



PATIENT

Luna Schuck

SPECIES

Canine

BREED

Labrador Retriever Mix

SEX

Spayed Female

AGE

1 Year

WEIGHT

61.8 Pounds

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

**IMAGING
PERFORMED BY**

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

Dr. Aronow

INVOICE

18902

DATE

11/30/22

PRESENTING CLINICAL SIGNS

History of collapsing episode. R/O likely seizure vs. hepatobiliary. Current meds: preventatives. Abnormal PE/Chem/CBC/UA Results: ALT/AST too high to register, pending. TP 5.1, albumin WNL, glob. 2.0, bile acid 114, WBC 4.5, GGT 12, CK 468, neutropenia. U/A: pending.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted. Aortic trifurcation was normal.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.4 cm in length. The right kidney measured 6.3 cm in length. No evidence of renal mineralization.

Adrenal Glands

The right adrenal gland was indistinctly visualized owing to patient size and conformation yet without overt pathology, subjectively measuring 0.39 cm at the caudal pole in width.

The left adrenal gland was overtly normal in size positing and shape, measuring 2.2 cm in length x 0.49 cm at the caudal pole in width.

Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas



PATIENT

Luna Schuck

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

SPECIES

Canine

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

BREED

Labrador Retriever Mix

- Hepatopathy, exhibiting normal vascular volume

ULTRASONOGRAPHIC FINDINGS

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

SEX

Spayed Female

No overt evidence of intrahepatic or extrahepatic shunting in light of normal hepatic vascular volume and without commonly seen secondary abnormalities such as renal or cystic calculi. Potential for primary parenchymal disease, i.e., nonspecific hepatitis or other inflammatory hepatopathy, toxic hepatopathy, i.e., copper, infectious disease or possible microvascular dysplasia/portohypoplasia are all potentials.

AGE

1 Year

Further assessment may include, assuming normal clotting status, hepatic FNA cytology with potential identification of inflammatory cell type, as well as leptospirosis titers/PCR. Core or surgical biopsy may be required for further definition. Likewise, advanced imaging, such as gold standard CT with contrast could be considered if strong clinical suspicion of nonobvious portosystemic vascular anomaly. Chest radiographs +/- ECG are suggested if not done. Full fasting and postprandial bile acids are warranted. Some or all of the following protocol may be considered empirically.

WEIGHT

61.8 Pounds

Hepatic Support for Bile Acid Elevation +/- Hepatic Encephalopathy

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

Royal Canin Hepatic Support diet or Hills L/D, Metronidazole (7.5 mg/kg PO bid) over the next 14 days, **Lactulose** (Oral: 3.1-3.7 g/5 ml lactulose in a syrup base) long term to target 2-3 soft stools/day, with a **high-quality protein supplement** of minor amount of **yogurt** or **cheddar cheese**. Monitor bile acids, with attention paid to dropping albumin, BUN or cholesterol. SAME and nutraceuticals as needed. **Ursodiol** (10-15 mg/kg p.o. q24h) can be considered as hepatoprotectant and to enhance bile flow. **Zinc** serum level keep between 200—500 ug/dl. If deficient then Tx zinc acetate 1-3 mg/kg/day. Gastrointestinal protectants are recommended if the patient is anorexic.

