



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Charlie DiNardo	History: Grossly elevated liver enzymes, lethargic, vomiting, diarrhea, and not eating well. Patient has not really eaten for approx. 5 days. Patient is not vaccinated for Leptospirosis. On I/D diet, Gent. spray (for hot spot), Cerenia, Proviabale, SQ fluids.
<b>SPECIES</b>	
Canine	Abnormal PE/Chem/CBC/UA Results: ALT 4678, AST 1396, ALP 3252, GGT 17, T. bili. 4.5, chol. 385, CK 228, PLTs 127, EOS. 0.047, cl. 107. U/A: pending.
<b>BREED</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Golden Retriever	<b>Urinary System</b>
<b>SEX</b>	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 5.0 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.
Neutered Male	The residual prostate was free of pathology.
<b>AGE</b>	Normal size and margination was 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 6.7 cm in length. The right kidney measured 6.5 cm in length.
1 Year	<b>Adrenal Glands</b>
<b>WEIGHT</b>	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.45 cm width at the caudal pole and 0.41 cm width at the cranial pole.
83.2 Pounds	The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.44cm width at the caudal pole.
<b>INTERPRETED BY</b>	<b>Spleen</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	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.
<b>IMAGING PERFORMED BY</b>	<b>Liver</b>
Kelly Vazquez	The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver exhibited subtle nonuniform parenchyma, exhibiting mild to moderate coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The liver exhibited normal volume. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal. No evidence of posthepatic obstruction. No masses or nodules noted.
<b>HOSPITAL NAME</b>	The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.
Allendale VH	<b>Gastrointestinal</b>
<b>REFERRING VET</b>	
Dr. Raum	
<b>INVOICE</b>	
16383	
<b>DATE</b>	



<b>PATIENT</b>	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.
Charlie DiNardo	
<b>SPECIES</b>	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.
Canine	Normal visible colon wall layers were present with apparent formed feces in lumen.
<b>BREED</b>	<b>Pancreas</b>
Golden Retriever	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.
<b>SEX</b>	<b>Free Abdomen</b>
Neutered Male	Multiple isoechoic to mildly hypoechoic prominent to mildly swollen hepatic lymph nodes were present adjacent to the portal vein were present, an example measured 3.6 cm x 1.5 cm. The lymph nodes exhibited maintained to borderline abnormal width to length ratio approaching 0.5. No evidence of peritoneal free fluid.
<b>AGE</b>	
1 Year	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>WEIGHT</b>	<ul style="list-style-type: none"> <li>• Hepatopathy</li> <li>• Sonographically unremarkable gallbladder/common bile duct</li> <li>• Associated hepatic lymphadenopathy</li> </ul>
83.2 Pounds	
<b>INTERPRETED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	The overall appearance of the liver was nonspecific. Considerations including suspected nonspecific hepatitis (cholangiohepatitis, viral, bacterial, leptospirosis, toxin), vacuolar hepatopathy and nonobstructive cholestasis, occult hepatic neoplasia or other hepatopathy. Further assessment may include hepatic FNA, assuming normal clotting status and using a 25-gauge needle for screening cytology, as well as leptospirosis titers/PCR. Correlation with pending urinalysis is suggested.
<b>IMAGING PERFORMED BY</b>	The associated hepatic lymphadenopathy may indicate secondary lymphoid hyperplasia or reactive lymphadenitis owing to the hepatopathy. Potential for emerging neoplastic hepatic lymphadenopathy cannot be definitively excluded.
Kelly Vazquez	
<b>HOSPITAL NAME</b>	Pending additional diagnostics, hospitalization with aggressive therapy for nonspecific hepatitis/cholangiohepatitis with as needed gastrointestinal support and monitoring of hepatic enzymes would be reasonable. No overt evidence of gastrointestinal pathology or metabolic/mechanical ileus.
Allendale VH	
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**PATIENT**

