



PATIENT PRESENTING CLINICAL SIGNS

Polly Spencer

History: Vomiting, anorexia, and lethargy since Sunday night. Injected sclera, otherwise exam on 12/5/22 was unremarkable. Was given Cerenia injection, SQ fluids, and offered i/d on Monday. Regurgitated water on Monday night and Tuesday morning. Hospitalized on IV fluids at the emergency hospital overnight. Current Medications Cerenia, buprenorphine
Radiographic Findings Moderate amount of gas in the stomach. Gas-filled transverse colon. Moderate thickening of the small intestinal walls. No mass effects or obstructive pattern noted. The liver and kidneys appear WNL. Good serosal detail. Primary Question/Differential to Be Answered in This Exam r/o cholangiohepatitis, infectious, gastroenteritis, toxin, secondary nephritis, neoplasia, open

SPECIES

Canine

BREED

Chihuahua

SEX

Spayed Female

Abnormal PE/Chem/CBC/UA Results: CBC/chem: ALT 375, ALP 741, AST 86, GGT 28, TBili 0.9, Cre 0.4, Chol 375, Calcium 8.7, Glucose 60, Neut 11,921, Lym 655. UA: 1+ protein, 1+ glucose, 2+ ketones, 3+ bilirubin.

AGE

9 Years

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

WEIGHT

5.7 Pounds

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Mild nondependent particulate sediment was present, which may indicate mild cellular debris/protein, crystalline debris or mucus without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

INTERPRETED BY

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

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 3.8 cm in length. The right kidney measured 4.1 cm in length.

IMAGING PERFORMED BY

Jenna Walsh, CVT

Adrenal Glands

HOSPITAL NAME

West Eugene AH

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.36 cm width in the cranial pole and 0.45 cm width in the caudal pole. The right adrenal gland measured 0.47 cm width in the caudal pole.

REFERRING VET

Dr. Larsen

Spleen

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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.

DATE

12/7/22

Liver

The liver exhibited subjective borderline enlargement. The hepatic parenchyma revealed diffuse reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse echotexture.



