

**DATE PRESENTING CLINICAL SIGNS**

7.21.2022

Acute lethargy and food refusal 4 days ago, runs of VPC and intermittent V-tach on ECG, HR 180. Hypovolemia on chest X-rays. At the ER all weekend on IVF and continuous ECG. After 3 days VPC's shorter runs, HR 100-120, appetite returned somewhat. Ultrasound showed some free fluid around liver and aging liver changes, no other abnormalities.

PATIENTBoo Boo
Miller/Klimovitz

Echo showed some aortic dilation but no cardiac changes to account for arrhythmia. Since discharge, energy is still very low, and appetite is not back to normal.

SPECIES

Canine

Current Medications: None listed.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.

BREED

Rottweiler

Imaging Performed By: Stephanie Pearce RDCS, RVT.

SEX

Neutered Male

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 1-2 cm, are normal.

AGE

1/14/2015

WEIGHT

107 lbs

The **prostate** is normal in size (1.51 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The **left kidney** is normal size (8.60 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The **right kidney** is normal size (8.01 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

Andrea Nicastro, DMV,
 Diplomate DACVIM
 (Small Animal
 Internal Medicine)

HOSPITAL NAME

Stay Pet Veterinary

Adrenal Glands

The **left adrenal gland** is normal size (0.59 cm at cranial pole) (0.72 cm at caudal pole) (3.20 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Dr. Klimovitz

INVOICE

11247

The **right adrenal gland** is normal size (1.04 cm at cranial pole) (0.91 cm at caudal pole) (3.86 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The **spleen** is normal in size (3.05 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The **liver** is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and mildly heterogenous in appearance, with a few, small, ill-defined hypoechoic nodules throughout the organ. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **gastric lumen** is mildly distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

The **peritoneal cavity** is normal. There is no evidence of inflammation or effusion. The abdominal **lymph nodes** are normal/not visible.

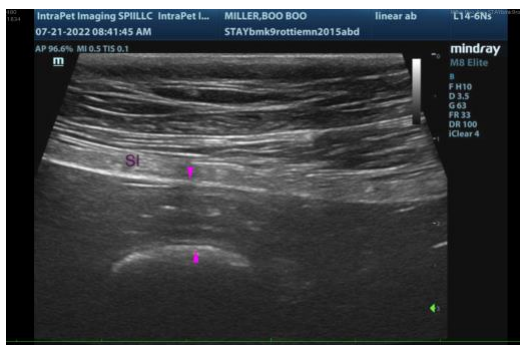
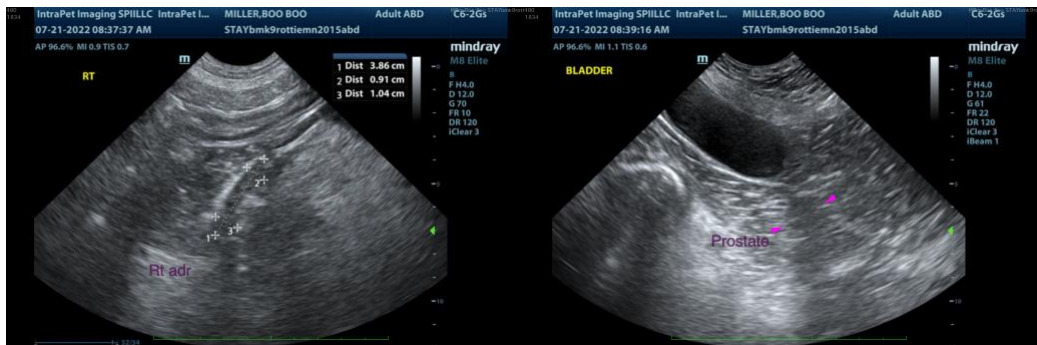
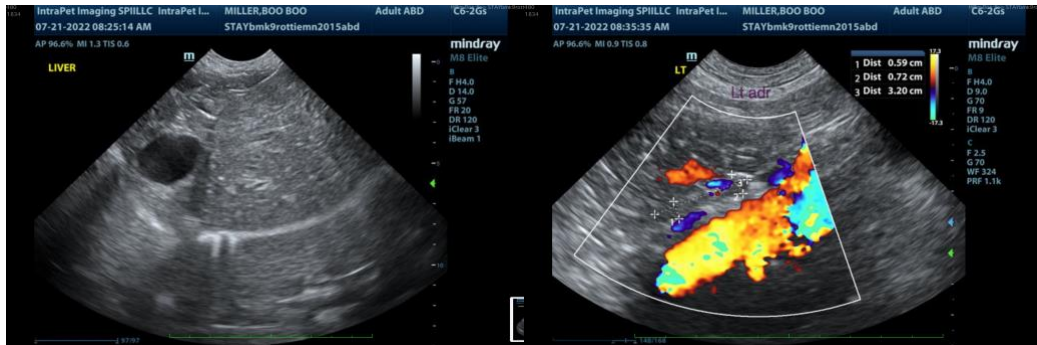
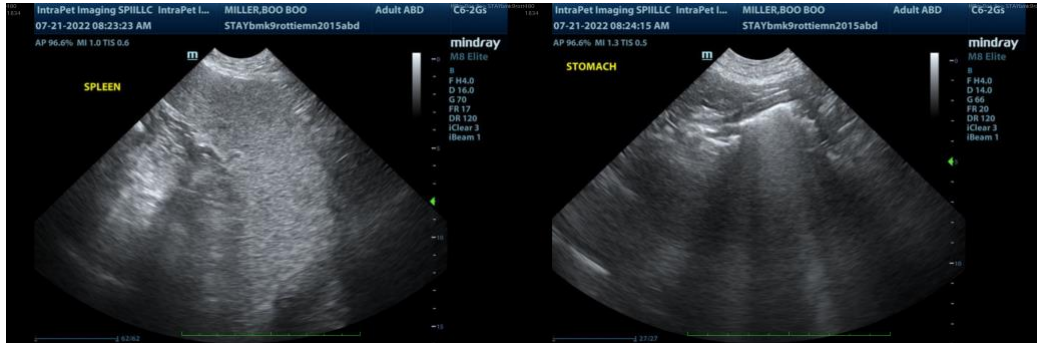
ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. However, correlation with the patient's liver values is recommended.
- The remainder of the abdomen is unremarkable. An obvious cause for the patient's clinical signs and arrhythmia is not identified in this study.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Baseline lab work, including a CBC, chemistry panel, urinalysis and T4 is recommended, if not already performed.
- Given the vague clinical signs, consider further testing for infectious diseases (i.e., tick-borne), particularly if the clinical suspicion for infection is high.
- Also consider orthopedic and neurologic evaluations to assess for non-metabolic causes for the clinical signs.
- Also consider further GI work-up (i.e., fecal evaluation for ova and Giardia, malabsorption (send to Texas A&M)), as gastrointestinal disease can sometimes be associated with transient arrhythmias.



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.

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com