



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
William Hahn	History: <ul style="list-style-type: none"> <li>William is a patient with a two-year history of elevated liver enzymes, chronic gastrointestinal issues, and recent weight loss.</li> <li>The primary clinical concerns include persistently elevated liver enzymes (ALT 404, AST 91, ALP 475, GGT 16) and elevated lipase (280) and cholesterol (12.9) that have been present for the past two years. These findings are associated with chronic long-term soft stool, a decreased appetite, and increased pickiness with eating. The patient has also experienced recent weight loss, decreasing from 5.35 kg on January 11th to 5.1 kg at the current presentation, though it is noted his weight typically fluctuates between 5.1 and 5.3 kg.</li> </ul>
<b>SPECIES</b>	
Canine	
<b>BREED</b>	
Chihuahua	
<b>SEX</b>	
NM	
<b>AGE</b>	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
11 years and 10 months	<b>Urinary System</b>
<b>WEIGHT</b>	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 evidence of urine or lumen sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.
5.35 kg	The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture.
<b>INTERPRETED BY</b>	No evidence of pathology in the area of the aortic trifurcation.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	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. Areas of mild medullary mineral were noted. The left kidney measured 3.4 cm in length. The right kidney measured 3.6 cm in length.
<b>IMAGING PERFORMED BY</b>	<b>Adrenal Glands</b>
Dr. Jill Rankin	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.43 cm width at the caudal pole. The right adrenal gland exhibited a borderline prominent caudal pole with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.66 cm width at the caudal pole.
<b>HOSPITAL NAME</b>	<b>Spleen</b>
McKnight VH	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>REFERRING VET</b>	
Dr. Vanessa	
<b>INVOICE</b>	
10568	
<b>DATE</b>	
1/21/26	

**PATIENT*****Liver/ Gallbladder***

William Hahn

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Chihuahua

**SEX**

NM

**AGE**

11 years and 10 months

**WEIGHT**

5.35 kg

**INTERPRETED BY**R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)**IMAGING PERFORMED BY**

Dr. Jill Rankin

**HOSPITAL NAME**

McKnight VH

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The liver was subjectively normal in size with symmetrical contour. Adequate hepatic vascular volume was present. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was mildly distended in size with mildly thickened, irregular, isoechoic gallbladder wall. Numerous choleliths were present with concurrent nonorganized bile sediment. Mildly dilated cystic and proximal common bile duct were noted with concurrent cystic or proximal common bile duct calculus measuring ~0.6 cm in diameter. The dilated common bile duct was not overtly visualized to the level of the duodenum.

***Gastrointestinal***

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty without evidence of retained ingesta, fluid, 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. The duodenum wall measured 0.47 cm width. The jejunum wall measured 0.33 cm width.

Normal visible colon wall layers were present with semi-formed to soft fecal matter.

***Pancreas***

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.

***Free Abdomen***

No overt lymphadenopathy or peritoneal effusion was present.

**ULTRASONOGRAPHIC FINDINGS**

- Benign hepatopathy pattern
- Cholecystitis / cholangitis with gallbladder and solitary visualized cystic / common bile duct calculi
- Sonographically normal pancreas
- Sonographically normal gastrointestinal tract / colon with soft fecal matter
- Mild chronic renal changes with mild medullary mineral
- Borderline prominent right adrenal gland - nonspecific, benign

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Chronic cholangitis / cholangiohepatitis and cholestatic hepatopathy are probable in conjunction with hepatic enzyme elevations, evidence of biliary tract inflammation, and biliary calculi. No overt hepatobiliary neoplastic criteria or current definitive post hepatic obstruction. However, given evidence



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DVM, DABVP  
(Canine and Feline)

