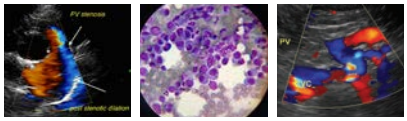
IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

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DATE

7/5/23

PATIENT

Barney Quinn

SPECIES

Feline

BREED

DLH

SEX

Neutered Male

AGE

7/1/06

WEIGHT

10.2 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Martinoli

INVOICE

43790

PRESENTING CLINICAL SIGNS

Here in March - dx with hyperthyroidism. Returned in May - constipation and UTI; since then has consistently been getting 2.5 mg Methimazole TD BID. Last fall he stopped eating dry food and has been only getting canned. Last week they got new kittens at home and think Barney may have started eating some of their dry food. For past 2 days has not been interested in his canned food at all; does not seem to be drinking much. Has leaked some diarrhea while sleeping on the bed but seems to be straining to defecate in the litterbox, but also she does not think he is urinating.

Current Medications: Miralax, Methimazole, oral Buprenorphine Maropitant Citrate.
Lab Results: Feline ProBNP Bionote in house 753.1 pmol/L abnormal, Urinalysis normal.
Radiographs: No obvious constipation, some stool in colon.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, or echogenic sediment are observed. A 0.46 cm in diameter cystolith is noted along the dependent wall. 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. Punctate non-obstructive nephrolithiasis is noted bilaterally. The left kidney measured 4.35 cm with pyelectasia at 0.26 cm in the sagittal view. The right kidney measured 3.33 cm with pyelectasia at 0.13 cm in the sagittal view. A large chronic infarct is noted in the right kidney.

Adrenal Glands

The right adrenal gland is normal in size (0.52 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.44 cm), shape and contour. Corticomedullary structure is unremarkable. 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.

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 stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) 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 (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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 (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

Pancreas is prominent in size with swollen irregular contour. Parenchyma is heterogenous characterized by hyperechoic tissue remodeling intermixed with ill-defined hypoechoic nodules. An approximately 1.0 cm in diameter anechoic/cystic lesion is noted in the caudal left limb. Pancreatic duct dilation is noted. 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

- Urinary bladder cystoliths
- Age related kidney changes with non-obstructive nephrolithiasis bilaterally
- Mild bilateral pyelectasia – Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.
- Chronic infarct in the right kidney
- Pancreatic nodular hyperplasia with a cystic pancreatic lesion/most likely benign pancreatic cyst in the caudal left limb – Infiltrative neoplasia cannot be ruled out but is considered less likely. Low-grade smoldering pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.

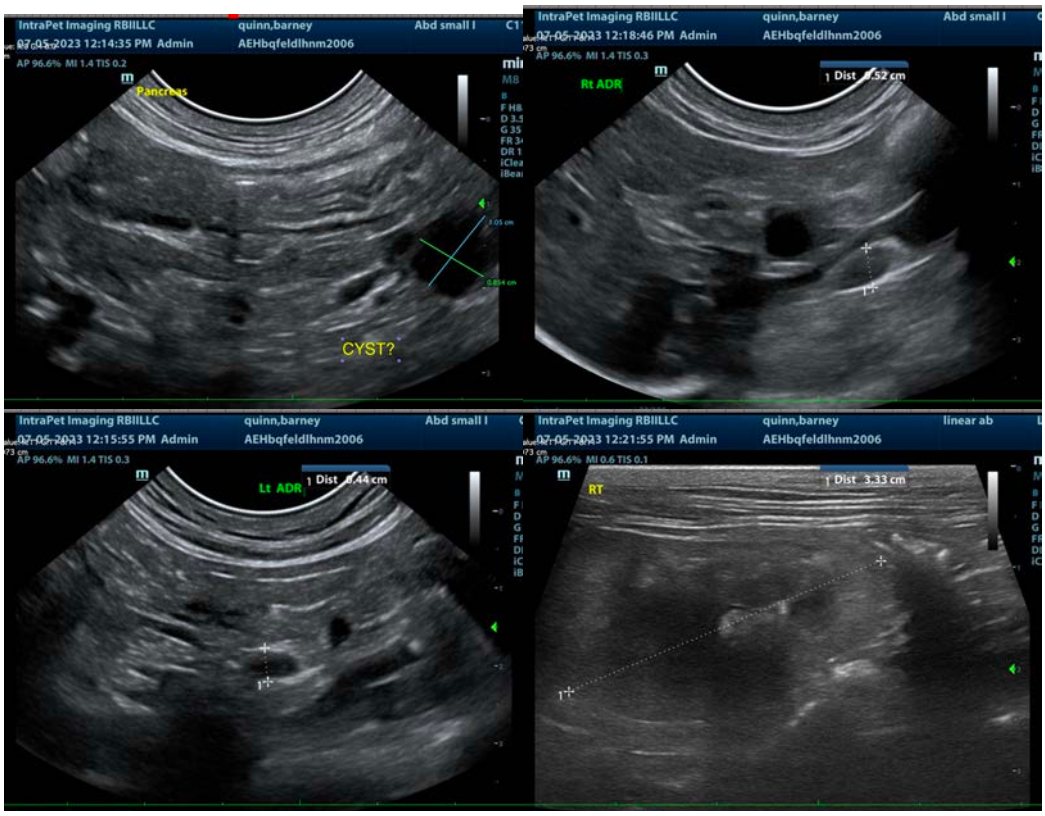
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

