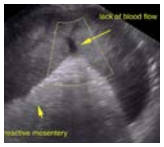
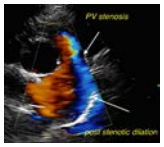
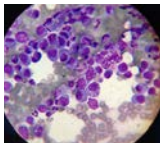
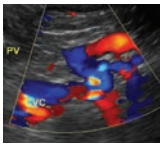
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Maks Cafferty

SPECIES
Canine

BREED
Morkie

SEX
Neutered Male

AGE
6 Years

WEIGHT
16.7 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Marti Williams

HOSPITAL NAME
Limestone Vet Hospital

REFERRING VET
Dr. Masha McCarthy

INVOICE
38790

DATE
6/16/22

PRESENTING CLINICAL SIGNS

PUPD x 3 months. Ddx: Cushings vs. Diabetes Inspidus
Abnormal PE/Chem/CBC/UA Results: Labwork: Alb 5.1, BUN 9. Creat 0.3, Sodium 156, Choles 348, TG 396, PPSL 549, CBC NSF, T4 1.2, USG 1.022, pH 8,5, Protein 2+, UPCR 0.6. Increased Albumin and Sodium interpreted as dehydration.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

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

The right kidney is normal in size (4.8 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 (4.3 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted, primarily in the diverticular of the kidney.

Adrenal Glands

The right adrenal gland is normal, but slightly plump in size (0.68 cm at the cranial pole and 0.61 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal, but slightly plump in size (0.47 cm at the cranial pole and 0.55 cm at the caudal pole), 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.

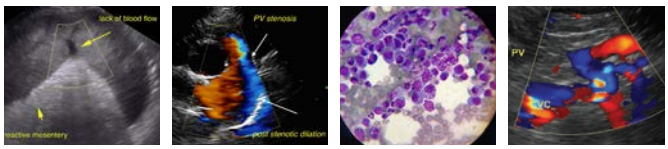
Liver

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.



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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 peritoneal effusion. There is no apparent lymphadenopathy.

PRIMARY FINDINGS

- Bilaterally mildly plump adrenal glands – rule out normal variant versus adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism.

SECONDARY FINDINGS

- Non-obstructive nephrolithiasis in the left kidney.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Polyuria/polydipsia – Differentials are vast and include, but are not limited to, primary polyuria caused by chronic kidney disease, pyelonephritis, liver disease, diabetes mellitus, hyperthyroidism, hypercalcemia, hyperadrenocorticism, hypoadrenocorticism, E.coli infectious ie) pyometra in females, polycythemia, central diabetes insipidus or primary nephrogenic diabetes insipidus or primary polydipsia caused by psychogenic polydipsia, fever, pain or central nervous system disease.

Most causes of PU/PD can be diagnosed with a comprehensive history and physical exam, a first AM urine specific gravity to see if urine concentration is possible (as most animals drink less overnight) followed by a comprehensive CBC, serum chemistry panel, electrolytes and urinalysis. If not, next step(s) should include a urine culture, low dose dexamethasone suppression test, T4, bile acids, Leptospirosis testing and/or an empirical course of antibiotics. If a diagnosis is still not obtained, a more advanced work-up is recommended.

Specifically for this patient, specific gravity of 1.022 is unlikely to be present with diabetes insipidus. Therefore, specific recommendations include beginning with testing for Leptospirosis, bile acids, and considering a low-dose Dexamethasone suppression test to rule in/out hyperadrenocorticism, especially if other clinical signs of Cushing's disease such as panting, polyphagia, hair loss, etc. are present. A blood pressure is recommended if not recently evaluated.