PATIENT	Increased portal vein prominence was evident. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The hepatic and portal vasculature were normal in appearance.
Polly Spencer	
SPECIES	The gallbladder was non-distended in size. Minor gallbladder wall edema was present. The gallbladder wall measured 0.16 cm in width. Anechoic content was present primarily with mild nondependent nonorganized echogenic gallbladder sediment. The cystic and common bile ducts were normal without evidence of posthepatic obstructive criteria.
Canine	
BREED	Gastrointestinal
Chihuahua	The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. The gastric body wall measured 0.47 cm width. Mild retained anechoic fluid was noted, along with pockets of mild luminal gas. No overt evidence of gastric foreign material or mechanical pyloric outflow obstruction.
SEX	
Spayed Female	
AGE	The small intestine presented intact wall layering with primarily maintained 1:3 muscularis/mucosa ratio with subjective propensity for subtly prominent generalized mucosa and submucosa layers. No evidence of small intestinal mechanical/metabolic ileus or intestinal foreign material.
9 Years	
WEIGHT	Normal visible colon wall layers were present with apparent formed feces in lumen.
5.7 Pounds	Pancreas
INTERPRETED BY	The pancreas was normal to mildly prominent in size with areas of mild capsule asymmetry contour with mild nonhomogenous to hypoechoic parenchyma compared to adjacent omentum.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	Free Abdomen
IMAGING PERFORMED BY	Mild isoechoic hepatic lymphadenopathy was noted, exhibiting width to length ratio <0.5, were present. An example of lymph node measured 0.67 cm in diameter. No evidence of peritoneal free fluid. Mild hepatic hyperechoic mesentery was noted.
Jenna Walsh, CVT	ULTRASONOGRAPHIC FINDINGS
HOSPITAL NAME	<ul style="list-style-type: none"> • Acute hepatopathy • Nondistended gallbladder, exhibiting mild echogenic luminal debris and minor wall edema • Acute gastroenteritis pattern with hypomotile stomach • Possible low-grade pancreatitis • Mild urinary bladder sediment
West Eugene AH	
REFERRING VET	
Dr. Larsen	
INVOICE	<u>INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS</u>
19063	Although nonspecific, the suspected etiology for the hepatopathy and minor gallbladder wall edema would be acute hepatitis (viral, bacterial, leptospirosis, toxin, etc.), with potential for vacuolar hepatic changes, nonobstructive cholestasis or less likely occult infiltrative hepatic neoplasia.
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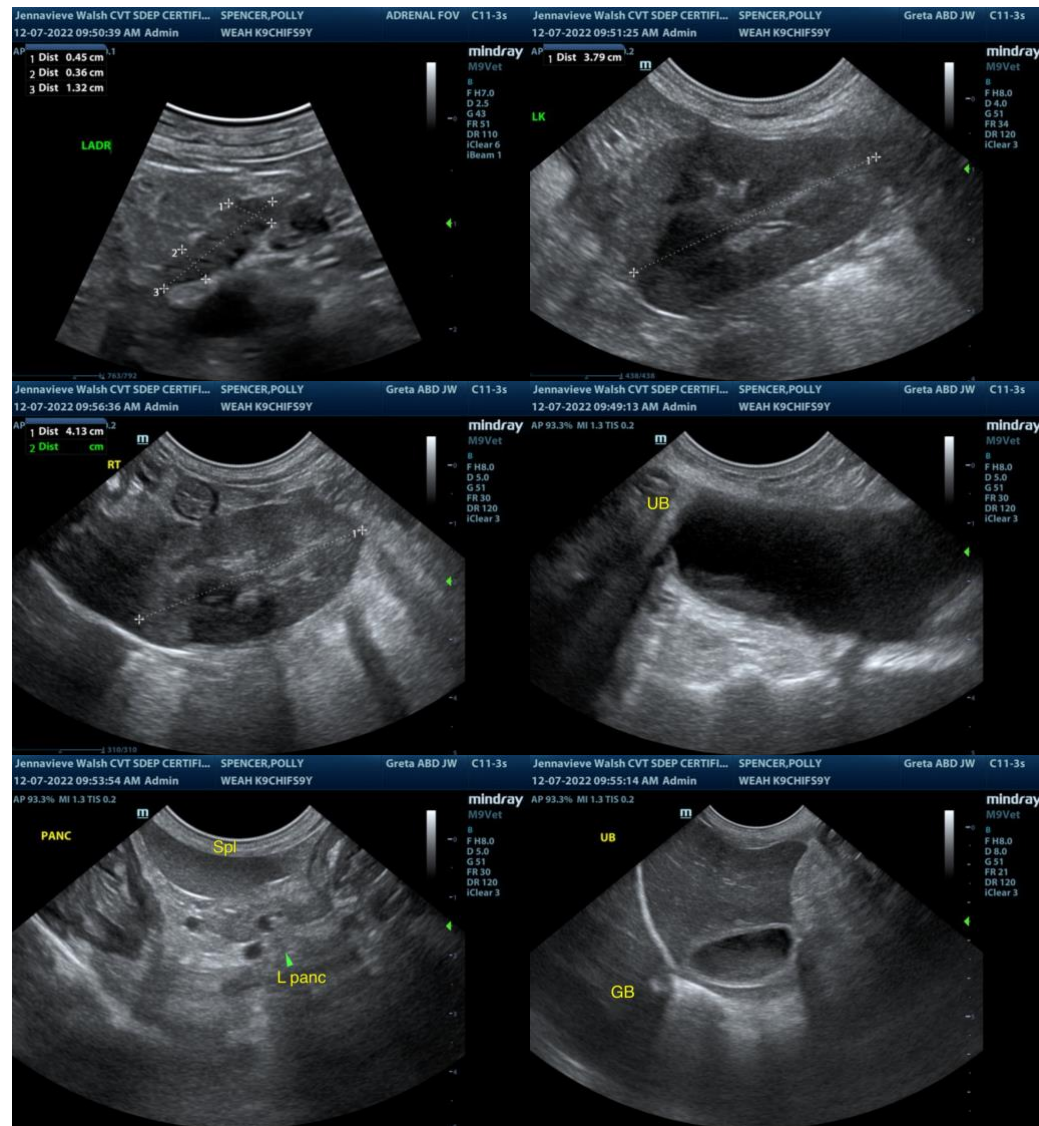
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Further assessment of the liver may include, assuming normal clotting status, screening FNA cytology, using a 25-gauge needle, as well as leptospirosis titers/PCR. No evidence of gastrointestinal foreign material or obstructive pattern. Spec CPL or full GI panel to include PLI/TLI/Cobalamin/Folate could be considered to assess for occult pancreatitis or nonstructural intestinal disease as a contributing factor. Empirically, hospitalization with IV fluids, hepatosupportive medications, antibiotic therapy for acute hepatitis and as needed gastroprotectants with assessment of clinical and hepatic response would be reasonable. Urine culture and sensitivity if evidence of inflammatory urinary debris is recommended. Recheck sonogram if clinically indicated and depending upon patient response to empirical therapy.





