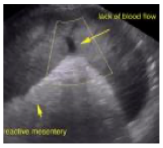
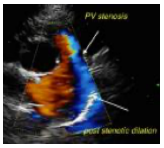
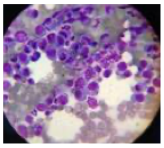
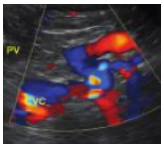
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Poppleton Voeller

SPECIES

Canine

BREED

French Bulldog

SEX

Neutered Male

AGE

3 years

WEIGHT

32 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family PC

REFERRING VET

Dr. Christina Sitton

INVOICE

11640

DATE

9.15.22

PRESENTING CLINICAL SIGNS

History: presented initially w/ ADR hiding signs on 8/24 - suspicious for spinal injury, started tx responded well and doing well currently did BW at the time found elevated ALT, tx w/ Clavamox & Denamarin for 2 weeks, rechecked and ALT worse. Discussed Lepto PCR, O elected for AUS and liver FNA first

Abnormal PE/Chem/CBC/UA Results: ALT 1004 (18-121); was 798 on 8/24 Neutrophils 5573 (2940-12670); was 14027 otherwise chem 11/CBC wnl liver FNA/cytology pending as of today

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 mildly distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The **prostate** is normal in size (0.66 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 (5.30 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. The cortex is mildly hyperechoic. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal (4.81 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. The cortex is mildly hyperechoic. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The **left adrenal gland** is normal size (0.45 cm at cranial pole) (0.48 cm at caudal pole; 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 normal size (0.51 cm at cranial pole) (0.45 cm at caudal pole) (2.11 cm in length); with a normal shape. A 0.53 x 0.35 cm hyperechoic nodule is observed at the cranial aspect. The remaining glandular echogenicity and detail are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The **spleen** is normal in size (1.44 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 normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **stomach and intestine** are free of stasis and exhibit normal peristaltic activity. 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 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

- An obvious cause for the patient's elevated liver enzymes is not identified in this study. If the liver enzyme elevations are acute in nature, infectious/inflammatory disease (i.e., bacterial cholangiohepatitis, Leptospirosis) or hepatotoxicosis would be the primary differentials. If the liver enzyme elevations are chronic, inflammatory disease is also possible with potential for fibrosis. Infiltrative neoplasia is also a possibility in either scenario. However, given the sonographic changes, this is considered less likely.

Secondary Findings

- The right adrenal nodule trends toward the benign (i.e., nodular hyperplasia) with a lower possibility of an emerging tumor.

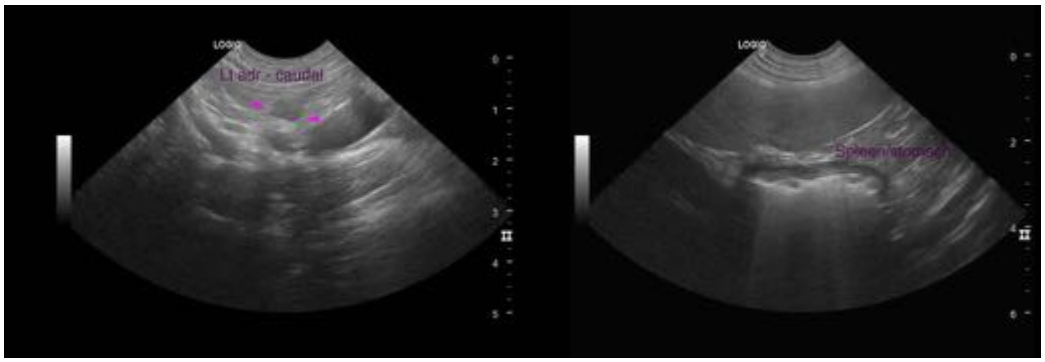
- Minor bilateral age-related renal changes

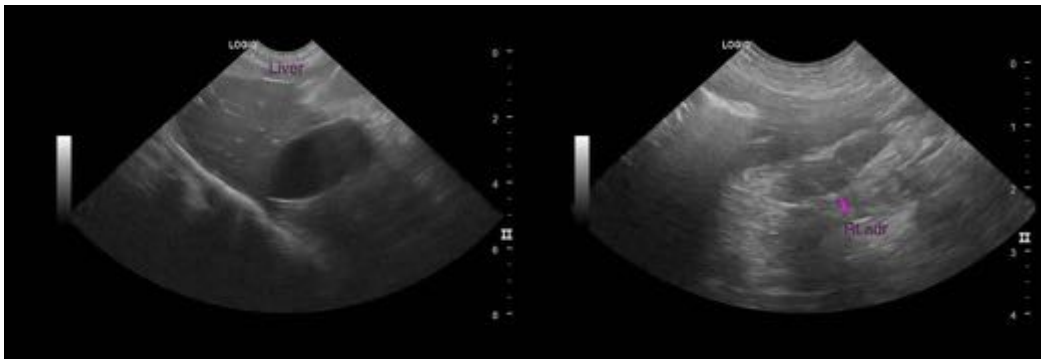
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Leptospirosis testing (i.e., blood and urine PCR, serology) is recommended.

Also consider pre-and postprandial serum bile acids.

If the above diagnostics and the hepatic cytology are inconclusive, a surgical liver biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for potential copper quantitation should be considered. While awaiting test results, empirical treatment for bacterial cholangiohepatitis/Leptospirosis/hepatotoxicity is recommended, including broad-spectrum antibiotics, hepatic antioxidants, and symptomatic care.





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