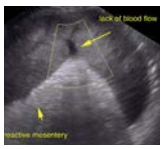
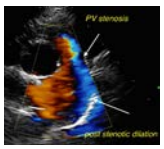
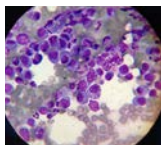
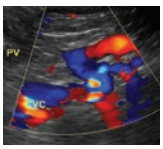
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT
Luc-e Miller

SPECIES
Canine

BREED
Great Dane

SEX
Spayed Female

AGE
9 Years

WEIGHT
68 kg

INTERPRETED BY
Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY
Erin Wicks

HOSPITAL NAME
Shores VEC

REFERRING VET
Dr. Lupole

INVOICE
42466

DATE
11/2/22

PRESENTING CLINICAL SIGNS

at our hospital for AUS. Started over the past couple of months with some weight loss, decreased appetite, drinking +++, took to rdvm, alt and ALP elevated, ALB low, Protein in urine, BP normal, Rec AUS. Previous Health Concerns: incontinence Current Medications: Proin, fish oil, frankincense, turmeric, ginger, Chondroitin treats, Valasta Appetite/When did they eat last: 6am

Abnormal PE/Chem/CBC/UA Results: rdvm bloodwork: CBC wnl; Chem: ALB 2.5; Alb glb ratio 0.6; ALT 367; ALP 1052, UR CREAT 111.9; UR PRO 219.1; UR PRO/CREA ratio 2.0; T4 2.0

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.

The right kidney is normal in size (10.0 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 (8.8 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.

Adrenal Glands

In the area medial to the right kidney, there is a 4.5 cm x 3.0 cm homogeneous, iso- to slightly hypoechoic structure that may be the right adrenal gland. The right adrenal gland is not otherwise visualized. However, the structure is difficult to definitively identify, and the caudal right liver wrapping around cannot be definitively ruled out.

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

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.

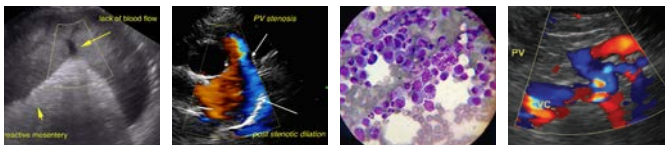
Liver

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 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.



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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 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.

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

- **Suspect right adrenal mass –** consistent with adenoma or possibly hyperplasia. Early pheochromocytoma cannot be ruled out. Interpret in combination with clinical signs of hyperadrenocorticism or other adrenal disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patient's polyuria/polydipsia, liver enzyme increases, and mild proteinuria, etc. could all be consistent with hyperadrenocorticism secondary to adrenal dependent disease resulting from the right adrenal tumor. Proteinuria secondary to hyperadrenocorticism, however, does not typically result in hypoalbuminemia and/or weight loss. Therefore, concurrent gastrointestinal disease could be present, or alternatively, the liver enzymes and proteinuria are not related to hyperadrenocorticism and are a primary hepatic and renal condition, resulting in the proteinuria as well as the weight loss, etc.

Recommendations to help differentiate the above described potentials include:

- A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.
- A low-dose Dexamethasone suppression test.
- Testing for Leptospirosis and a liver aspirate if patient's coagulation status is appropriate.

If this patient's clinical signs are determined to primarily be related to hyperadrenocorticism, especially if an adrenalectomy is going to be pursued, advanced imaging of both the pituitary gland and the abdomen could be considered, given the patient's atypical decreased appetite and weight loss, etc.

