



PATIENT

Milly McGrath

SPECIES

Canine

BREED

German Shepherd Mix

SEX

Spayed female

AGE

10 years

WEIGHT

49 kg

INTERPRETED BY

Alicia Angosto
Guerrero, DMV,
PgDip, MSc.

IMAGING PERFORMED BY

Ryan Bergner, LVT

HOSPITAL NAME

Waterville VC

REFERRING VET

Dr. Peppenelli

INVOICE

75497

DATE

5/13/26

PRESENTING CLINICAL SIGNS

History: Patient presented for a wellness appointment on 4/27/26 and general bloodwork and UA were submitted. Bloodwork revealed mixed cholestatic and hepatocellular hepatopathy with marked elevation of GGT (ALP 357, ALT 133, GGT 312) and elevated cholesterol (451). Patient also had a urinary tract infection with marked rods and WBC present (Pt is currently on antibiotic therapy for this). Abdominal ultrasound was recommended to assess for underlying cause of liver enzyme elevations. Abnormal PE/Chem/CBC/UA Results: Anaplasmosis positive on 4DX, otherwise See history above

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The bladder lumen is normally distended, and the wall of the urinary bladder appears thin and smooth. The urine is anechoic. Normal appearance of the bladder neck and proximal urethra. There are no calculi, and no evidence of inflammatory or neoplastic changes.

The left kidney is normal in shape and size: 7.93×3.82 cm, and the thickness of the cortex is 0.64 cm, in the sagittal plane. The right kidney is normal in shape and size: 8.17×4.65 cm, and the thickness of the cortex is 0.70 cm, in the sagittal plane. Both kidneys: the cortex is isoechoic compared to liver parenchyma. The corticomedullary ratio is normal and corticomedullary definition is preserved. There is no evidence of pyelectasia, nephroliths, or hydronephrosis. Doppler color demonstrates a normal vascular pattern.

Adrenal Glands

Dorsoventral diameters measured in the sagittal plane: the left adrenal gland measures 0.60 cm at the cranial pole and 0.58 cm at the caudal pole, which are within normal limits for a dog of this size. The right adrenal gland is not confidently visualized.

Spleen

Splenic thickness is 2.83 cm. The parenchyma demonstrates normal echogenicity with a mildly patchy heterogeneous echotexture and no discrete focal lesions identified. The splenic capsule is smooth and regular.

Liver

The liver is subjectively normal in size, with relatively sharp margins and a regular contour. The hepatic parenchyma is overall uniform and isoechoic relative to the falciform fat, with generally preserved echotexture. However, within the region of the right medial liver lobe, there is a poorly defined region of mildly heterogeneous/nodular altered echogenicity measuring subjectively approximately 6-7 cm in diameter, associated with mild distortion of the expected hepatic echotexture and vascular architecture. The significance of this finding is uncertain, as some component may be related to technical/image quality limitations; however, a true focal hepatic lesion cannot be excluded based on the current examination. No hepatic lymphadenopathy is observed.



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The gallbladder lumen is normally distended. The wall is thin and the contents are primarily anechoic. No evident dilation of the cystic duct or common bile duct is observed.

Gastrointestinal Tract

The stomach is moderately distended with luminal ingesta, with mural thickness measuring 2.70 mm and preserved wall layering. The duodenum measures 3.12 mm. The jejunum measures 3.29-3.34 mm, with preserved wall layering. No evidence of gastrointestinal inflammation, ileus, or foreign material is identified. The colon measures 1.92 mm, with mild formed fecal material present.

Pancreas

The evaluated pancreatic regions do not show evidence of overt inflammation or neoplastic disease.

Free Abdomen

No sonographic evidence of abdominal effusion, peritonitis, or lymphadenomegaly is identified. The iliac trifurcation is normal.

PRIMARY FINDINGS

- Ill-defined heterogeneous/nodular region within the right medial liver lobe

SECONDARY FINDINGS

- Mild patchy splenic heterogeneity

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A large poorly defined mass-like region of altered hepatic echogenicity and architecture is identified in the region/projection of the right medial liver lobe, measuring subjectively approximately 6-7 cm in diameter. Within this area, normal hepatic echotexture and vascular architecture are partially effaced. Although sonographic characterization remains somewhat limited on the current examination, the abnormality is reproducibly identified in multiple imaging planes and is therefore considered unlikely to be purely artifactual. A true focal hepatic lesion should be strongly considered.

Differential considerations include infiltrative or primary hepatic neoplasia, focal severe vacuolar/reactive hepatopathy, focal inflammatory hepatopathy, or other infiltrative hepatic disease processes. The lesion is not sufficiently characterized ultrasonographically to determine biological behavior with confidence.

