

<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
Barney Paterson	Current meds Gabapentin and Trio flea/tick and heartworm prevention. Arthritis, early cataracts, grade 3 dental disease. Owner has noted increased gassiness, polyuria and polydipsia.
<b>SPECIES</b>	Abnormal PE/Chem/CBC/UA Results: ALT elevated 462, ALKP over 2000, GGT elevated 31, Lymphocytes decreased, Basophils increased, Platelets decreased and PCT elevated. Resting cortisol elevated 160(28-120). 4DX negative.
Canine	
<b>BREED</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
Beagle	<b>Urinary System</b>
<b>SEX</b>	The urinary bladder, trigone, and cystourethral junction 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 was noted.
MN	
<b>AGE</b>	The area of the aortic trifurcation was free of pathology.
14 years	Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 6.2 cm in length. The right kidney measured 5.4 cm in length.
<b>WEIGHT</b>	
15.37 kg	
<b>INTERPRETED BY</b>	<b>Adrenal Glands</b>
R. McKenzie Daniel, DVM, DABVP	The left adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.45 cm width at the caudal pole and 0.42 cm width at the cranial pole. The right adrenal gland was indistinctly visualized without overt evidence of pathology subjectively measuring 0.47 cm width at the caudal pole and 0.47 cm width at the cranial pole.
<b>IMAGING PERFORMED BY</b>	<b>Spleen</b>
Crystal Hill	The generalized splenic parenchyma exhibited mild heterogeneity. Multifocal to potentially coalescing, hyperechoic nodules were present primarily in the medial 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 or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas. No evidence of splenic neoplastic criteria was noted.
<b>HOSPITAL NAME</b>	<b>Liver/ Gallbladder</b>
Grand River VH	The liver presented enlarged in size. Subtle increased parenchyma echogenicity with mild parenchymal remodeling was present. No masses or nodules were noted. 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 gallbladder was non distended in size with primarily anechoic content with mild, nondependent yet nonorganized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.
<b>REFERRING VET</b>	
Chu/Robinson	
<b>INVOICE</b>	
13737	
<b>DATE</b>	
4/27/22	



<b>PATIENT</b>	<b><i>Gastrointestinal</i></b>
Barney Paterson	The visualized gastric walls were sonographically unremarkable. The lumen of the stomach contained moderate ingesta exhibiting mild nearfield hyperechogenicity with strong distal acoustic shadowing noted in the gastric body, antrum, and pylorus.
<b>SPECIES</b>	
Canine	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.
<b>BREED</b>	Normal visible colon wall layers were present with apparent formed feces in lumen.
Beagle	<b><i>Pancreas</i></b>
<b>SEX</b>	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 were evident.
MN	
<b>AGE</b>	<b><i>Free Abdomen</i></b>
14 years	No overt lymphadenopathy or peritoneal effusion was present.
<b>WEIGHT</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
13.37 kg	<ul style="list-style-type: none"> <li>• Hepatopathy - subjectively benign</li> <li>• Mild gallbladder debris (non-mucocele)</li> <li>• Age-related kidneys</li> <li>• Strongly shadowing gastric ingesta</li> <li>• Overtly normal adrenal glands</li> </ul>
<b>INTERPRETED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
R. McKenzie Daniel, DVM, DABVP	The hepatic presentation was nonspecific yet most consistent with benign hepatopathy. Considerations may include vacuolar hepatopathy and nonobstructive cholestasis, given the elevated ALP/GGT elevation with concurrent gallbladder debris with potential for primary or concurrent inflammatory hepatopathy, i.e., cholangiohepatitis, given the ALT elevation. Further assessment may include, assuming normal clotting status, hepatic FNA for screening cytology.
<b>IMAGING PERFORMED BY</b>	
Crystal Hill	
<b>HOSPITAL NAME</b>	
Grand River VH	
<b>REFERRING VET</b>	Full adrenal workup is recommended if strong clinical suspicion for adrenal hyper functionality. If positive LDDST, sonographic reassessment specifically in the area of the right adrenal gland is suggested.
Chu/Robinson	
<b>INVOICE</b>	Empirical hepatosupportive medications and Ursodiol may prove beneficial. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.
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**SEX**

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**WEIGHT**

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**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP

