



<b>PATIENT</b>	<b>PRESENTING CLINICAL SIGNS</b>
River Twigt	Icteric lethargic
<b>SPECIES</b>	Abnormal PE/Chem/CBC/UA Results: Anemic 4DX for blood born parasitic disease negative. PCV 15 regenerative anemia and panleukopenia
Canine	<b>ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN</b>
<b>BREED</b>	<b>Urinary System</b>
Australian Shep Mix	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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.
<b>SEX</b>	
FS	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 6.8 cm in length. The right kidney measured 5.3 cm in length (possible mild underestimation of right kidney size).
<b>AGE</b>	
7	The area of the iliac trifurcation was free of pathology including no evidence of medial, iliac or sublumbar lymphadenopathy or masses.
<b>WEIGHT</b>	<b>Adrenal Glands</b>
14kg	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.33 cm width at the caudal pole and 0.30 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.38 cm width at the caudal pole and 0.33 cm width at the cranial pole.
<b>INTERPRETED BY</b>	<b>Spleen</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	The spleen exhibited possible mild enlargement with generalized mild parenchyma heterogeneity. No masses or nodules noted.
<b>IMAGING PERFORMED BY</b>	<b>Liver/Gallbladder</b>
Dr. Belan	The liver presented possibly mildly enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. Overtly adequate hepatic vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion.
<b>HOSPITAL NAME</b>	
Fish Creek Animal Hospital	
<b>REFERRING VET</b>	
Dr. Ackert	The gallbladder wall was thickened in appearance consisting of an echogenic double rim corresponding to the inner and outer portions of the wall. This is consistent with gallbladder wall edema. The gallbladder wall measured up to 0.44 cm in width. Mild non-organized to mildly congealed sludge was present primarily in the mid to caudal lumen area of the gallbladder neck. Possible causes may include acute inflammation, edema and anaphylaxis.
<b>INVOICE</b>	<b>Gastrointestinal</b>
13699ag	The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained variably echogenic non-shadowing ingesta with no signs of ileus, obstruction or foreign material.
<b>DATE</b>	
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<b>PATIENT</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.
River Twigt	Normal visible colon wall layers were present with apparent formed feces in lumen.
<b>SPECIES</b>	<b>Pancreas</b>
Canine	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>BREED</b>	<b>Free Abdomen</b>
Australian Shep Mix	No omental masses, overt/significant lymphadenopathy or peritoneal effusion was present.
<b>SEX</b>	Rapid view of the heart revealed no evidence of pericardial masses or effusion in the visible window.
FS	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>AGE</b>	<ul style="list-style-type: none"> <li>Possible mild hepatomegaly exhibiting normal vascular volume.</li> <li>Gallbladder wall edema with mild congealed non-organized sludge-acute cholecystitis, edema (portal hypertension), hypoalbuminemia if clinically applicable, anaphylaxis, neoplasia (less likely) all potentials.</li> <li>Mild retained gastric ingesta.</li> <li>Mild splenomegaly exhibiting mild parenchymal heterogeneity- suspect incidental hyperplasia, hematopoiesis given the anemia or incidental splenitis. Early/occult infiltrative neoplasia (less likely) possible.</li> </ul>
7	
<b>WEIGHT</b>	
14kg	
<b>INTERPRETED BY</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	The potential for mild hepatomegaly in conjunction with gallbladder wall edema is of unclear clinical significance given the lack of reported hepatic enzyme elevations. Assessment of hepatic enzymes is recommended if not done. No evidence of post hepatic obstruction or elevated right heart pressure as a contributing factor.
<b>IMAGING PERFORMED BY</b>	A CBC pathology review is suggested. Assuming normal clotting status and using a 25g needle, a hepatosplenic FNA for screening cytology is warranted for further assessment yet at this stage is precluded given the degree of anemia.
Dr. Belan	Empirically some or all of the following protocol could be considered with concurrent coverage for possible acute cholecystitis and/or anaphylaxis.
<b>HOSPITAL NAME</b>	<i>(Note: ensure no underlying neoplasia as IMHA/Evans syndrome can occur as paraneoplastic manifestation especially in lymphoma/round cell neoplasia)</i>
Fish Creek Animal Hospital	
<b>REFERRING VET</b>	Anemia +/- thrombocytopenia with spherocytes/autoagglutination in dogs and hyperbilirubinemia, bilirubinuria. (NOTE: cats do not get spherocytes in IMHA) Consider Onion/Garlic derivative ingestion if Heinz bodies are present.
Dr. Ackert	
<b>INVOICE</b>	<b>Prednisone (K9) Prednisolone (Feline):</b> 2 mg/kg Sid/Bid initially x 3 weeks then attempt taper. <b>Aspirin</b> 0.5 mg/kg Sid owing to hypercoagulable state. <b>Sucralfate</b> 0.5-1 g po tid dogs, 0.5 g bid cats in slurry <b>Doxycycline</b> if infectious suspected clinically or based on CBC path review: <b>Dogs, Cats:</b> 10 mg/kg p.o. q24h with food or water bolus in cats
13699ag	
<b>DATE</b>	<b>Long-term management dogs:</b> Azothiaprine 2 mg/kg Sid or Cyclosporine 10mg/kg po sid bid
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**PATIENT**

