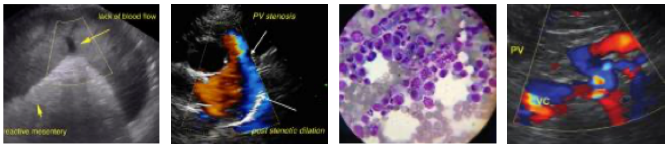
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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1-800-838-4268 info@sonopath.com

PATIENT
Scotty Koleszar

SPECIES
Canine

BREED
Labrador Retr

SEX
Neutered Male

AGE
10 years 5 mos

WEIGHT
40.2 kg

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

IMAGING PERFORMED BY
Brian Barnes

HOSPITAL NAME
Westview VH

REFERRING VET
Brian Barnes

INVOICE
11960

DATE
11.3.22

PRESENTING CLINICAL SIGNS

History: R/C AUS , liver enzymes continue to climb upwards
Abnormal PE/Chem/CBC/UA Results: History of increased liver values; Historical ALT:(N 10-125) ALKP:(N 23-212) 10/25/22 406 308 04/21/22 307 122 10/05/21 232 58 02/03/21 205 28 08/31/20 154 28 06/23/20 135 42 04/30/20 145 15 04/27/17 69 15 01/24/17 37 <10 Had Normal BA Panel Feb 10, 2021 SDMA 15 (N 0-14) Had a previous increased BNP with a normal Echo U/A: Free catch, pale yellow, clear, USG 1.031, pH 7.0, Leu 25, Pro 500, / Glu/ Ket/ Bil Negative, UBG 1 Bld 25 . SEDI: WBC <1/HPF, RBC 2/HPF, Bac 0, Non-SEC <1/HPF, Cast 0, Crystals 0 UPCR: <0.2 (N <0.5 =no significant proteinuria)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with mostly anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 3-4 cm, are normal.

The **prostate** is normal in size (1.07 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The **left kidney** is normal size (6.73 cm in length); normal shape and architecture with 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 size (7.86 cm in length); normal shape and architecture with 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.

Adrenal Glands

The **left adrenal gland** is normal size (0.58 cm at cranial pole) (0.50 cm at caudal pole) (2.42 cm in length); normal shape; homogenous parenchyma. 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 mildly enlarged (1.16 cm at cranial pole) (1.11 cm at caudal pole) (4.21 cm in length); normal shape; 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 (1.72 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 normal in size with slightly irregular peripheral contours. The parenchyma is hypoechoic relative to the spleen and heterogenous in appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is moderately distended. The wall is normal to slightly thickened, and hyperechoic to mineralized in some areas. A small amount of gravity dependent, 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 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.

Free Abdomen

The **peritoneal cavity** is normal. There is no evidence of inflammation or effusion. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Given the patient's clinical history and sonographic hepatic changes, a chronic hepatopathy (i.e., chronic hepatitis, hepatotoxicosis (i.e., copper)) +/- concurrent fibrosis is considered likely. Infiltrative neoplasia is possible but considered unlikely given the chronicity of the liver enzyme elevations.

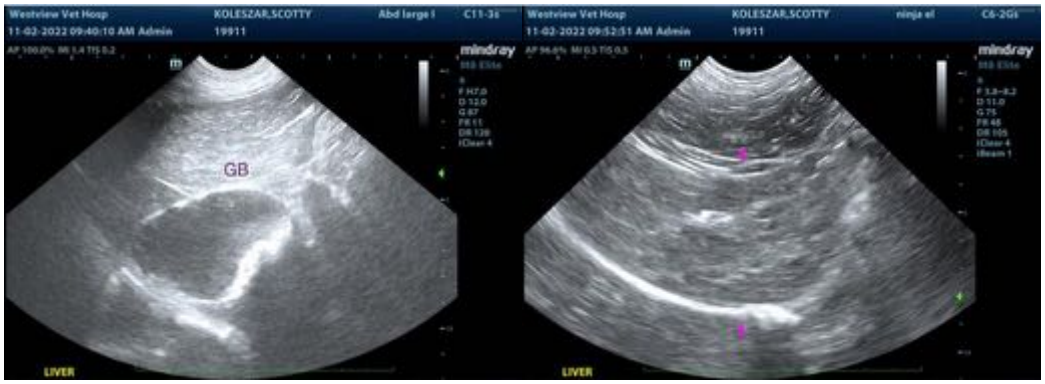
- The gall bladder wall changes are suggestive of cholecystitis.

Secondary Findings

- Mild right adrenomegaly. This may be a normal variant for this patient or may represent early hyperplastic change.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Consider pre-and postprandial serum bile acids to assess overall hepatic function. Ultimately, laparoscopic, or surgical liver biopsies should be considered to get a definitive diagnosis. If pursued, copper quantitation on hepatic tissue is recommended along with aerobic and anaerobic bile cultures. Prior to the hepatic tissue sampling, three-view thoracic radiographs should be performed along with clotting times (PT/PTT). In the meantime, consider supportive measures (i.e., Denamarin, vitamin E, Ursodiol, prescription liver diet).



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