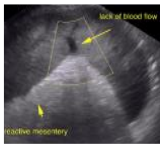
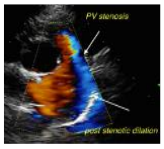
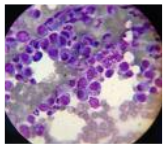
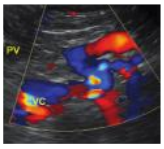
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Forrest Saez

SPECIES

Canine

BREED

Poodle Mix

SEX

Neutered Male

AGE

10 years

WEIGHT

22 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family Pet Clinic

REFERRING VET

Dr. Wustenberg

INVOICE

105601

DATE

3/23/22

PRESENTING CLINICAL SIGNS

History: incident liver enzyme changes found on pre-anesthetic BW
Abnormal PE/Chem/CBC/UA Results: ALT 309 U/L 18 - 121 BILE ACIDS 27.5 umol/L 0.0 - 14.9 BILE ACPP 25.5 umol/L 0.0 - 29.9 otherwise chem/CBC/T4/UA: wnl

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A scant amount of suspended echogenic debris is observed within the lumen. 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 (0.78 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 (5.19 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. The cortex is mildly hyperechoic. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The right kidney is normal size (5.53 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. The cortex is mildly hyperechoic. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The left adrenal gland is normal size (0.41 cm at cranial pole) (0.48 cm at caudal pole); with 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.

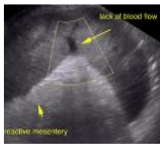
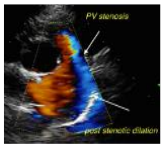
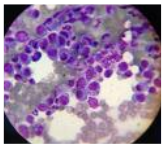
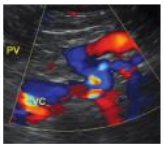
The right adrenal gland is normal size (0.5 cm at cranial pole) (0.41 cm at caudal pole) (2.38 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.04 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 prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.

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

PATIENT

Forrest Saez

SPECIES

Canine

BREED

Poodle Mix

SEX

Neutered Male

AGE

10 years

WEIGHT

22 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family Pet Clinic

REFERRING VET

Dr. Wustenberg

INVOICE

105601

DATE

3/23/22

The gall bladder lumen is distended. The wall is normal in thickness. A moderate amount of aggregated, gravity dependent, echogenic debris/sludge is observed within the lumen, along with a small amount of suspended debris. The cystic and common bile ducts are not seen.

Gastrointestinal

The gastric lumen is mildly distended. Stranding echogenic material is observed within the lumen and creates a compartmentalized appearance. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is not overtly 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. No obstructive or overt infiltrative disease is noted.

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

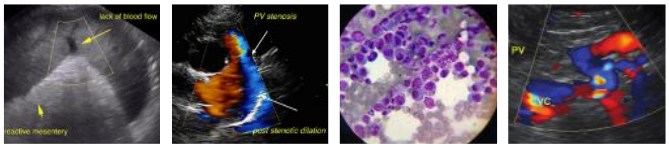
- Nonspecific diffuse hepatopathy. Top differentials include inflammatory hepatopathy (i.e., bacterial cholangiohepatitis, chronic active hepatitis, copper hepatotoxicosis, cholestatic liver or gall bladder disease, infiltrative neoplasia (less likely), reactive hepatopathy), other.
- Gall bladder sludge, without obvious mucocele formation

Secondary Findings

- Minor age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider Leptospirosis testing (i.e., blood and urine PCR, serology), particularly if the patient's risk level is high.
- Ultimately hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy, will likely be necessary to get a definitive diagnosis. Surgical biopsies would be ideal in that they are more likely to be representative of global organ pathology. If surgery is pursued, aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for potential copper quantitation are recommended. The gall bladder/bile ducts should also be evaluated at the time of surgery to assess for pathology and patency, respectively. Thoracic radiographs should be performed prior to anesthesia to evaluate cardiopulmonary status.
- If a more conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis with broad-spectrum antibiotics (i.e., amoxicillin-clavulanic acid, +/- Metronidazole, Denamarin). If no improvement in the liver values is seen within 5-7 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling revisited. If



