



PATIENT

Onyx Simkin

SPECIES

Canine

BREED

Scottish Terrier

SEX

Neutered Male

AGE

13 Years

WEIGHT

26 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Joan Gramazio

HOSPITAL NAME

Shohola Vet Hospital

REFERRING VET

Dr. Joan Gramazio

INVOICE

40572

DATE

8/17/22

PRESENTING CLINICAL SIGNS

Is currently being treated for Cushings disease and recently started having PU/PD and uncontrolled Cushings symptoms. Blood work is indicating renal disease and ultrasound was performed to rule out kidney disease vs infection. Urine culture is pending

Abnormal PE/Chem/CBC/UA Results: IDEXX SDMA 20 (0 - 14) µg/dL BUN 51 (9 - 31) mg/dL Phosphorus 6.5 (2.5 - 6.1) mg/dL Creatinine 1.5 (0.5 - 1.5) mg/dL Potassium 5.8 (4.0 - 5.4) mmol/L ALP 2,234 (5 - 160) U/L SG 1019

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

****There are no measurements provided below, as they could only be measured in pixels.**

Urinary System

Urinary bladder is adequately distended with primarily anechoic contents and occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick. Mucosa is hyperechoic and irregular. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. Small cortical cysts noted bilaterally.

Adrenal Glands

The right adrenal gland is unable to be well visualized in these images.

The left adrenal gland appears normal in size, shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The 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 subjectively enlarged (swollen contour) without disruption of architecture. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen and falciform fat. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.



PATIENT

Onyx Simkin

SPECIES

Canine

BREED

Scottish Terrier

SEX

Neutered Male

AGE

13 Years

WEIGHT

26 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Joan Gramazio

HOSPITAL NAME

Shohola Vet Hospital

REFERRING VET

Dr. Joan Gramazio

INVOICE

40572

DATE

8/17/22

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- **Hyperechoic hepatomegaly** - This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely.
- **Gallbladder debris** - Cholecytic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecytic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
- Age related kidney changes with bilateral renal cortical cysts
- **Chronic Cystitis** - Urinary bladder wall changes are most consistent with chronic cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely give the location and diffuse nature of the changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient may have early mild kidney disease contributing to the sudden recurrence of polyuria/polydipsia. However, given the history of hyperadrenocorticism and the acute mild azotemia combined with hyperkalemia, etc., cortisol deficiency is another differential. Therefore, recommendations include an ACTH stimulation test to further investigate patient's cortisol responses to the current treatment for hyperadrenocorticism that the patient is on.

If cortisol is low, recommendations are to discontinue therapy temporarily and restart at a lower dose. If cortisol is normal, that is more support for early emerging kidney disease. A blood pressure is recommended if not recently evaluated. A urine culture is recommended, as is reportedly pending.



PATIENT

Onyx Simkin

SPECIES

Canine

BREED

Scottish Terrier

SEX

Neutered Male

AGE

13 Years

WEIGHT

26 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Joan Gramazio

HOSPITAL NAME

Shohola Vet Hospital

REFERRING VET

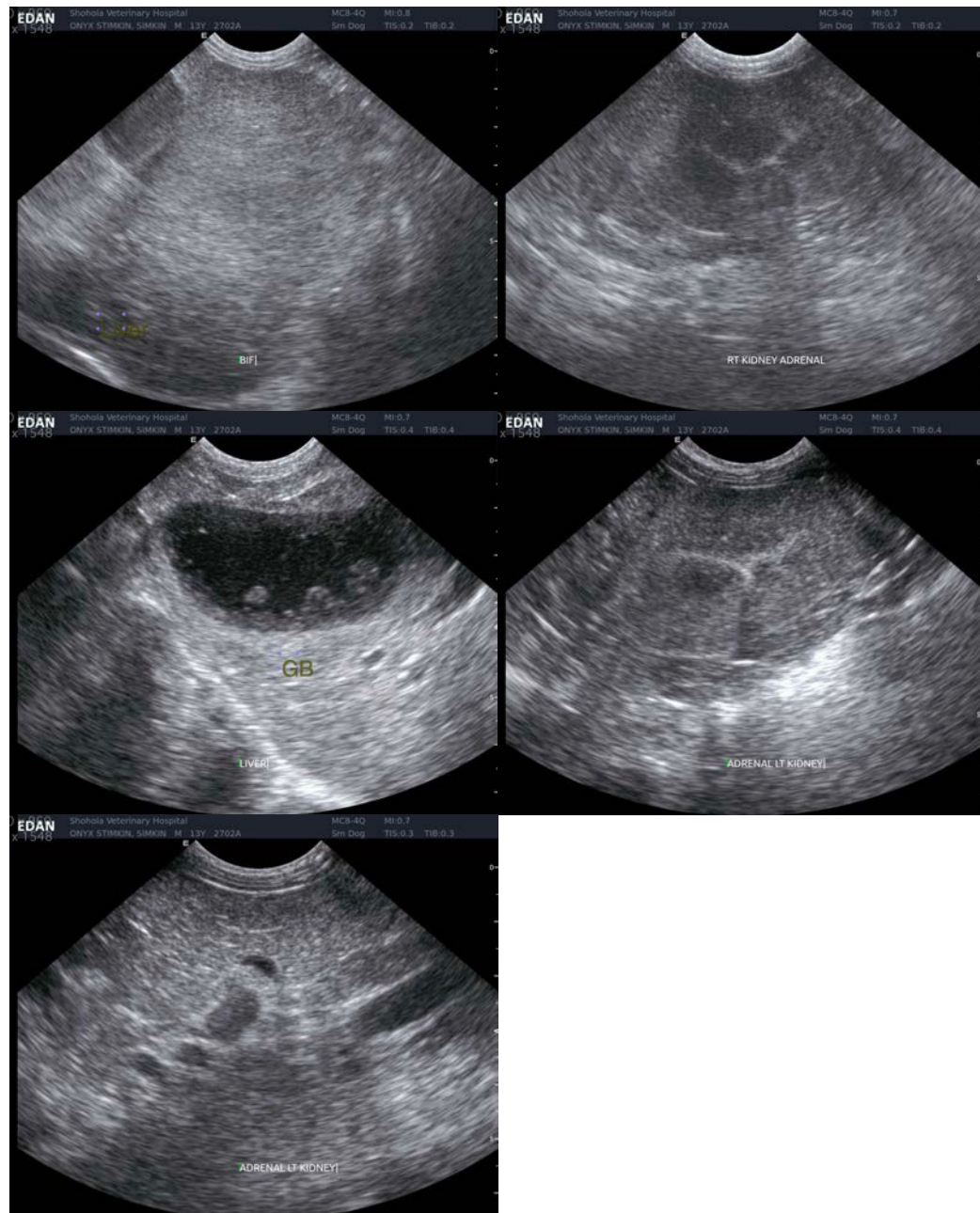
Dr. Joan Gramazio

INVOICE

40572

DATE

8/17/22



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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com