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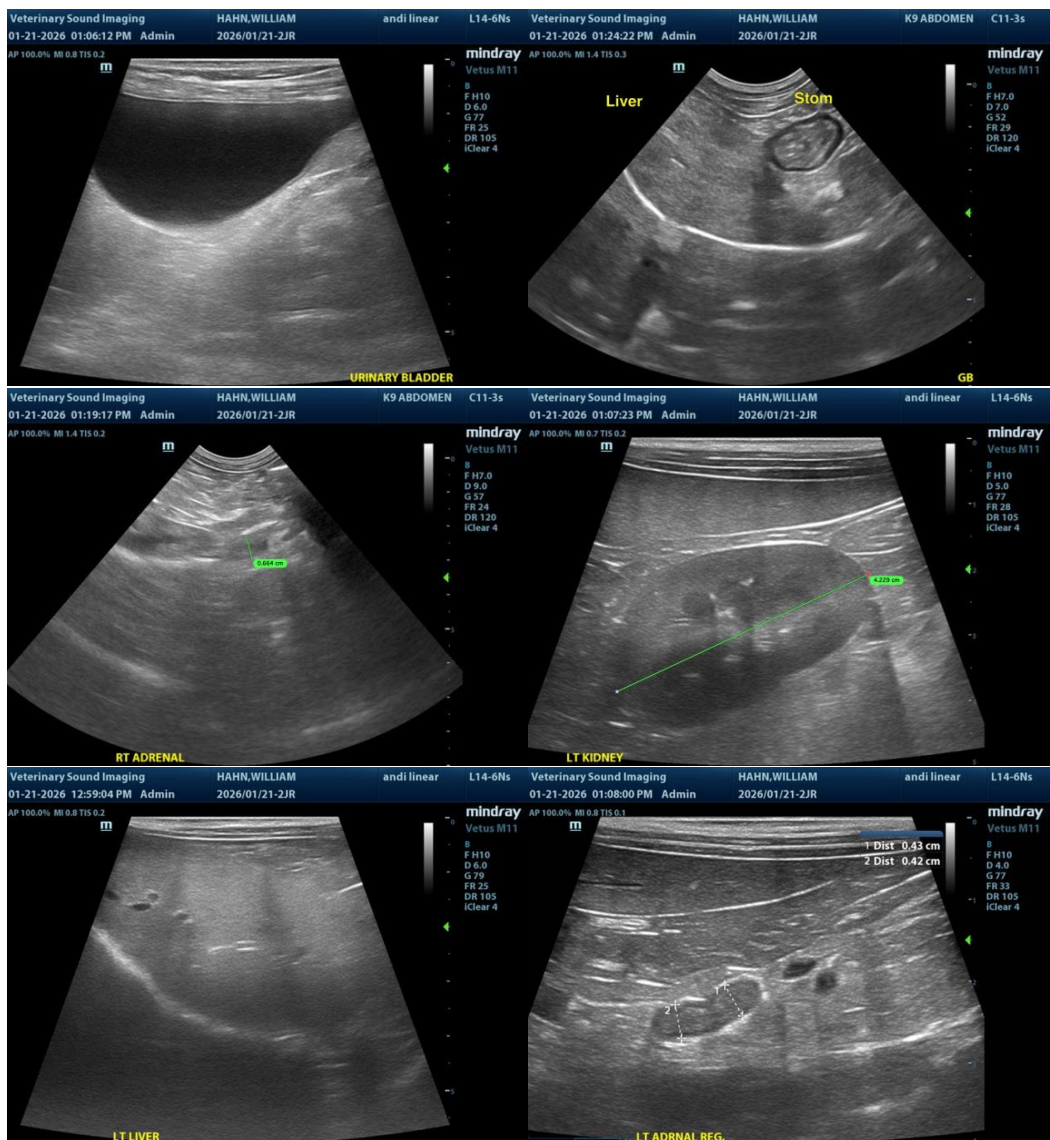
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of common bile duct calculi, serial monitoring is indicated. Assuming normal clotting status and using a 25-gauge needle, hepatic FNA cytology to assess for inflammatory cell type could be considered.

A GI panel to include PLI/TLI/Cobalamin/Folate and screening three-view chest radiographs to assess for nonstructural or occult gastrointestinal or extra-abdominal disease as a contributing factor to the weight loss, is suggested. Adrenal disease as a contributing factor to the hepatopathy is thought less likely, given the current clinical signs. Adrenal screening could be considered if clinical signs consistent with adrenal disease arise.