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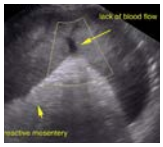
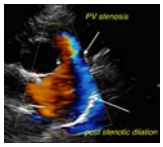
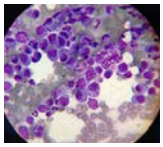
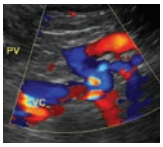

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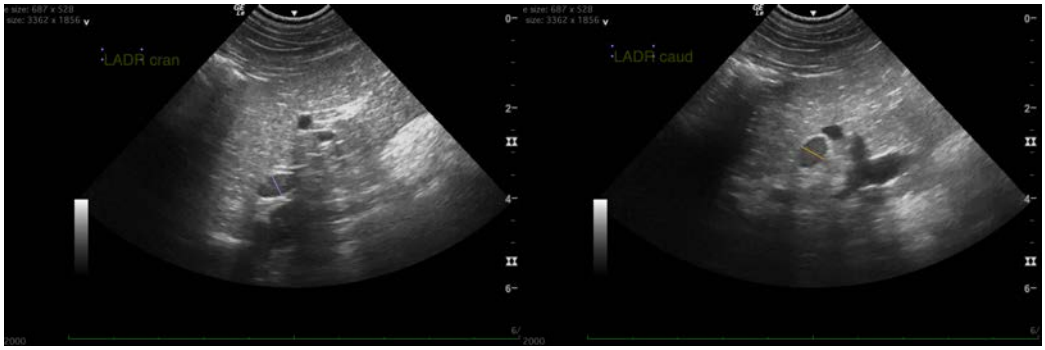

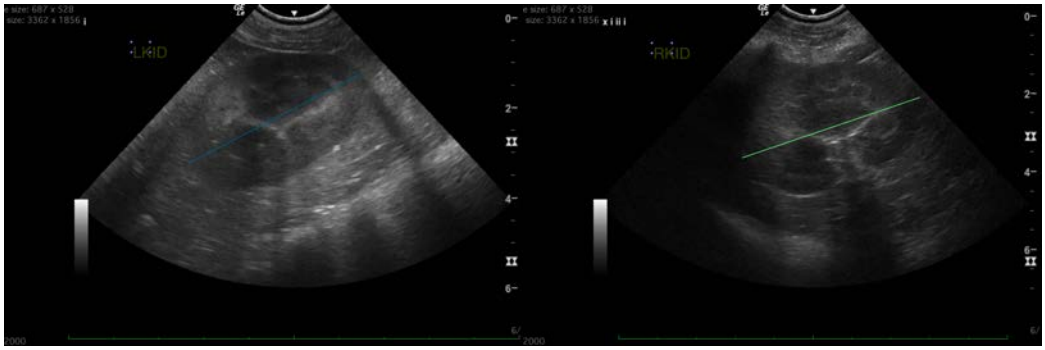

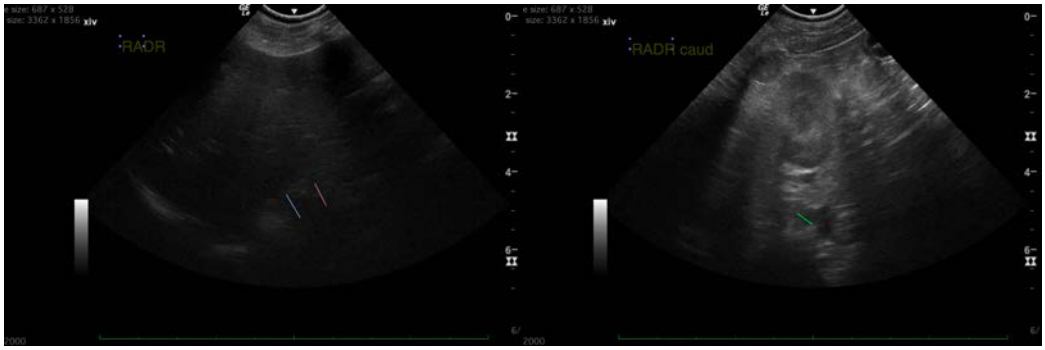

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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