



DATE
10/17/22

PRESENTING CLINICAL SIGNS

History: Thickened bladder and bowel on quick US scan. Chronic diarrhea. Concerned about possible PU/PD.

PATIENT
Toby Badolato

Current Medications: Metronidazole 250mg BID, Convenia 1mL, Diagel.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Canine

Imaging Performed By: Rachel Brillhart, RDMS.

BREED

Poodle

SEX

Neutered Male

AGE

6/6/08

WEIGHT

22.6 Pounds

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is adequately distended. It has a normal uniform wall thickness. Contents include primarily anechoic fluid with occasional echogenic non-shadowing debris, most consistent with exfoliated cells, mucous and/or small blood clots. Mineral/sand debris versus potentially one larger cystolith with acoustic shadow settled along the dependent wall. Both sterile inflammation as well as urinary tract infection can also present with echogenic debris. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

In the area of the prostate, there is a heterogenous mineralized mass, measuring 2.6 cm wide, that is poorly differentiated from surrounding tissue and encroaches upon the neck of the bladder into the trigone.

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. The left kidney measures 4.28 cm. The right kidney measures 3.62 cm. Mild pyelectasia is noted bilaterally.

INTERPRETED BY

Beth Johnson, DVM
DACVIM

Adrenal Glands

Left adrenal gland is normal in size (2.17 cm long x 0.67 cm at cranial pole and 0.7 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

HOSPITAL NAME

Abbey AH

Right adrenal gland is normal in size (1.9 cm long x 0.83 cm at cranial pole and 0.75 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

REFERRING VET

Dr. Kroll

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.

INVOICE

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Liver

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 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.

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The area of the pancreas contains irregular hyperechoic pancreatic remodeling.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Mineralized heterogenous prostate mass with extension into the urinary bladder trigone, most concerning for infiltrative neoplasia, such as carcinoma. Benign inflammatory prostatitis cannot be ruled out but is considered much less likely.
- Urinary bladder debris, including mineral/sand and possibly a larger cystolith versus accumulated sand and debris.
- Hyperechoic pancreas – This finding is suggestive of pancreatic fibrosis, possibly secondary to chronic pancreatitis. A TLI is recommended to rule out exocrine pancreatic insufficiency (EPI), especially if clinical signs (weight loss, diarrhea, etc.) are present.

Secondary Findings

- Mild pyelectasia bilaterally

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

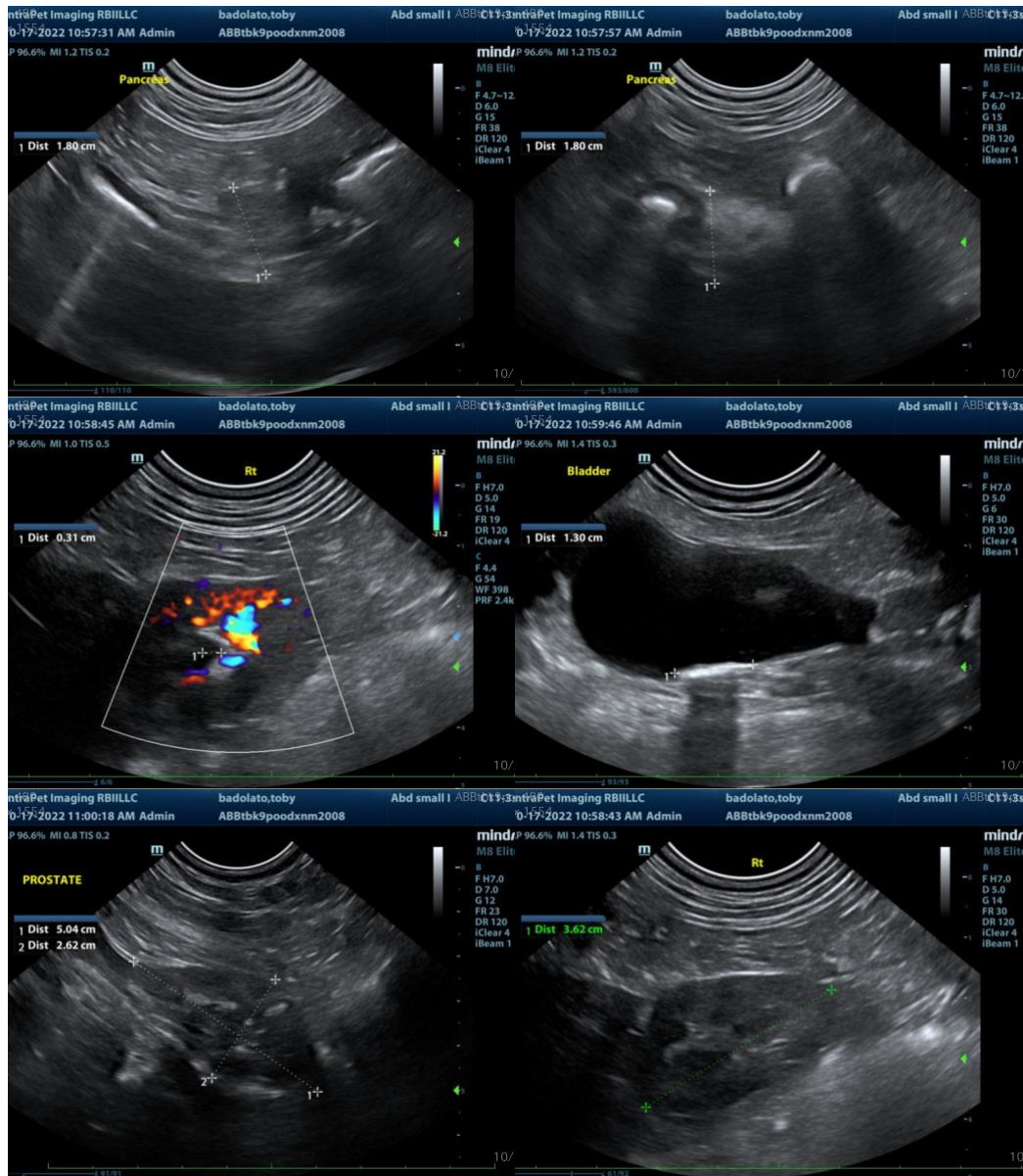
Urinalysis and urine culture, if indicated based on urinalysis results, are recommended. Submission of urine to look for BRAF gene mutation, which is associated with urinary bladder cancer, could be considered. Other diagnostic options include traumatic catheterization, fine needle aspirate (with small risk of tumor seeding/trailing) or cystoscopy for further sampling.

