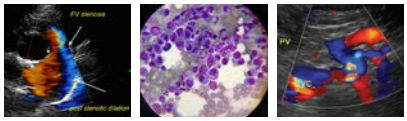
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

11/30/22

PATIENT

Sophie Cavanaugh

SPECIES

Canine

BREED

Shepherd X

SEX

Spayed Female

AGE

6/4/10

WEIGHT

59.7 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Northwind AH

REFERRING VET

Dr. Cross

INVOICE

43072

PRESENTING CLINICAL SIGNS

P having frequent urination at random times, since September 2022. Urinalysis normal, urine culture. Negative. P still having urine accidents.

Current Medications: None.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended with primarily anechoic contents and occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick (0.60 cm). 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.

The right kidney is normal in size (6.5 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (6.4 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

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 right adrenal gland measures 2.72 cm long x 1.0 cm at the cranial pole and 0.97 cm at the caudal pole. The left adrenal gland measures 3.51 cm long x 1.06 cm at the cranial pole and 1.25 cm at the caudal pole.

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). An approximately 1.5 cm in diameter hypo- to anechoic nodule is noted near the head of the spleen, resulting in a mild capsular bulge. Splenic vasculature appears normal.

Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The 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.

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.

Subjectively there appears to be some mildly enhanced hyperechoic mesenteric fat medial to and surrounding the left kidney.

No evidence of pericardial effusion or heart base lesions noted in these images.

ULTRASONOGRAPHIC FINDINGS

- **Bilateral adrenomegaly –** consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.

- **Hypo to anechoic splenic nodule** – likely represents a benign lesion such as a cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions, and cannot be ruled out.

- Mild subjective evidence of perinephric inflammation around the left kidney primarily

ULTRASONOGRAPHIC FINDINGS

- **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

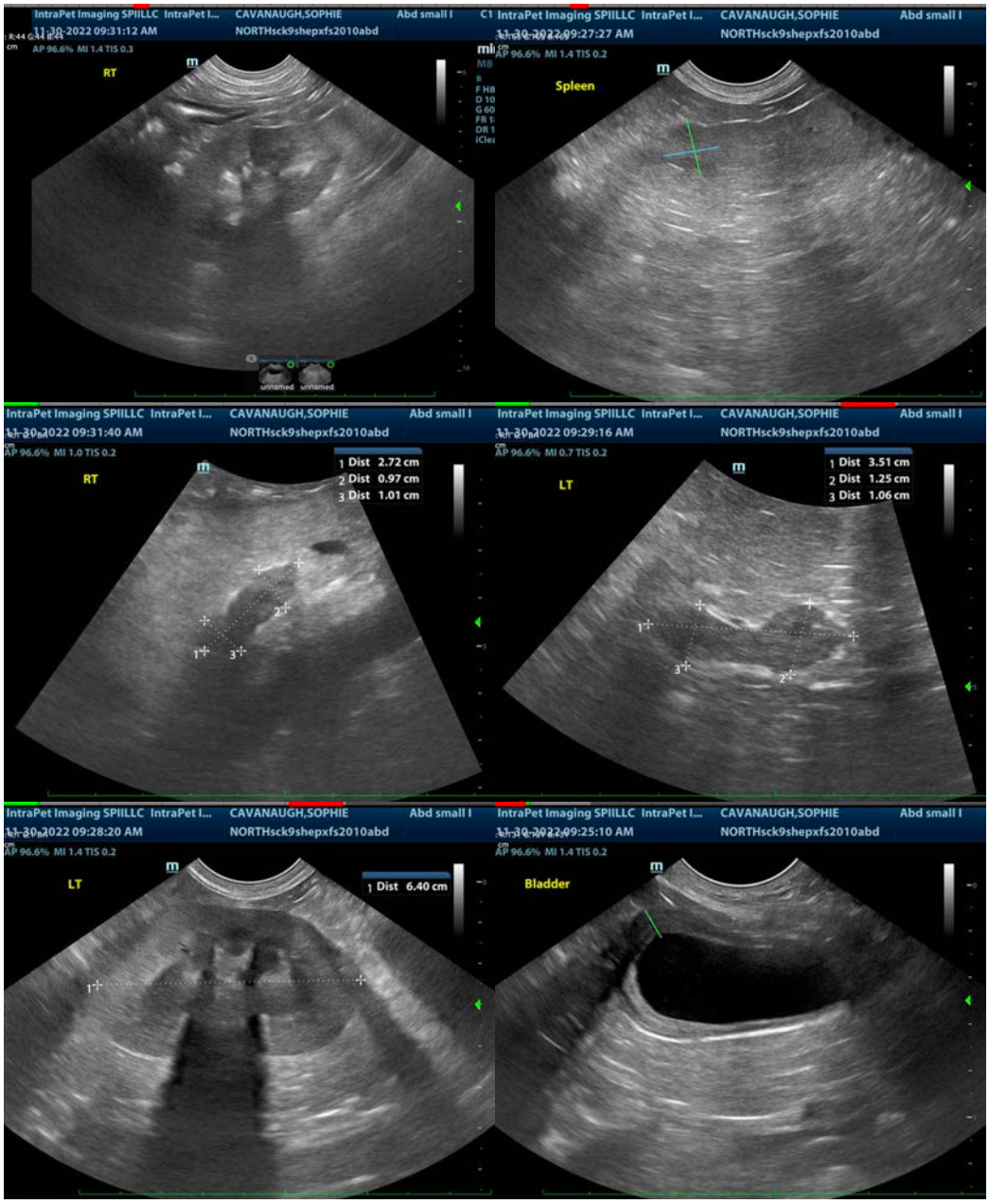
Given this patient's reported laboratory changes, the increased ALP, and the proteinuria combined with the adrenomegaly, hyperadrenocorticism is considered a differential for this patient's urinary accidents, which may be a result of PU/PD. Testing for Leptospirosis could be considered in the form of a low-dose Dexamethasone suppression test.

Blood pressure is recommended if not recently evaluated.

Urine protein to creatine ratio is recommended to further quantify the reported proteinuria to help determine whether treatment may be warranted.

Additionally, urine cultures have reportedly been negative with an unknown time as to when the last urine culture was evaluated. However, given the possible perinephric inflammation, a recheck urine culture could be considered, or potentially an empirical course of antibiotics could be considered, in case the infection is renal in origin, resulting in negative urinary bladder samples.

The splenic nodule trends towards benign in appearance. A fine needle aspirate could be considered if patient's coagulation status is appropriate. However, given the small size and appearance of the nodule, monitoring is a reasonable approach alternatively.



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
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