**IMAGING  
PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Grand River VH

**REFERRING VET**

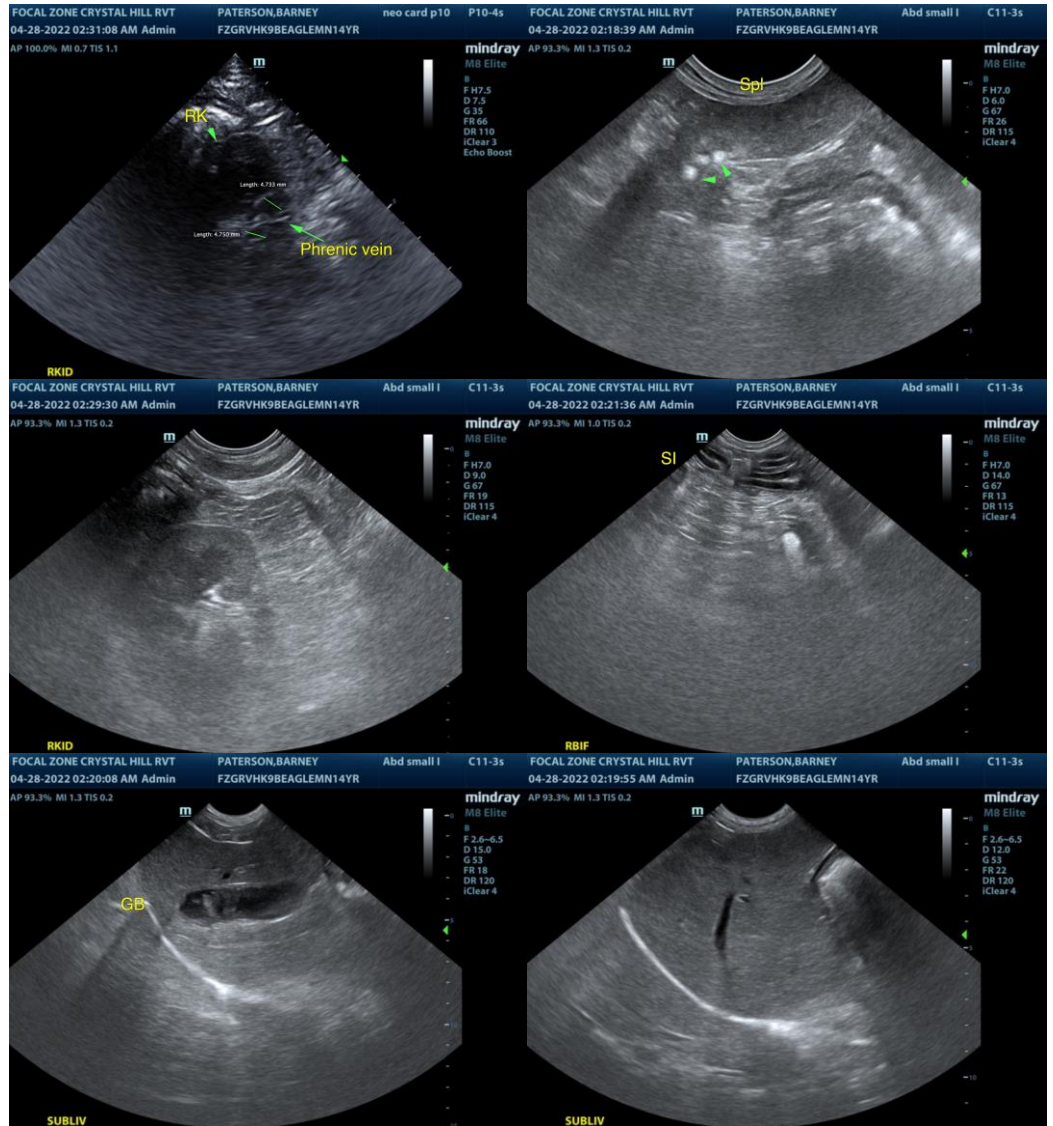
Chu/Robinson

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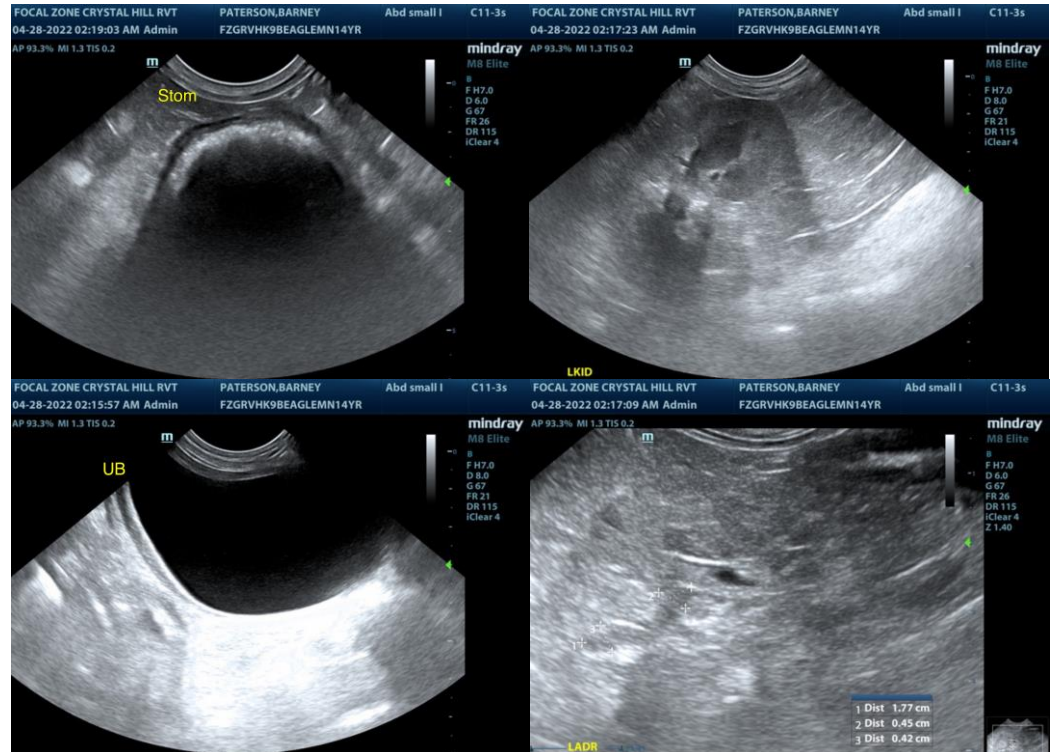
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**WEIGHT**

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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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
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