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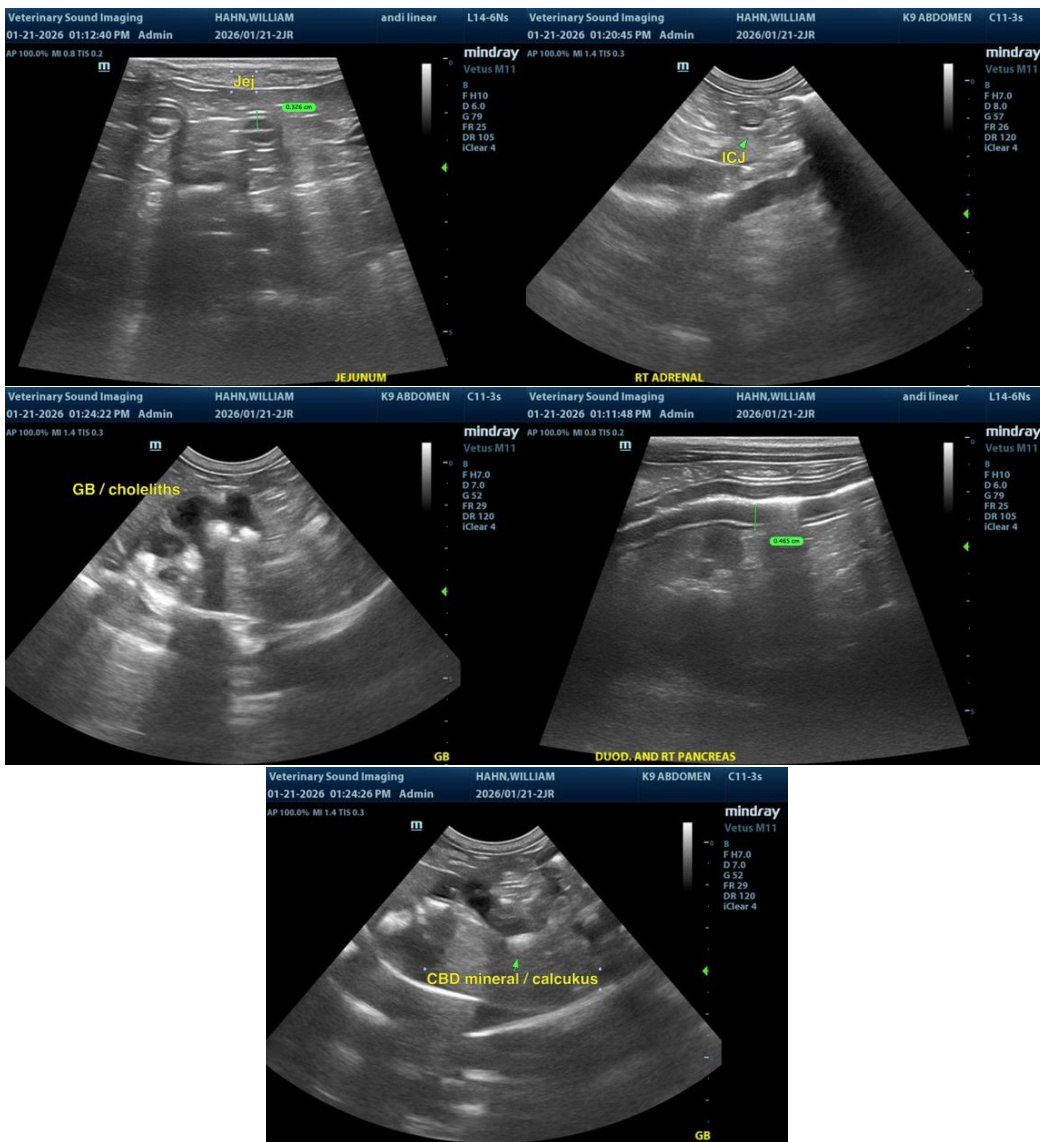
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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