River Twigt

**SPECIES**

Canine

**BREED**

Australian Shep Mix

**SEX**

FS

**AGE**

7

**WEIGHT**

14kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Belan

**HOSPITAL NAME**

Fish Creek Animal  
Hospital

**REFERRING VET**

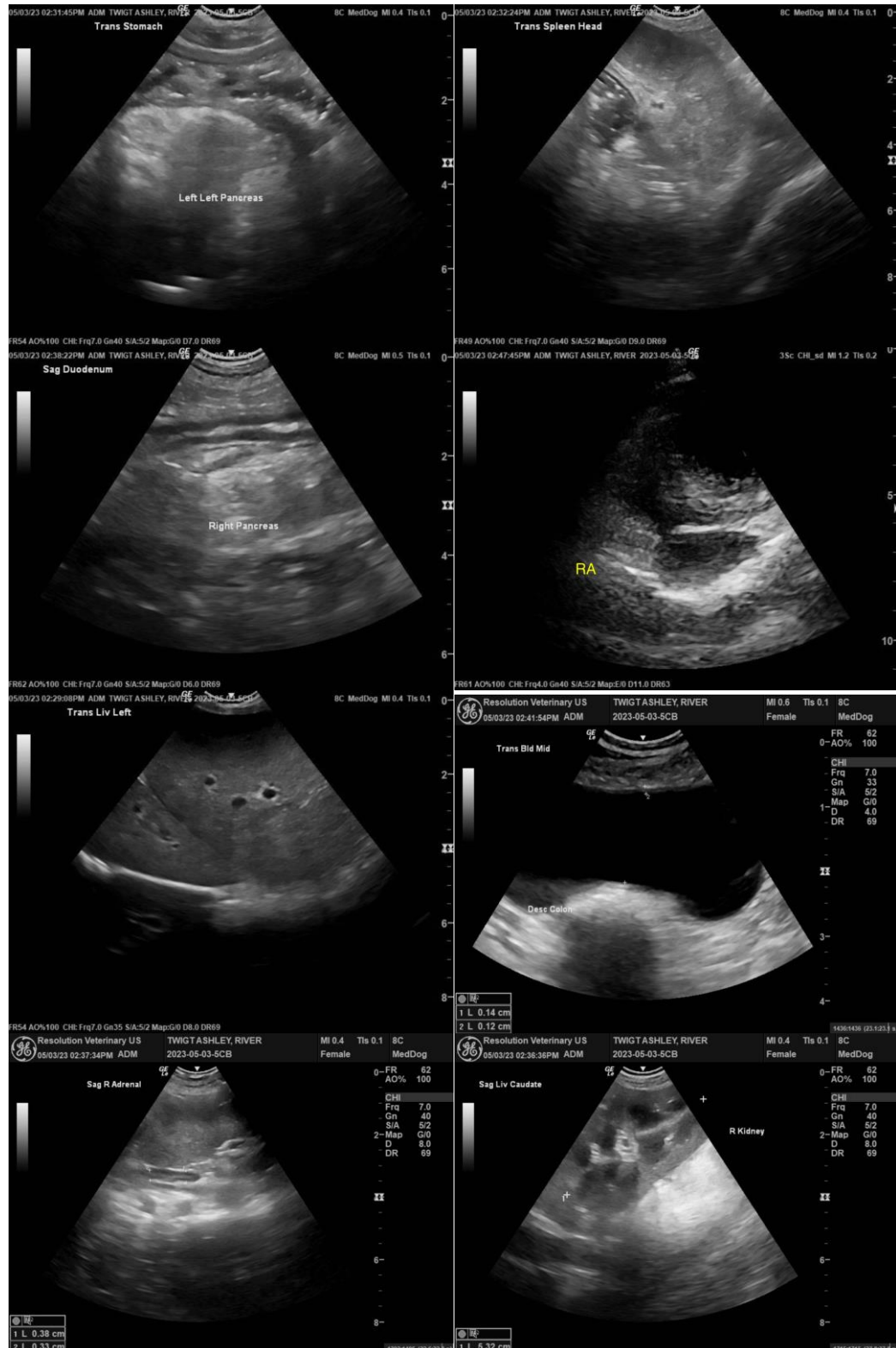
Dr. Ackert

