



PATIENT

Gibbs Hunt

SPECIES

Canine

BREED

Bull Dog X

SEX

MN

AGE

5 years

WEIGHT

73 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

West Salem Animal
Clinic

REFERRING VET

Dr. Bruton

INVOICE

16507

DATE

4/6/23

PRESENTING CLINICAL SIGNS

5 days of inappetence with vomiting and marked icterus Current Medications Cerenia, enrofloxacin, metronidazole, famotidine, denamarin, Vit K, IV fluids (Norm-R with 20mEq KCl/L), proviable
Radiographic Findings 3-view abdominal radiographs: Mild loss of serosal detail, no FB or obstructive pattern noted. No mass effect noted. Stomach is empty and few loops of SI contain gas. Primary Question/Differential to Be Answered in This Exam Identify cause of icterus

Abnormal PE/Chem/CBC/UA Results: Elevated liver values: AST > 1000 (0-60), GGT 48 (0-14), ALP 686 (0-140), Tbili 19.9 (0-0.5), K+ 3.3 (3.8-5.3) Hemoconcentration: HCT 58.4 (33-56), RBC 8.54 (5.1-8.5) Normal total protein with elevated albumin: TP 6.7 (5.5-7.6), Albumin 4.2 (2.5-4.0) Elevated PT 13.4 (6-12.0) with normal PTT Dilute urine USG 1.010

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. No evidence of mineral or calculi was noted. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The residual prostate was free of pathology.

The area of the aortic trifurcation was free of pathology.

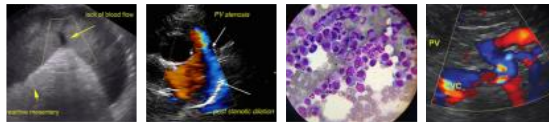
Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 7.3 cm in length. The right kidney measured 7.4 cm in length. No evidence of renal mineralization or calculi was noted.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.2 cm length x 0.62 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.2 cm length x 0.62 cm width at the caudal pole.

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.



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Liver/ Gallbladder

Gibbs Hunt

The liver exhibited subjective borderline to possible mild subnormal hepatic size with subjective adequate hepatic vascular volume. The liver maintained a symmetrical capsule contour with normal hepatic parenchyma echogenicity exhibiting moderate coarse echotexture and mildly increased yet indistinct prominence of the portal vascular borders. The gallbladder was non-distended in size containing anechoic content within the gallbladder lumen. No evidence of gallbladder sludge or cholelithiasis was noted. The gallbladder wall was moderately thickened in appearance consisting of an echogenic double rim corresponding to the inner and outer portions of the wall. This is consistent with moderate gallbladder wall edema. Possible causes may include acute inflammation, edema and anaphylaxis. The common bile duct was not definitively visualized. No evidence of common bile duct dilation, stasis, or post hepatic obstructive pattern was noted. The gallbladder wall width measured 0.6 cm width.

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Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. Minor retained nonshadowing ingesta / chyme was noted.

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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.

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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.

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Free Abdomen

No evidence of perihepatic, pericholecystic, or peritoneal free fluid was noted. No omental lymphadenopathy or masses were noted.

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ULTRASONOGRAPHIC FINDINGS

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Dr. Bruton

- Hepatopathy exhibiting subjective borderline / mild subnormal liver size
- Nondistended gallbladder with moderate wall edema - acute cholecystitis, anaphylaxis, portal hypertension, possible
- Sonographically unremarkable gastrointestinal tract with mild retained gastric ingesta / chyme
- Normal pancreas

