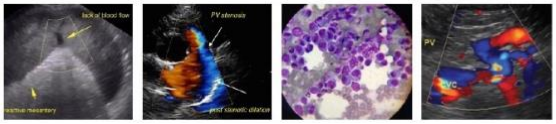
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Onyx Burch

SPECIES

Canine

BREED

Beagle Mix

SEX

Spayed Female

AGE

16 Years

WEIGHT

22 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family PC

REFERRING VET

Christina Sitton

INVOICE

16218

DATE

6/22/22

PRESENTING CLINICAL SIGNS

History: ADR, PU/PD, hyporexia, lethargy
Abnormal PE/Chem/CBC/UA Results: Creatinine 2.1 (0.5-1.5); was 1.8, 1.5, 1.5 BUN 36 (9-31); was 39, 25, 34, 35 ALP 3366 (5-160); was 2045, 2345, 795, 2040 ALT 578 (18-121); was 103, 183, 92, 72, 188 tbil was wnl last week and has been historically but P is now visibly icteric so I suspect this is now elevated UA: cocci, rods UC: negative previous AUS with you guys in 7/2021, BA at that time wnl: Large heterogenous liver-diffuse changes which are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy, infiltrative disease or other hepatopathy

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Kidneys are bilaterally normal in size with irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed. Cortical cysts were present in the left kidney. The left kidney measures 4.4 cm. The right kidney measures 4.4 cm.

Adrenal Glands

Adrenal glands are plump/swollen in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 0.59 cm at the cranial pole and 0.61 cm at the caudal pole. The right adrenal gland measures 0.9 cm at the cranial pole and 0.6 cm at the caudal pole.

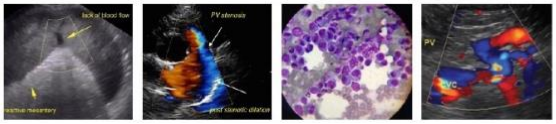
Spleen

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

Liver is enlarged in size with a swollen, irregular contour. The parenchyma is heterogeneous, characterized by multiple poorly defined hypoechoic nodules, with an otherwise hyperechoic liver parenchyma. Several more distinct lesions, including a 2.5 cm round target lesion, which is a hyperechoic nodule surrounded by a hypoechoic rim, as well as a 1.5 cm x 3.0 cm hypoechoic mass-like lesion are noted. The mass-like lesion is in the mid caudal liver. The target lesion is in the ventral liver.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.



PATIENT

Onyx Burch

SPECIES

Canine

BREED

Beagle Mix

SEX

Spayed Female

AGE

16 Years

WEIGHT

22 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family PC

REFERRING VET

Christina Sitton

INVOICE

16218

DATE

6/22/22

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

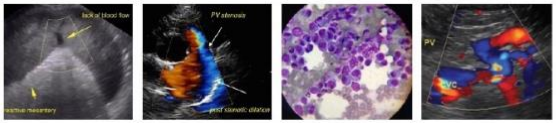
- A diffusely heterogeneous liver, differentials for which include benign changes, such as nodular hyperplasia or steroid vacuolar hepatopathy, extramedullary hematopoiesis, etc., as well as neoplastic disease, such as infiltrative round cell or metastatic neoplasia. However, given the discreet target lesion, especially in the hypoechoic mid liver mass, infiltrative neoplasia is considered probable.

Secondary Findings

- Bilateral adrenomegaly is consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.
- This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.
- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

1. Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.
2. A fine needle aspirate of the diffuse liver changes, as well as the discreet target lesion, if



