



**PATIENT**

Roxy Blackman

**SPECIES**

Canine

**BREED**

Mastiff x

**SEX**

Spayed Female

**AGE**

11 Years

**WEIGHT**

45.5 kg

**INTERPRETED BY**

Beth Johnson, DVM  
 DACVIM

**IMAGING PERFORMED BY**

Amanda Stewart

**HOSPITAL NAME**

Buck Animal Hospital

**REFERRING VET**

Dr. Sommers

**INVOICE**

75110

**DATE**

5/13/26

**PRESENTING CLINICAL SIGNS**

Anorexia, pu/pd leading to incontinence. Current Medications: zeniquin 200mg SID, proin 75mg. Reason for pu/pd? adrenals?

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is adequately 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 is size (7.72 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 is size (7.36 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**

The right adrenal gland is normal in size (1.3 cm at cranial pole and 0.70 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The left adrenal gland is largely normal, measuring 0.64 cm at the cranial pole. However, the caudal pole is mildly plump as a result of a hyperechoic nodule measuring 1.1 cm x 1.4 cm in size that does not disrupt normal shape and/or architecture, resulting in a caudal pole that overall measures 1.1 cm in size. 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.

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.

**Gastrointestinal**

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.



**PATIENT**

Roxy Blackman

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.

**SPECIES**

Canine

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

***Pancreas***

**BREED**

Mastiff x

The pancreas that is observed 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.

**SEX**

Spayed Female

***Free Abdomen***

**AGE**

11 Years

There is no visible free peritoneal effusion noted in these images.

There is no apparent pathologic lymphadenopathy noted in these images.

**ULTRASONOGRAPHIC FINDINGS**

**WEIGHT**

45.5 kg

- Hyperechoic adrenal nodule (caudal pole left adrenal gland) – Differentials include primary adrenal cortical adenoma or adenocarcinoma, pheochromocytoma, myelolipoma, adrenal hyperplasia secondary to pituitary disease or metastatic disease. Ultrasound alone cannot differentiate between functional and non-functional nodules and/or between benign and malignant disease. Small nodules without other evidence of abdominal disease (to suggest metastatic disease) and/or clinical signs (to suggest adrenal disease) are most often incidental and should be monitored.
- Mild gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic 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.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Amanda Stewart

**HOSPITAL NAME**

Buck Animal Hospital

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Differentials for PU/PD are vast and include, but are not limited to:

**REFERRING VET**

Dr. Sommers

Primary polyuria caused by chronic kidney disease, pyelonephritis, liver disease, diabetes mellitus, hyperthyroidism, hypercalcemia, hyperadrenocorticism, hypoadrenocorticism, E.coli infections ie) pyometra in females, polycythemia, central diabetes insipidus or primary nephrogenic diabetes insipidus.

**INVOICE**

75110

Primary polydipsia caused by psychogenic polydipsia, fever, pain, or central nervous system disease.

**DATE**

5/13/26

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 naturally consume less water overnight) followed by a comprehensive CBC, serum chemistry panel, electrolytes, and urinalysis.