The reported mixed hepatocellular/cholestatic enzyme elevations with marked GGT increase and hypercholesterolemia may be related to the hepatic abnormality identified on this study; however, the ultrasonographic appearance remains nonspecific, and concurrent diffuse hepatobiliary disease cannot be excluded. Importantly, no sonographic evidence of gallbladder mucocele, extrahepatic biliary



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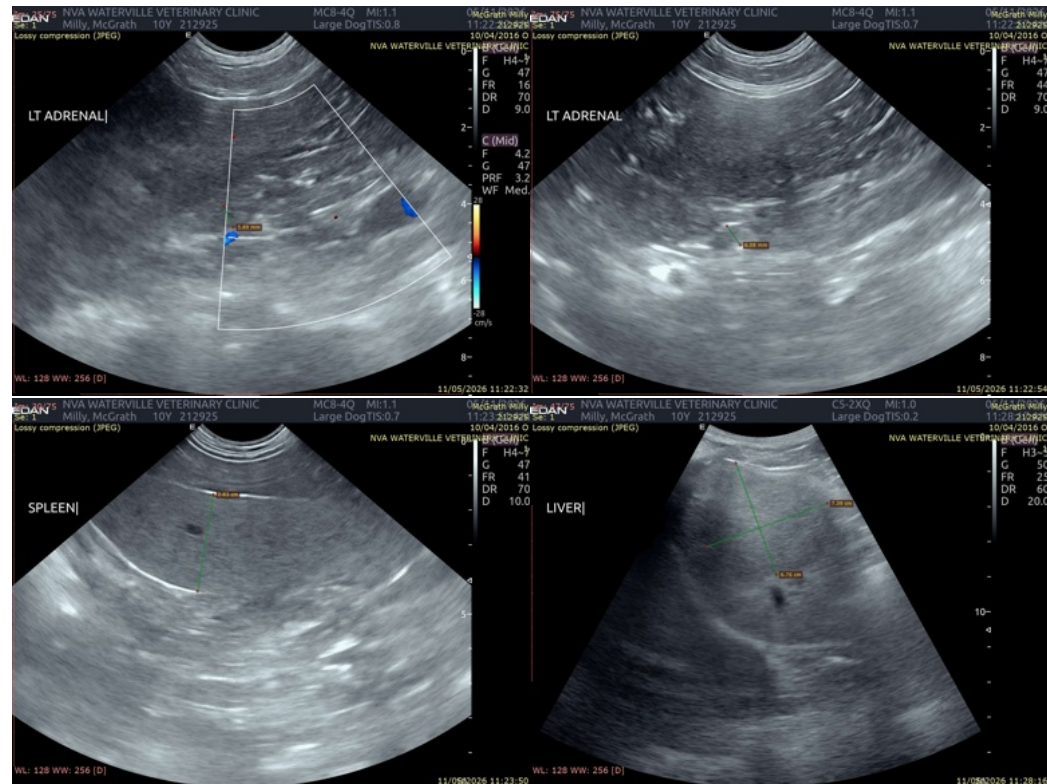
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obstruction, overt cholecystitis, or clinically significant pancreatobiliary inflammation is identified at this time.

The mild patchy splenic heterogeneity is nonspecific and commonly incidental/reactive in appearance. Reactive lymphoid change, including potential association with the reported Anaplasma-positive status, is considered possible. No convincing evidence of abdominal metastatic disease or significant abdominal lymphadenopathy is identified on the current examination.

Recommendations

- Correlation with the current/repeat liver enzyme values and ongoing clinical progression is recommended.
- Further characterization of the focal hepatic abnormality could be pursued with repeat targeted ultrasonographic evaluation and/or advanced imaging (such as CT).
- If liver enzyme abnormalities persist or worsen, further investigation such as ultrasound-guided hepatic sampling or biopsy could eventually be considered, although final diagnostic and therapeutic decisions should be made by the attending veterinarian, who can best integrate these findings with the patient's clinical status.





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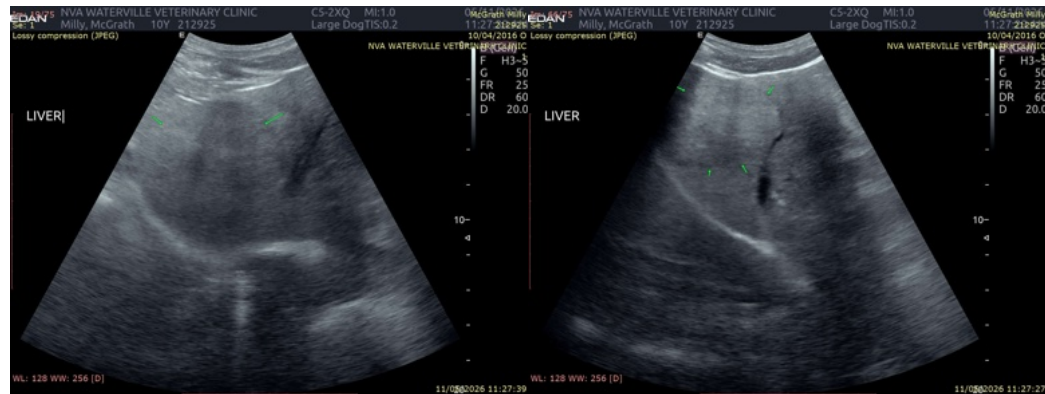
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Alicia Angosto Guerrero, DMV, PgDip, MSc.

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