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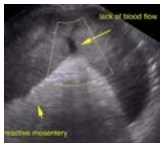
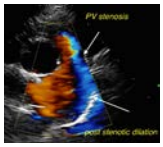
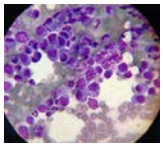
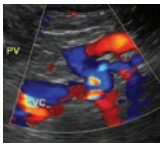

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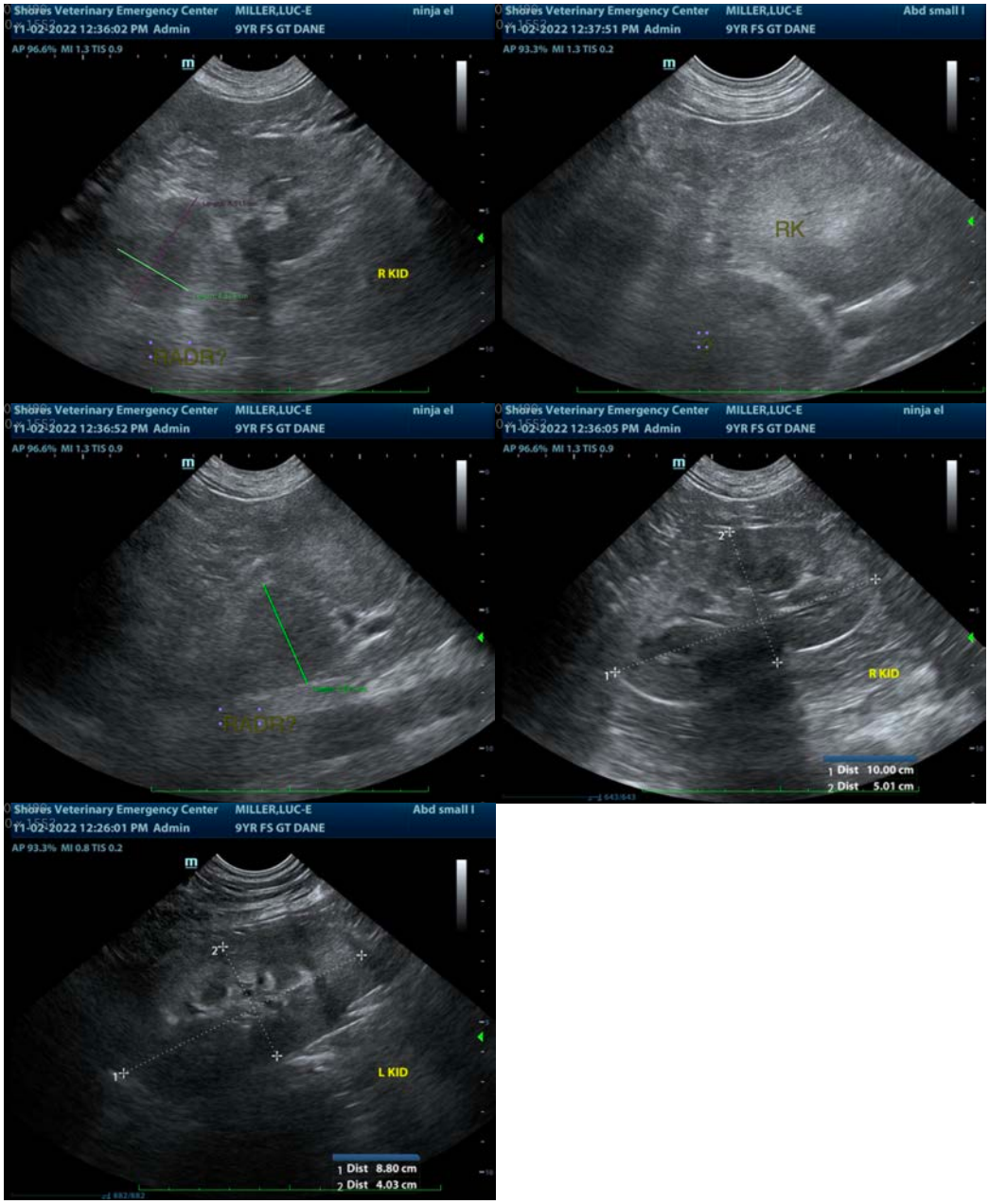

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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