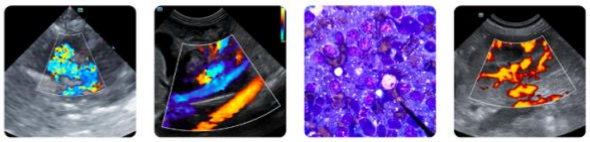


PATIENT

Gordie Macphail

SPECIES

Canine

BREED

Beagle Mix

SEX

Neutered Male

AGE

9

WEIGHT

20.25 kg

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Natalia Franco

HOSPITAL NAME

Eagleson VC

REFERRING VET

Boules Maher

INVOICE

22492

DATE

2-2-26

PRESENTING CLINICAL SIGNS

History: Presented for abdominal ultrasound due to persistently abnormal liver-associated parameters identified on repeat bloodwork. Initially presented with an acute episode of vomiting in late December, which has since resolved. At the time of imaging, the patient was clinically stable with no ongoing vomiting, diarrhea, or inappetence reported.

Abnormal PE/Chem/CBC/UA Results: Physical examination was largely unremarkable; mild abdominal tension had been noted on prior palpation. Serial serum biochemistry demonstrated a cholestatic pattern, including elevated GGT (9 U/L; reference 0–7 U/L), total bilirubin (11 µmol/L; reference 2–10 µmol/L), and bile acids (35–49 µmol/L; reference 0–25 µmol/L). ALT was variably elevated, with a peak value of 122 U/L (reference 10–118 U/L), and previously markedly increased at 427 U/L. Alkaline phosphatase remained within reference range. Liver synthetic function parameters, including albumin (39–43 g/L; reference 25–44 g/L), as well as renal values and cholesterol, were within normal limits.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder wall is normal in thickness. The mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is normal in size (0.70 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal in size (5.32 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (5.92 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.61 cm at cranial pole) (0.71 cm at caudal pole) with slightly swollen peripheral contours. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

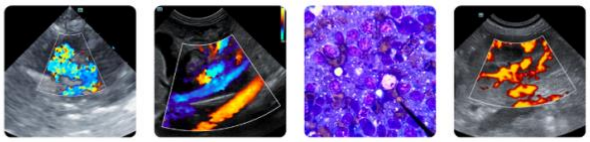
The right adrenal gland is normal in size (1.00 cm at cranial pole) (0.57 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.97 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.



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The gallbladder lumen is moderately distended. The wall is thin and smooth. A small amount of gravity-dependent, echogenic- to mineralized debris/sand is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Lymph Nodes

The abdominal lymph nodes are normal/not visible.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion.

ULTRASONOGRAPHIC FINDINGS

- The hepatic changes are nonspecific and could be secondary to inflammatory disease (i.e., cholangiohepatitis, chronic hepatitis), Leptospirosis, hepatotoxicosis, infiltrative neoplasia (i.e., lymphoma), vacuolar hepatopathy, regenerative nodular hyperplasia, other hepatopathy, or some combination thereof.
- Gallbladder debris/sand, non-mucocele
- Mild left adrenomegaly

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Leptospirosis testing (i.e., blood and urine PCR, serology) can be considered, particularly if clinical suspicion for disease is high.
- Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If cytologic evaluation is inconclusive or if a more aggressive approach is desired, consider laparoscopic or surgical liver biopsies with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for copper quantitation.
- If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.

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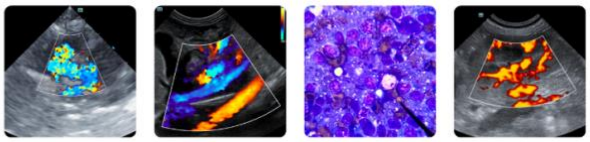

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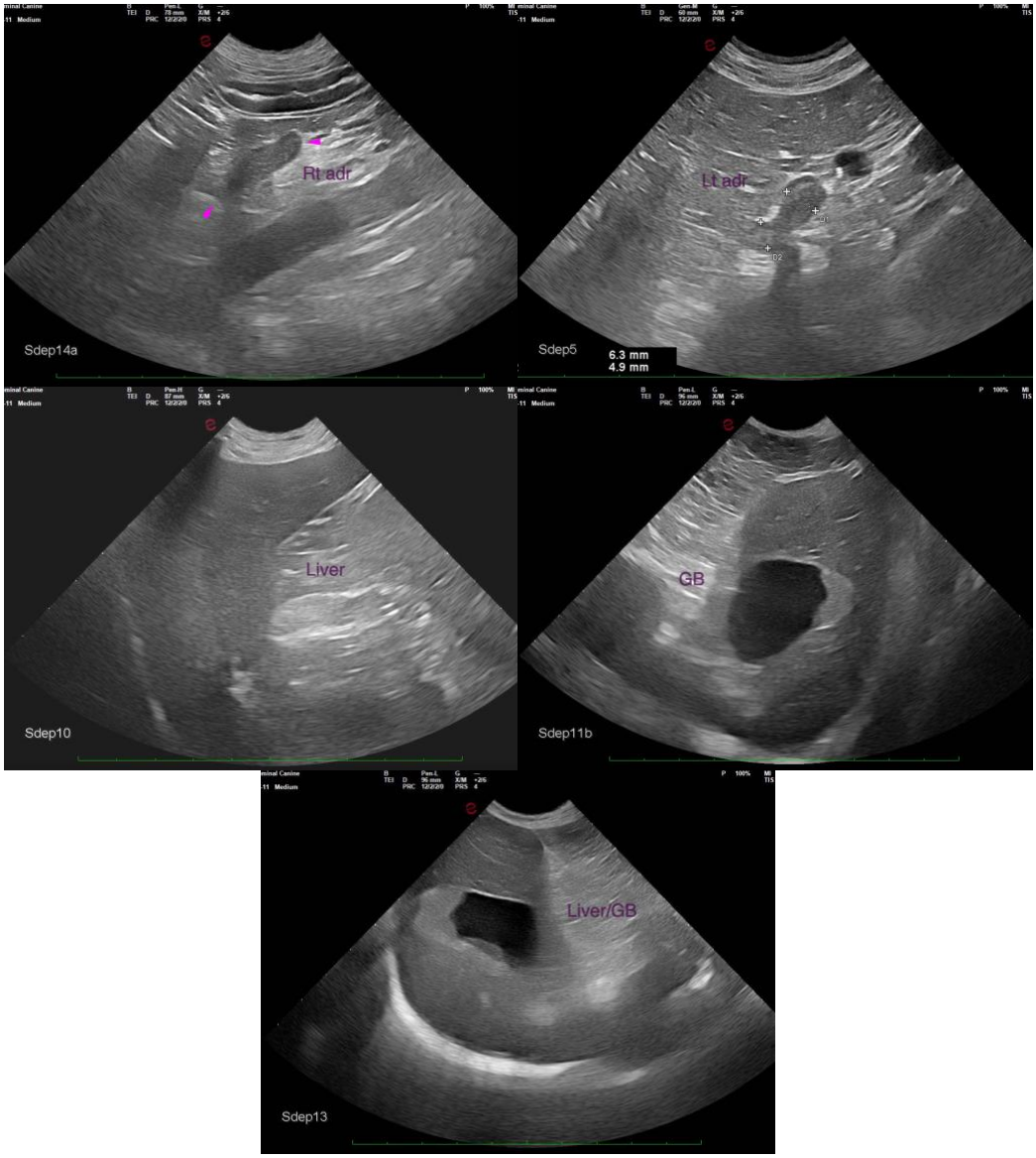

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com