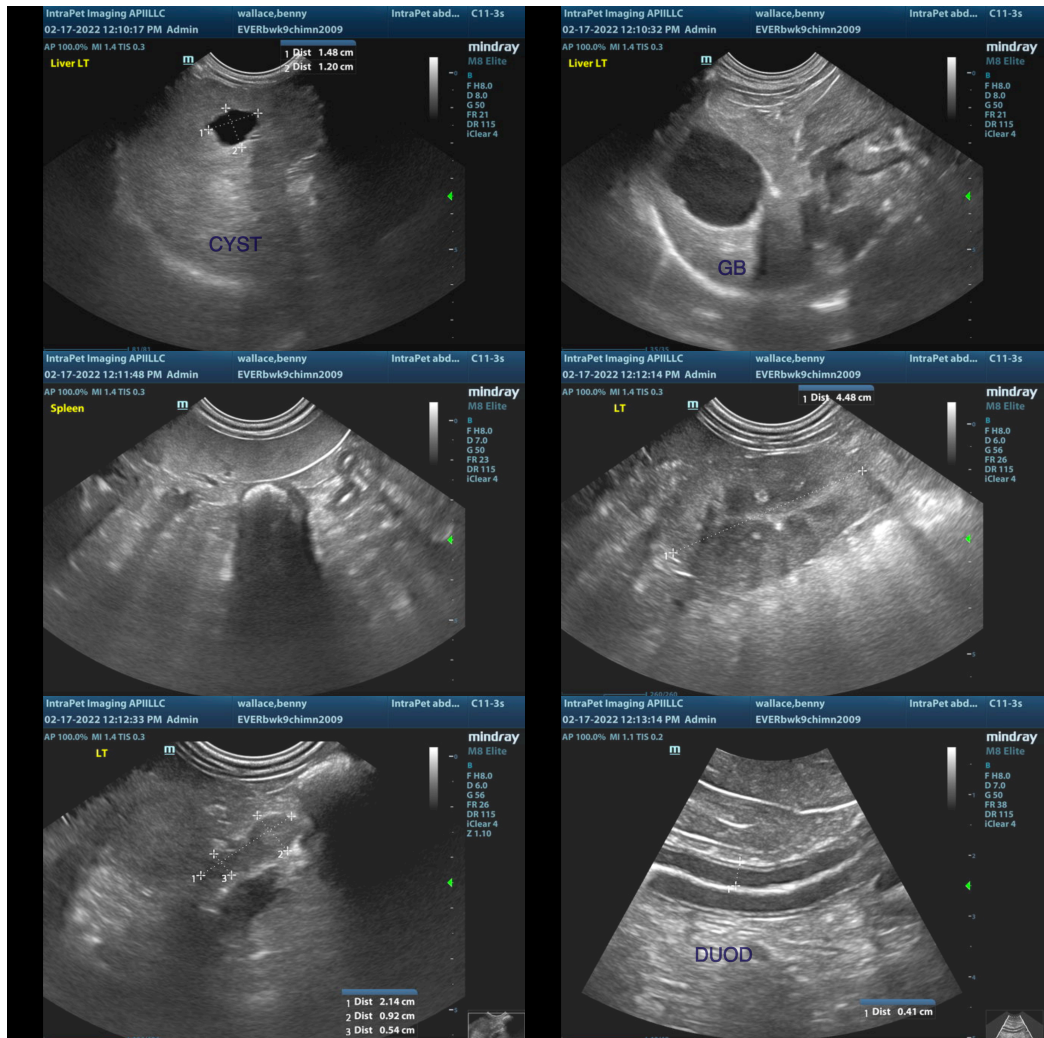
- Decreased corticomedullary distinction in both kidneys with small cortical cysts – The bilateral renal findings are consistent with age-related change.
- Borderline bilateral adrenomegaly – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended. If there are no biochemical or clinical signs associated with Cushing's, this could be within normal limits in this individual.

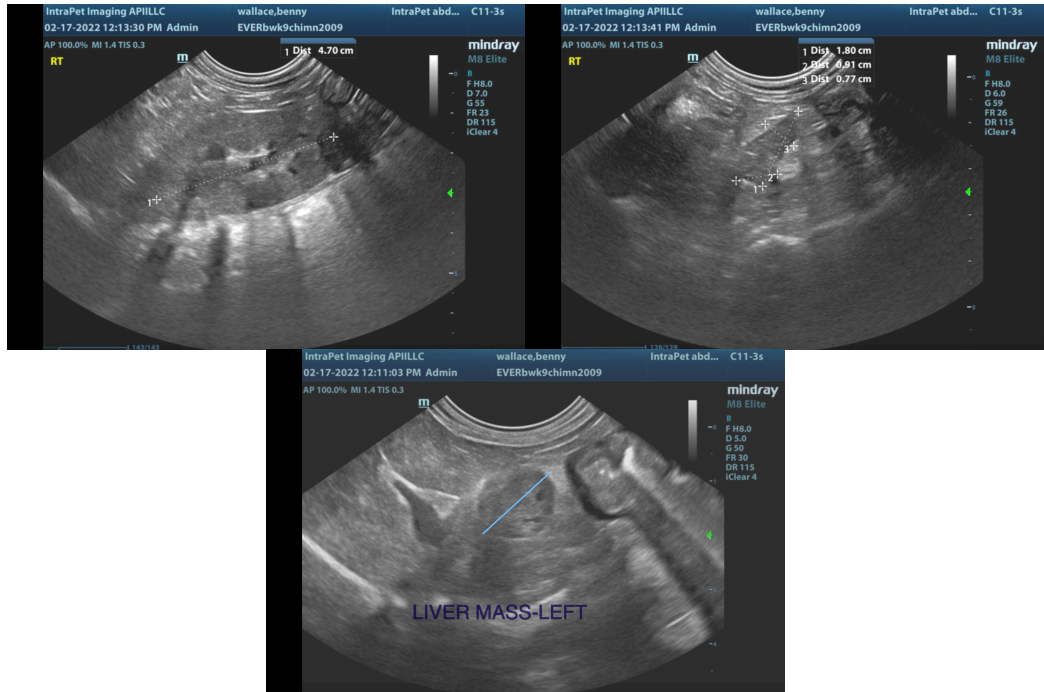
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The significant lesion observed is primarily associated with the liver. There is a small mass effect deep on the left side of the liver. A fine needle aspirate could be considered if a window is available, but otherwise your options are either surgical biopsy or continued monitoring with ultrasound.

The changes visualized in the kidneys are consistent with chronic progressive renal disease and age related change. Given the proteinuria reported, recommend blood pressure evaluation, urine culture, and urine protein/creatinine ratio (I believe these have already been done). If the proteinuria is significant, recommend medical therapy.

Consider three view thoracic radiographs to rule out 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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com