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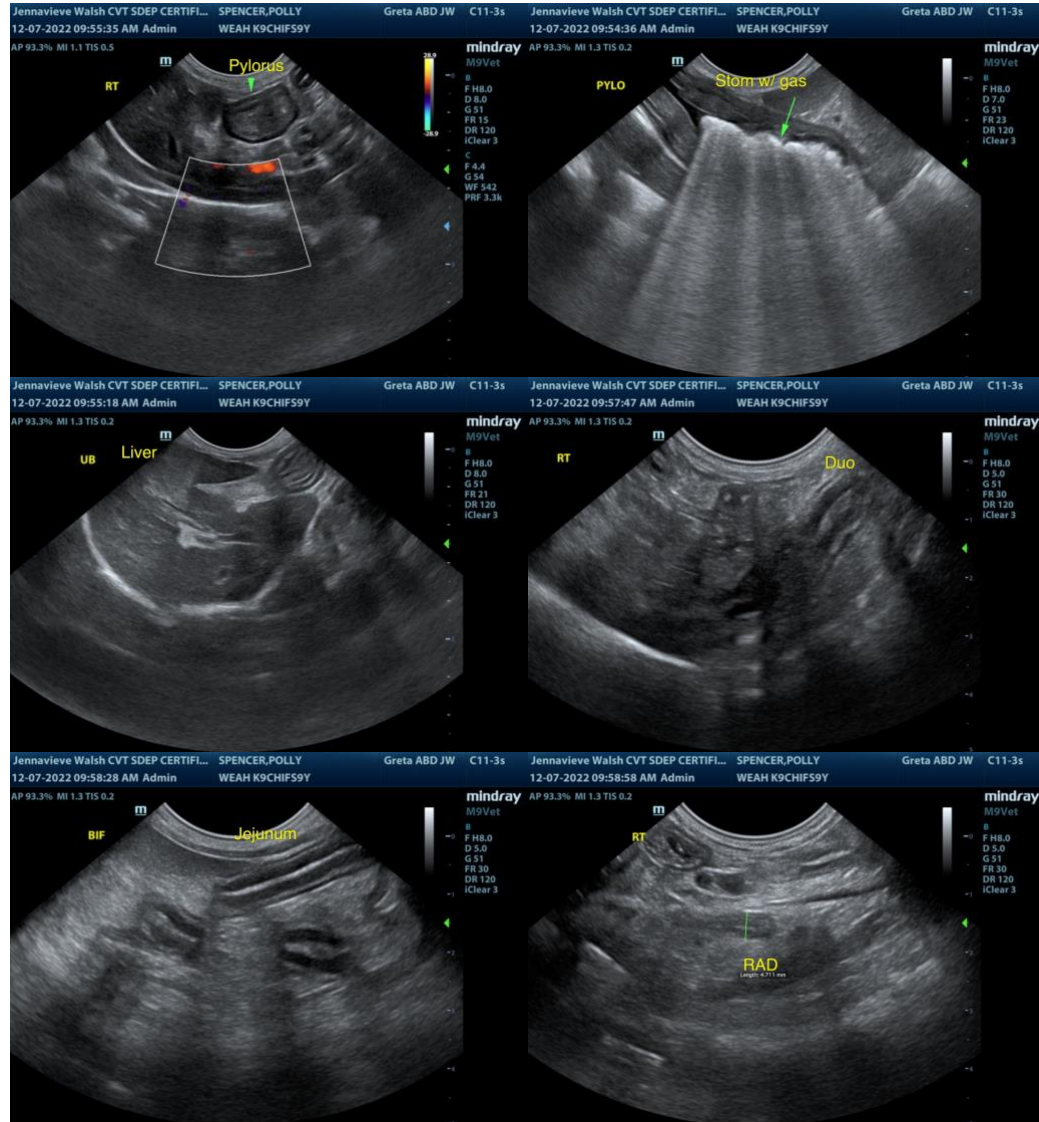
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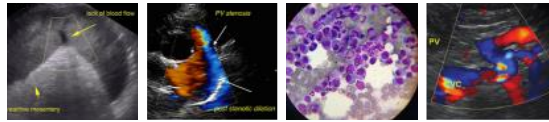
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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



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