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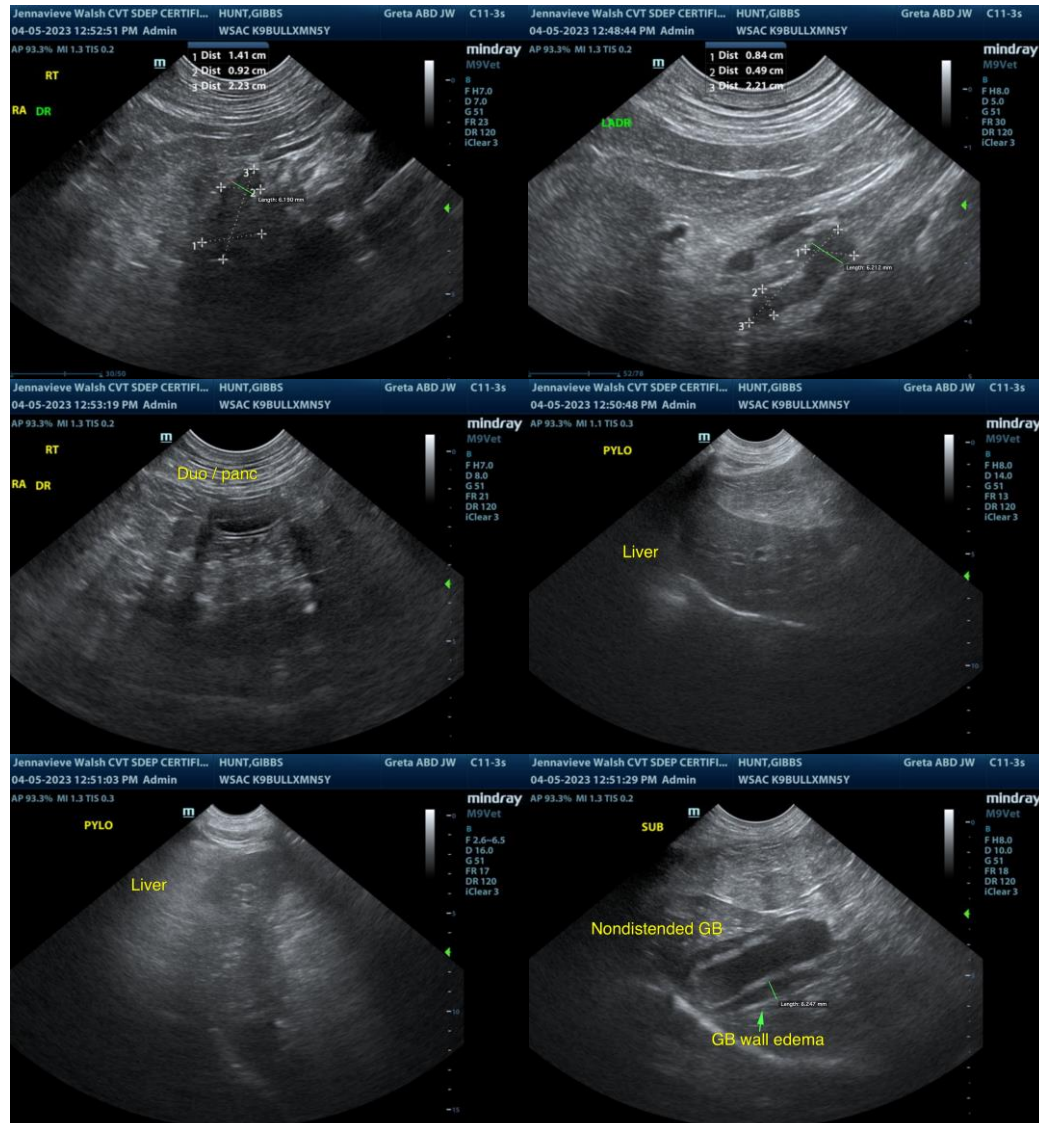
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although nonspecific, suspect potential acute hepatobiliary inflammatory process in conjunction with hepatic presentation, elevated liver enzymes and presence of gallbladder wall edema. Nonspecific hepatitis (viral, bacterial, Leptospirosis, toxin, etc..) nonobstructive cholestasis, concurrent vacuolar hepatic changes, and less likely infiltrative neoplasia are all potentials. No obvious evidence of macroscopic shunting or evidence of post hepatic obstruction was noted. Hepatic biopsy as well as fasting and post prandial bile acids are likely required for further clarification. Leptospirosis titers / PCR is suggested if potential exposure.

Empirically, continued supportive care for hepatobiliary inflammatory disease with as-needed gastrointestinal support would be reasonable. Recheck sonogram may be considered if clinically indicated.





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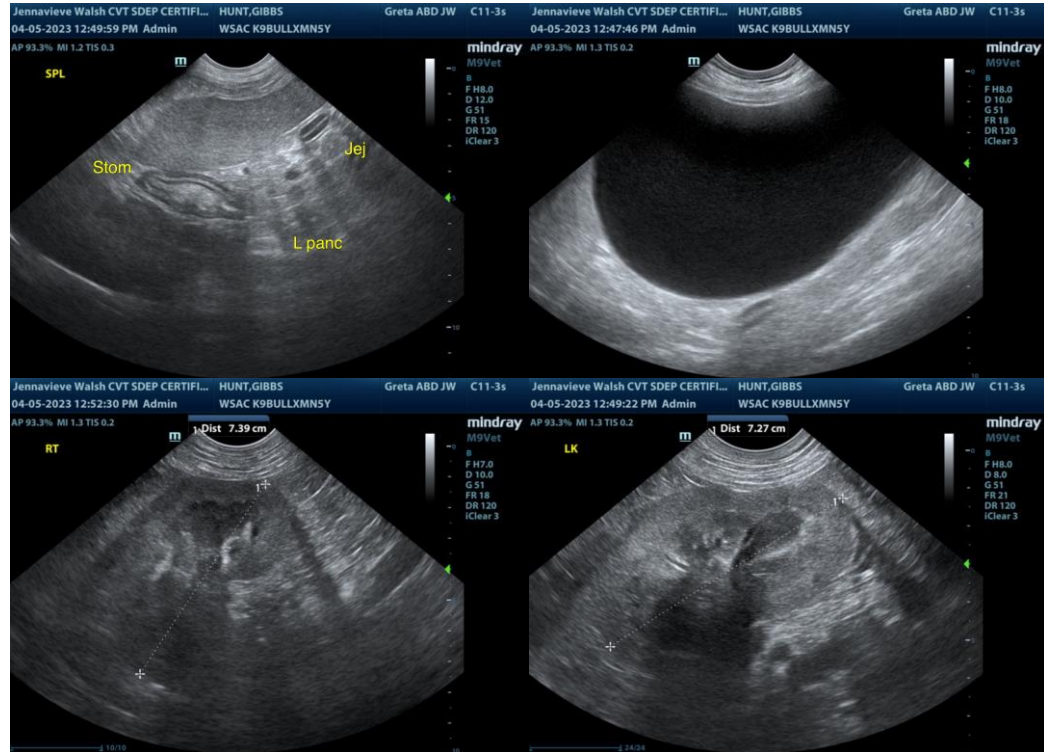
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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