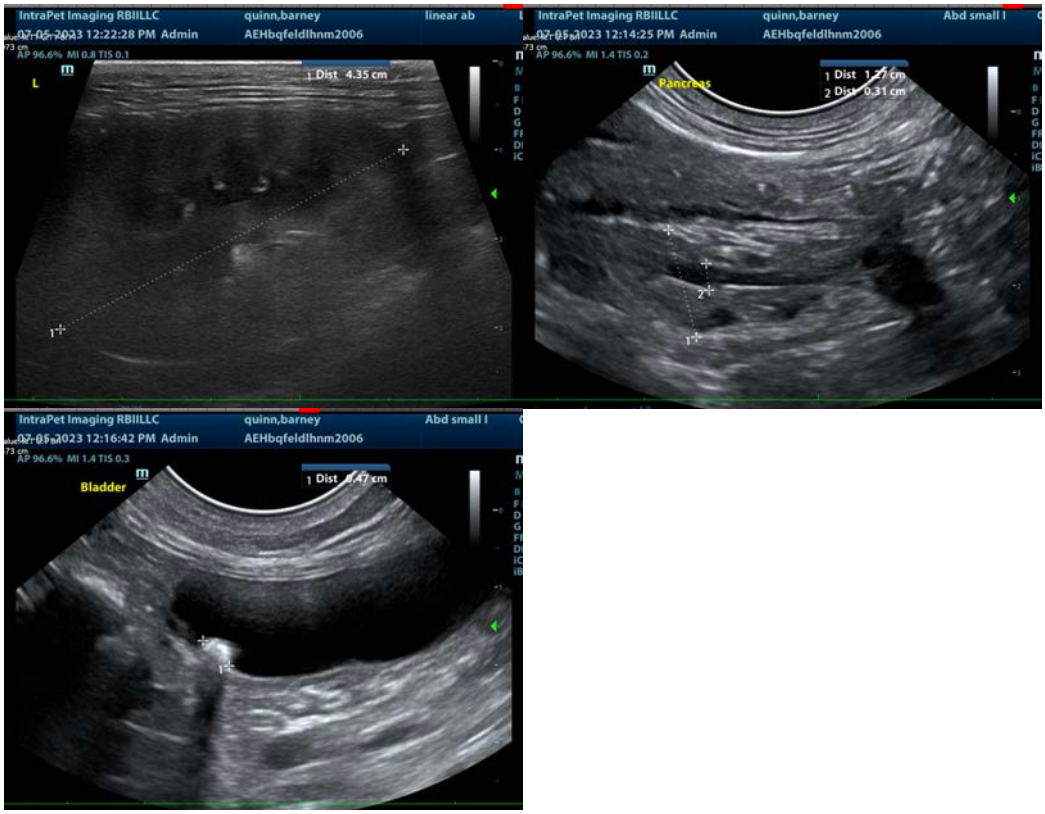
If not recently evaluated, a recheck general metabolic health screen is recommended in the form of a CBC/Chem panel, electrolytes, T4, a urinalysis and, if indicated based on urinalysis results, urine culture. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.

Additionally, further evaluation of digestion and absorption could be considered, beginning with a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory.

In the meantime, given this patient's history of constipation and the reported straining, therapeutic recommendations include increased medical management of constipation, potentially fluid therapy, rehydration, stool softeners, and/or fiber supplement, a diet change (if tolerated) to a colitis or fiber responsive diet, even enemas or de-obstipation (if indicated), etc.

While the appearance of the urinary bladder cystolith is not consistent with straining to urinate, meaning no apparent obstruction, overdistention, no evidence of inflammation or other debris, etc., and if straining persists beyond managing constipation and is believed to be urinary in nature, a cystotomy could be considered for removal of the stone.





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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