PATIENT

Onyx Burch

SPECIES

Canine

BREED

Beagle Mix

SEX

Spayed Female

AGE

16 Years

WEIGHT

22 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family PC

REFERRING VET

Christina Sitton

INVOICE

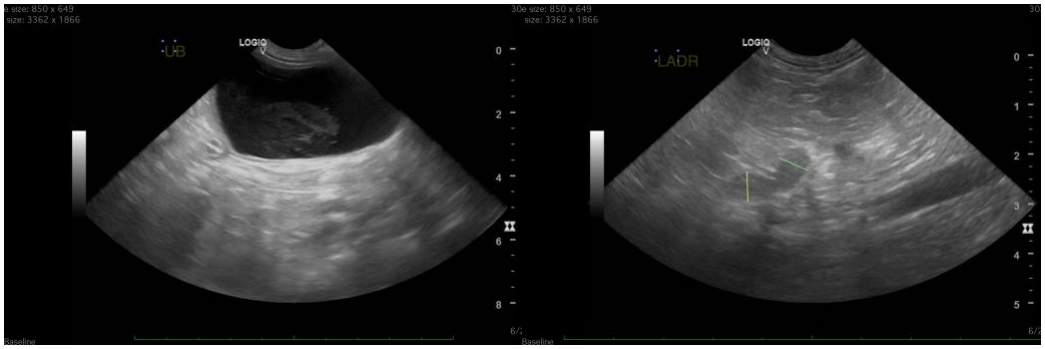
16218

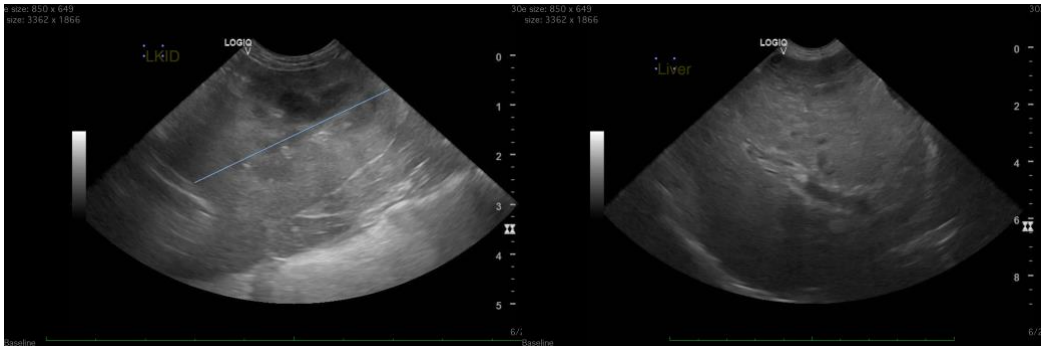
DATE

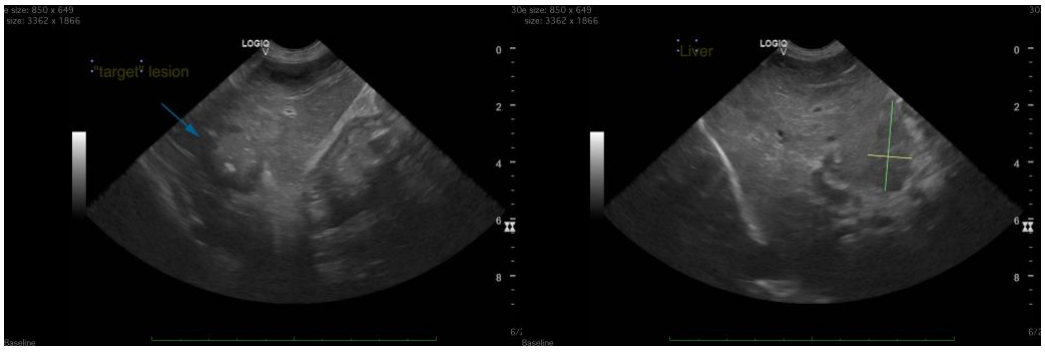
6/22/22

patients coagulation status is appropriate.

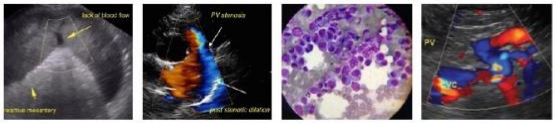
3. Given this patients bacteriuria, adrenomegaly, diffusely heterogeneous liver and PU/PD, hyperadrenocorticism is suspected. However, hyperadrenocorticism does not typically make animals inappetent and ill, therefore, recommendations are to diagnose and manage the infiltrative hepatopathy prior to further pursuing possible hyperadrenocorticism down the road. Having said that, a blood pressure is recommended, if not recently evaluated, as is treatment of the suspected UTI, despite the reported negative culture.







SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Onyx Burch

SPECIES

Canine

BREED

Beagle Mix

SEX

Spayed Female

AGE

16 Years

WEIGHT

22 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Christina Sitton

HOSPITAL NAME

Sherwood Family PC

REFERRING VET

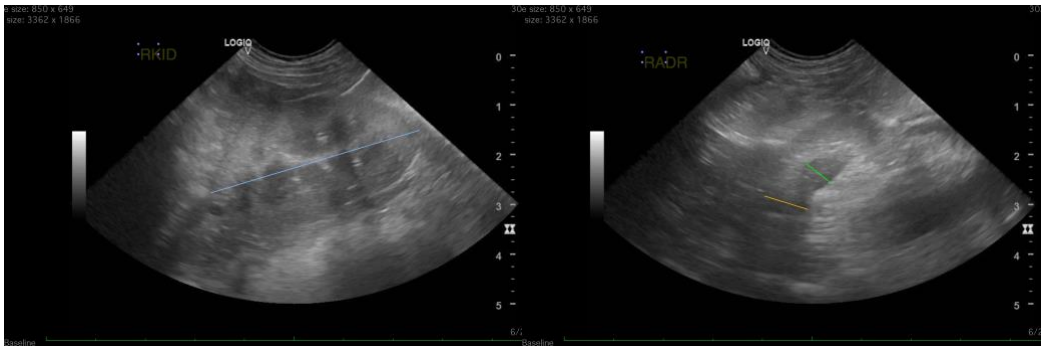
Christina Sitton

INVOICE

16218

DATE

6/22/22



The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

Beth Johnson, DVM DACVIM

Beth.Johnson@SonoPath.com