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

PATIENT

Forrest Saez

SPECIES

Canine

BREED

Poodle Mix

SEX

Neutered Male

AGE

10 years

WEIGHT

22 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family Pet Clinic

REFERRING VET

Dr. Wustenberg

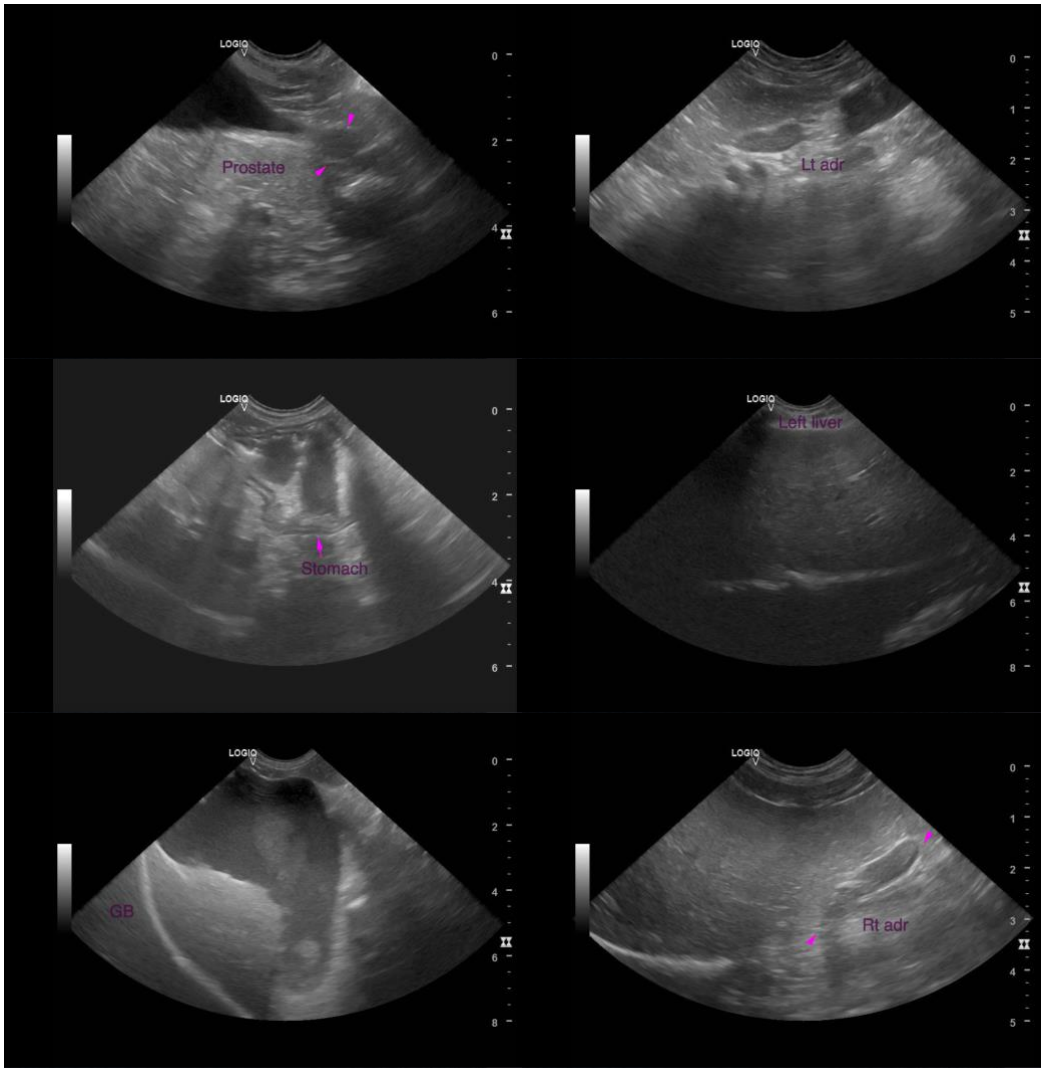
INVOICE

105601

DATE

3/23/22

liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.



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