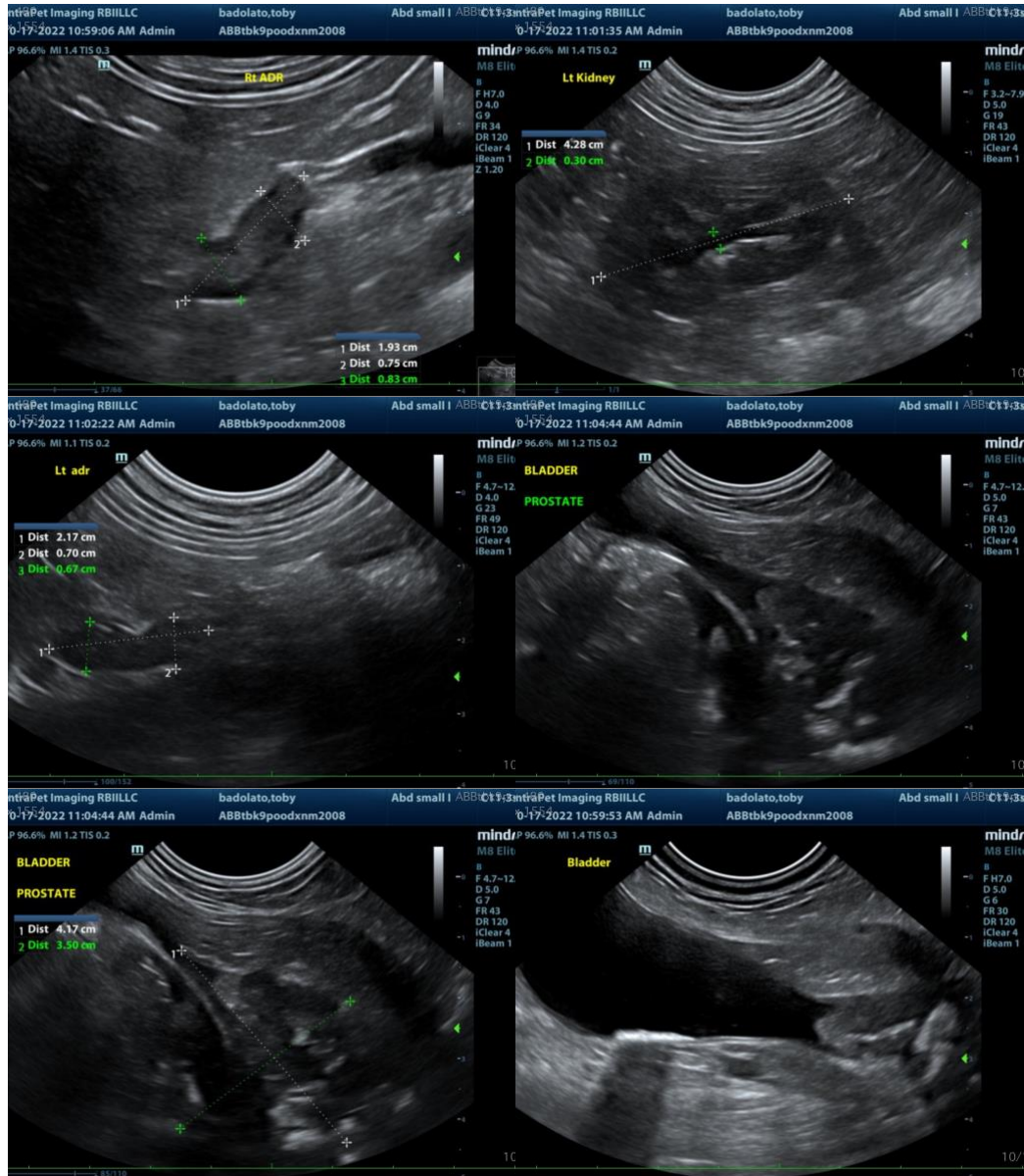
Given this patient reported diarrhea and the pancreas changes described above, a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.

Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.

In the meantime, empirical therapeutic recommendations include antibiotics, ideally based on culture and sensitivity results, as well as potentially an anti-inflammatory to begin alleviating lower urinary tract signs

while awaiting results. Additionally, empirical deworming with a 5-day course of Panacur and transition, if tolerated, to a hydrolyzed protein diet or potentially low-fat diet based on trial and error response. Additionally, a probiotic, such as Provable or Visbiome could be considered.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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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