



PATIENT

Romeo Knutson

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

3 years

WEIGHT

10.81 lbs

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Emily Shotts

HOSPITAL NAME

Riverbend Veterinary
PetCare Hospital

REFERRING VET

Dr. Emily Shotts

INVOICE

11922

DATE

5/11/2026

PRESENTING CLINICAL SIGNS

Approximately 3 year old male neutered domestic shorthair that was adopted about 1 month ago. Owner reports that he seems to drink water excessively but is otherwise normal (eating/drinking/litterbox habits all wnl). Physical exam wnl. Chemistry wnl. CBC showed mild leukopenia (3.7 k/ul [3.9 - 19.0 K/ μ L]), characterized by neutropenia (1.957 k/ul [2.62 - 15.17 K/ μ L]). Felv/FIV negative. UA wnl.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is only mildly distended. Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or definitive cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. In the face of urinary signs and/or suspected urinary bladder pathology, reassessment after complete filling is recommended.

The right kidney is normal is size (3.7 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 (3.6 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 areas of the adrenal glands are examined without evident adrenal gland pathology.

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) with a diffusely mildly coarse architecture and subtly increased portal markings. Mildly mixed echogenic changes are noted diffusely. 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 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. 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.



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

Pancreas

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.

Free Abdomen

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

There is no apparent pathologic lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- The liver changes are non-specific and mild but could represent a microscopic hepatopathy including bacterial or lymphoplasmacytic cholangiohepatitis, hepatic lipidosis, other benign infectious or inflammatory hepatopathy, etc. Infiltrative neoplasia can't be definitively ruled out without tissue sampling.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There's not a definitive ultrasonographically visible intraabdominal explanation for patient's reported polydipsia.

Given history, further evaluation of the neutropenia, which may or may not be related, may help identify a cause. Comprehensive infectious disease evaluation is recommended. Fine needle aspirates of the liver could be considered if patient's coagulation status is appropriate. Pathology review of the cells could be considered or ultimately, bone marrow cytology may be indicated.

Differentials for PU/PD 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 infections ie) pyometra in females, polycythemia, central diabetes insipidus or primary nephrogenic diabetes insipidus.

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

If not, next steps may include a urine culture, additional adrenal hormone testing, T4, bile acids, as previously described, comprehensive infectious disease evaluation, 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.



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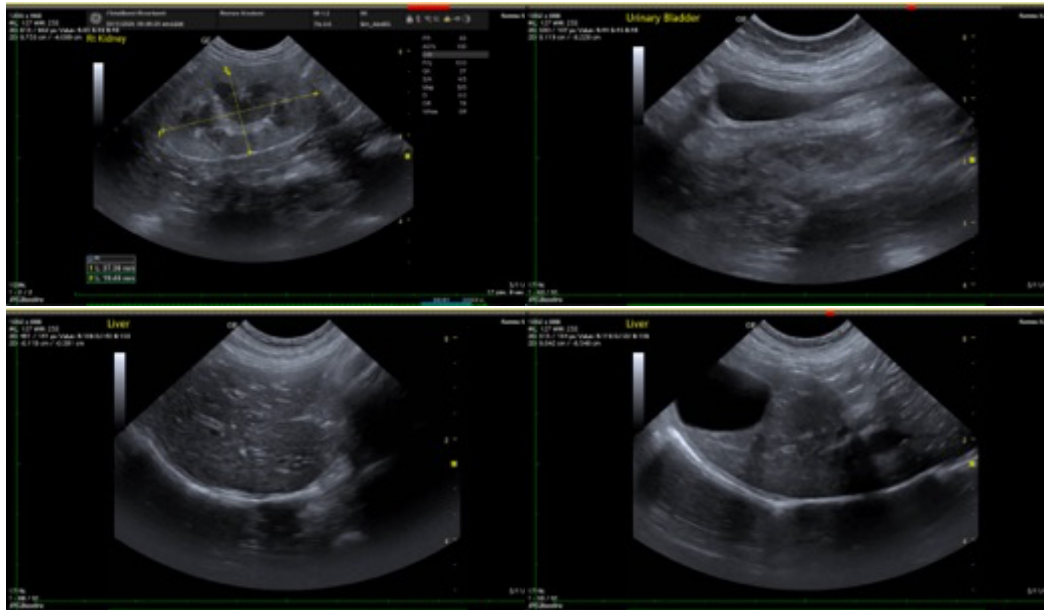
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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
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