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

Dr. Aronow

INVOICE

18902

DATE

11/30/22



PATIENT

Luna Schuck

SPECIES

Canine

BREED

Labrador Retriever Mix

SEX

Spayed Female

AGE

1 Year

WEIGHT

61.8 Pounds

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

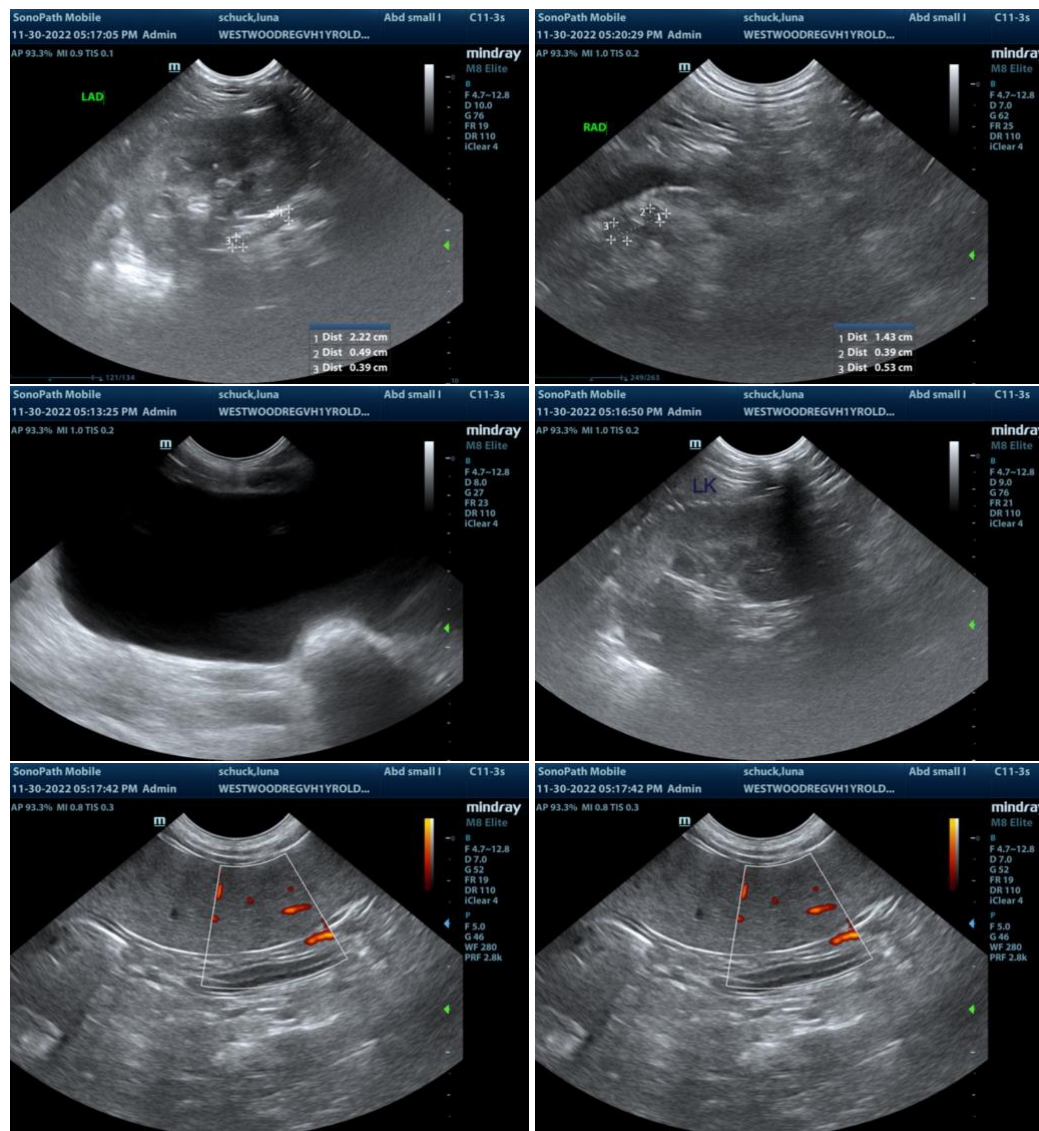
Dr. Aronow

INVOICE

18902

DATE

11/30/22





PATIENT

Luna Schuck

SPECIES

Canine

BREED

Labrador Retriever Mix

SEX

Spayed Female

AGE

1 Year

WEIGHT

61.8 Pounds

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

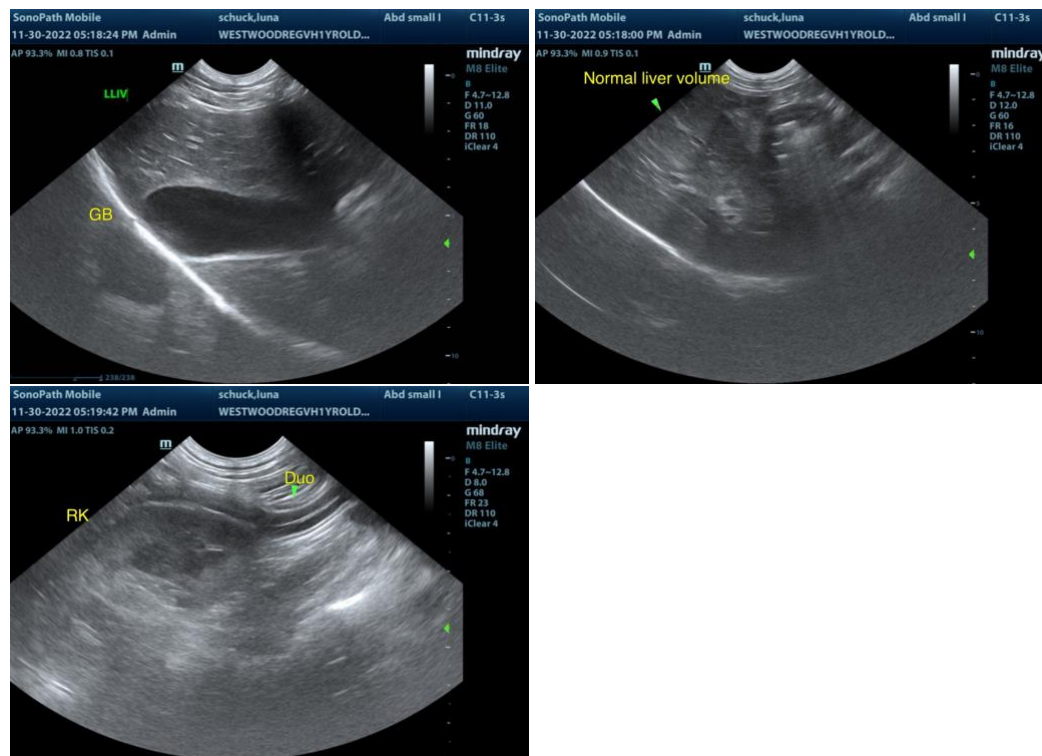
Dr. Aronow

INVOICE

18902

DATE

11/30/22



The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com