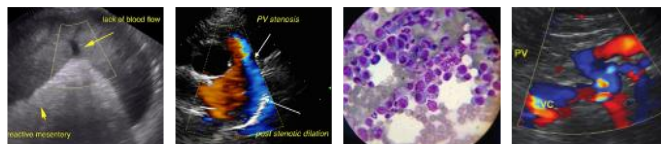
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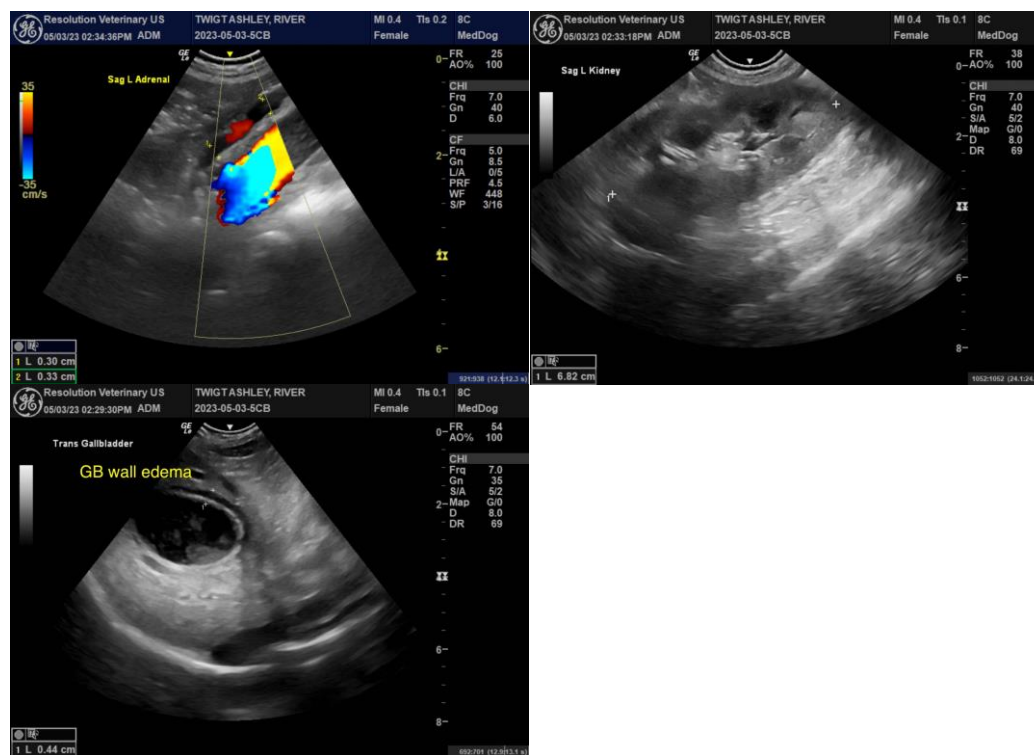
Dr. Ackert

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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.

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