



DATE PRESENTING CLINICAL SIGNS

2/9/26 Patient History: 12/21/25 P started having a lot of accidents in the house. Multiple tests were performed and pet was placed on abx for a potential UTI 1/5/26 which did not help. A desmopression trial was conducted and did not help enough. All test results can be found below. The current belief is that Gracie has kidney disease of some sort.

PATIENT

Gracie Neumann

Current Medications: 1/30/26: started Doxycycline 100mgT: Give 3/4T BID 14 days to empirically treat Leptospirosis

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

1/9/16

WEIGHT

9.62 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

HOSPITAL NAME

Banfield Columbia

REFERRING VET

Dr. Landon

INVOICE

36787

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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.

Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of mineral or infarcts observed. Trace pyelectasia is noted in the left kidney. The left kidney measures 5.82 cm. The right kidney measures 6.01 cm.

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 left adrenal gland measures 0.83 cm at the cranial pole and 0.89 cm at the caudal pole. The right adrenal gland measures 0.87 cm at the cranial pole and 0.7 cm at the caudal pole. Additionally, a hyperechoic nodule is noted in the cranial pole of the left adrenal gland. Nodule does not disrupt normal shape and/or architecture.

Spleen

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 with mildly irregular margins. Parenchyma is mildly heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. 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 mildly distended with echogenic intraluminal gastric contents that demonstrate strong acoustic shadow. There is no visible evidence of obstruction noted in these images at this time.

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/chyme. 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 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

- Mildly bilateral adrenomegaly – In a patient diagnosed with hyperadrenocorticism, this finding is most consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism. This finding can also be seen with stress and/or normal patient variant. Interpret in combination with clinical signs of hyperadrenocorticism and/or other adrenal disease.
- Hyperechoic adrenal nodule in the cranial pole of the 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.

- Mildly heterogenous liver- These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
- Moderate 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.
- Mild age-related kidney changes with trace pyelectasia in the left kidney
- Gastric foreign material, given the shadowing described above, can't be ruled out. Having said that, this finding should be interpreted in combination with when patient last ate, as normal ingesta and gas can create a similar effect. Recheck imaging following an additional 12-24 hours of fasting could be considered.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes described above are mild/subtle with several possible contributing factors to patient's reported PU/PD but without a definitive obvious diagnosis.

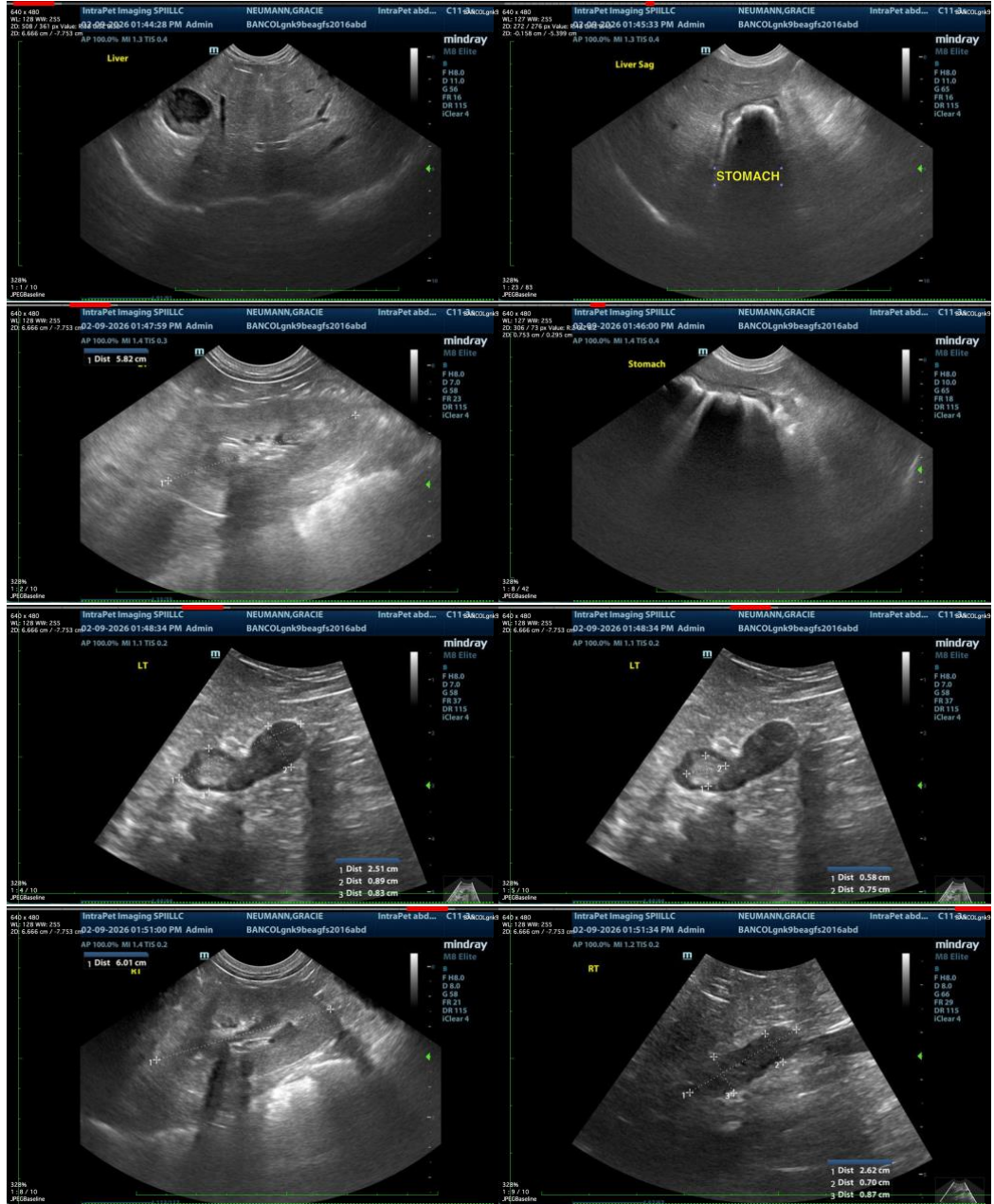
Differentials for PU/PD are vast and include, but are not limited to:

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 step(s) may include a urine culture, low dose dexamethasone suppression test, T4, bile acids, Leptospirosis testing and/or an empirical course of antibiotics.

Given patient's history so far, combined with the complications and even risks of empirical treatments, water deprivation, etc., if a diagnosis is not obtained, a full consultation with, and/or even referral to a veterinary internist is recommended if available.



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.

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