**PATIENT**

Roxy Blackman

**SPECIES**

Canine

**BREED**

Mastiff x

**SEX**

Spayed Female

**AGE**

11 Years

**WEIGHT**

45.5 kg

**INTERPRETED BY**

Beth Johnson, DVM  
 DACVIM

**IMAGING PERFORMED BY**

Amanda Stewart

**HOSPITAL NAME**

Buck Animal Hospital

**REFERRING VET**

Dr. Sommers

**INVOICE**

75110

**DATE**

5/13/26

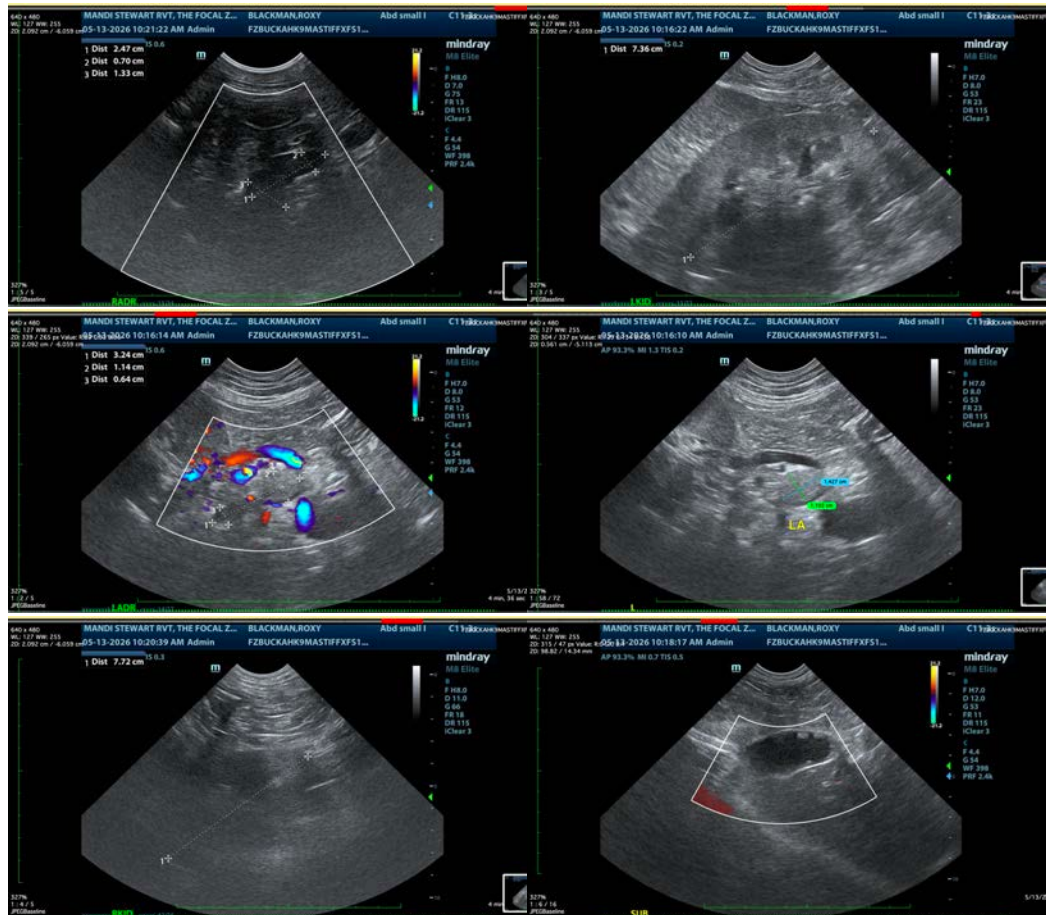
If not, next step(s) may include a urine culture, low dose dexamethasone suppression test, T4, bile acids, Leptospirosis testing and/or an empirical course of antibiotics.

If a diagnosis is still not obtained, a more advanced work-up is indicated and consultation with an internist may be warranted.

Therefore, if not recently evaluated, a full general metabolic health screen is recommended, including a urinalysis and, if indicated based on urinalysis results, urine culture is recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

A blood pressure is recommended if not recently evaluated.

While the adrenal nodule and PU/PD could indicate the need for hormone testing to rule out hyperadrenocorticism, hyperadrenocorticism does not typically result in anorexia. Therefore, further evaluation for other underlying metabolic disease causing the anorexia is recommended first. The exception to this is a pituitary macroadenoma, which can occasionally result in clinical signs of illness. Therefore, advanced imaging could be considered, if elected.





**PATIENT**

Roxy Blackman

**SPECIES**

Canine

**BREED**

Mastiff x

**SEX**

Spayed Female

**AGE**

11 Years

**WEIGHT**

45.5 kg

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING  
PERFORMED BY**

Amanda Stewart

**HOSPITAL NAME**

Buck Animal Hospital

**REFERRING VET**

Dr. Sommers

**INVOICE**

75110

**DATE**

5/13/26

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**  
[info@sonopath.com](mailto:info@sonopath.com)