Charlie DiNardo

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered Male

**AGE**

1 Year

**WEIGHT**

83.2 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Allendale VH

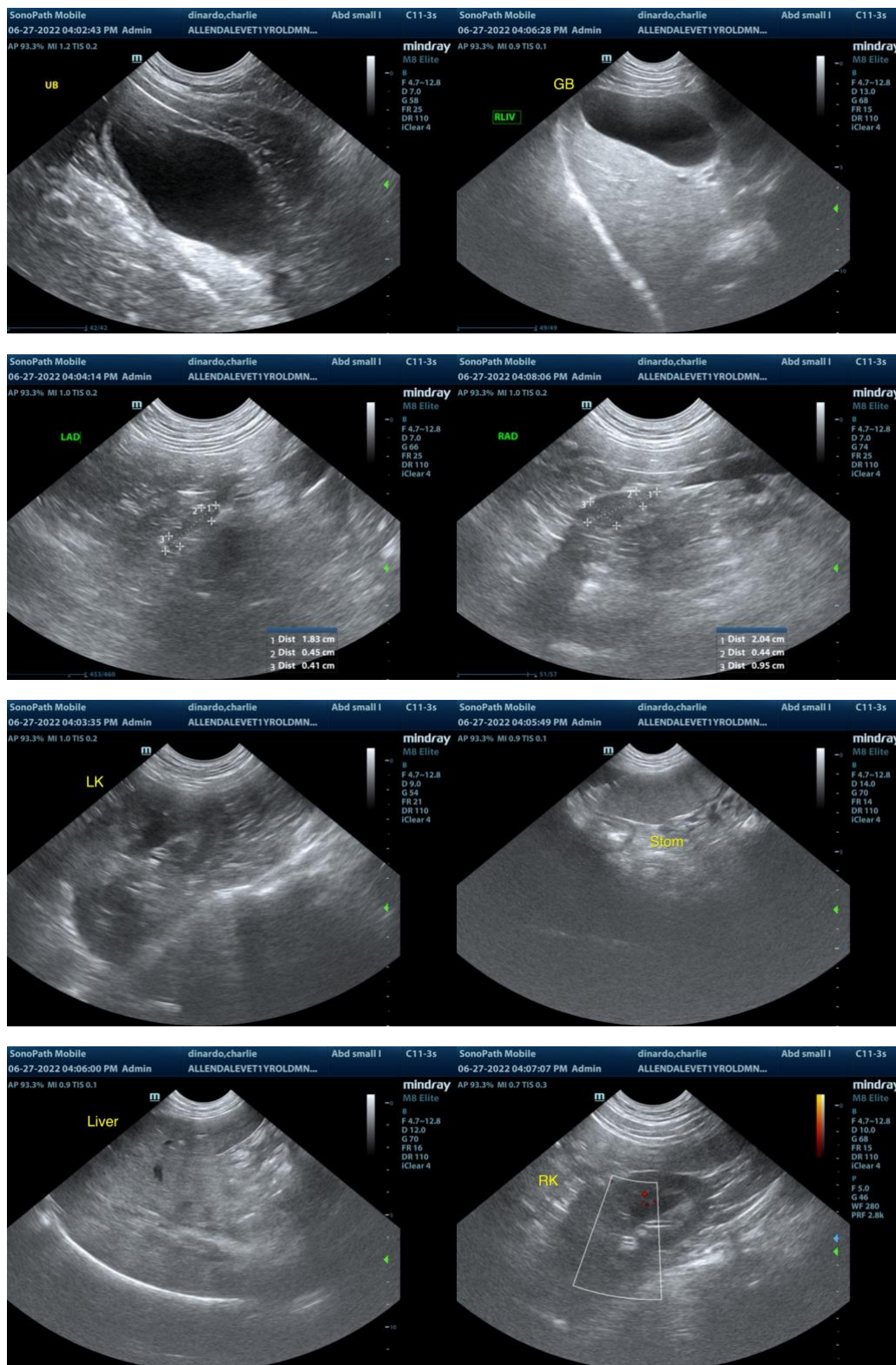
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**PATIENT**

Charlie DiNardo

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered Male

**AGE**

1 Year

**WEIGHT**

83.2 Pounds



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

**INTERPRETED BY**

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DVM, DABVP  
(Canine and Feline)

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