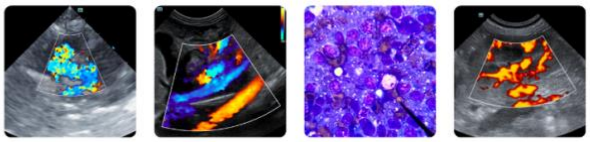


PATIENT

Wrigley Drennan

SPECIES

Canine

BREED

Retriever Mix

SEX

Neutered Male

AGE

12

WEIGHT

75 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Michelle Lindemulder DVM

HOSPITAL NAME

Southkent VH

REFERRING VET

Michelle Lindemulder

INVOICE

22423

DATE

1-22-26

PRESENTING CLINICAL SIGNS

- Elevated liver enzymes not decreasing with Denamarin

Abnormal PE/Chem/CBC/UA Results: Repeatedly elevated liver enzymes (ALT 385, ALP >2,000) of almost one year duration

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 mostly anechoic. No cystic calculi are observed. The region of the trigone is normal.

The region of the prostate is not visualized due to its pelvic location.

The left kidney is normal in size (6.69 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal-to-mild corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (7.47 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal-to-mild corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

No images provided.

Spleen

The spleen is normal in size (2.23 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged, with swollen peripheral contours. The parenchyma is isoechoic-to-hyperechoic relative to the spleen, and diffusely heterogenous in appearance, with several, ill-defined hypoechoic nodules throughout the organ. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

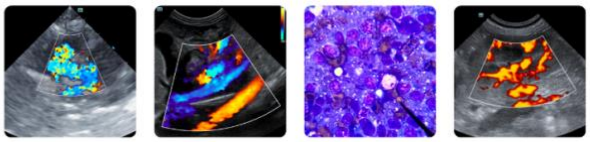
The gallbladder is moderately distended. The wall is normal in thickness, slightly irregular, and hyperechoic-to-mineralized. A few, small, nonobstructive cholelith are seen within the lumen, along with a scant amount of gravity-dependent mineralized sand. The cystic and common bile ducts are normal.

Gastrointestinal

The lumen is not distended. The gastric wall is normal in thickness with a normal layering pattern. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal 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.



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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

Primary Findings

- The hepatic changes are nonspecific and could be secondary to inflammatory disease (i.e., cholangiohepatitis, chronic hepatitis), hepatotoxicosis, infiltrative neoplasia (i.e., lymphoma), vacuolar hepatopathy, regenerative nodular hyperplasia, other hepatopathy, or some combination thereof.
- The gallbladder wall changes are suggestive of cholecystitis. Some gallbladder sand and tiny, nonobstructive choleliths are observed within the lumen.
- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a lower possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).

Secondary Findings

- Minor bilateral age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the hepatic and splenic changes, consider fine-needle aspiration of both organs (assuming normal clotting status). Twenty-five gauge-needles should be used. If the cytology results of the liver are inconclusive, consider laparoscopic or surgical biopsies with aerobic and anaerobic bile cultures and hepatic copper quantitation. Three-view thoracic radiographs should be performed prior to any anesthetic event.
- 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.
- Other diagnostic considerations include the following:

    1. Pre- and postprandial serum bile acids
    2. Leptospirosis testing (i.e., blood and urine PCR, serology) particularly if the clinical suspicion for disease is high

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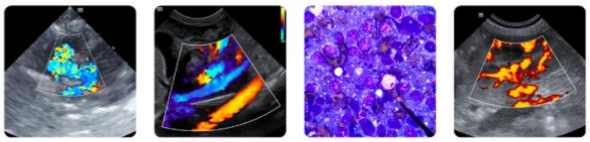

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Educational Teleconsultation Services™

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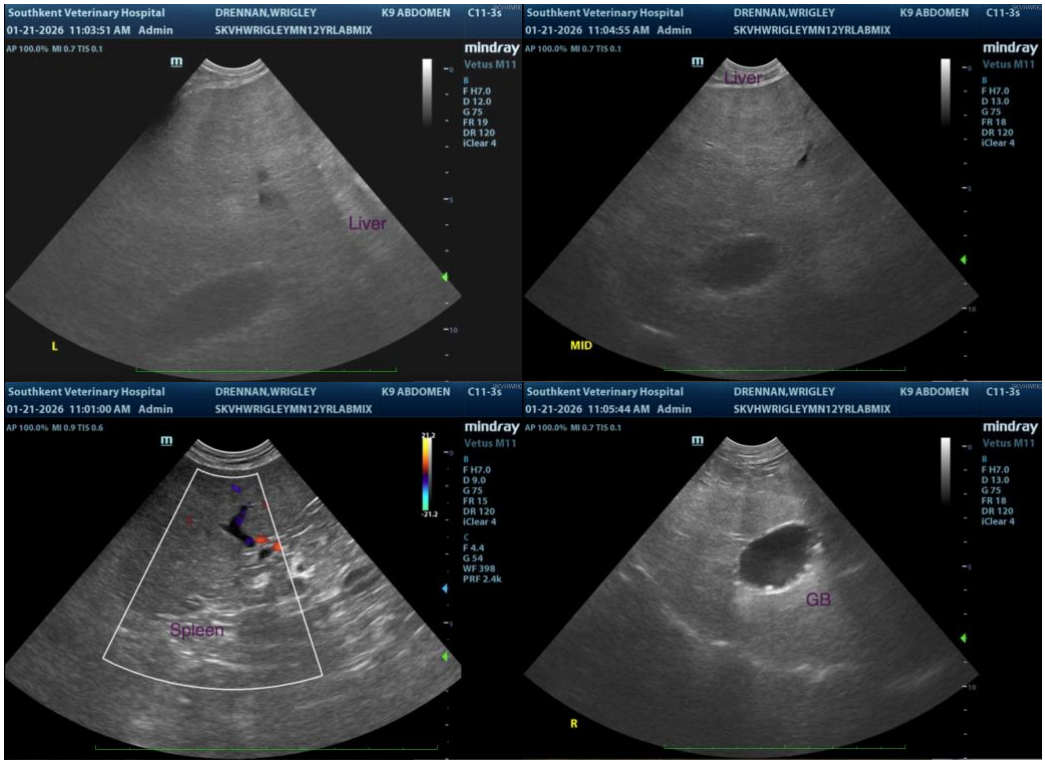

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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