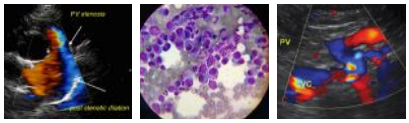
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE
8/29/22

PATIENT
Nala Paxton

SPECIES
Canine

BREED
American Bulldog

SEX
Spayed Female

AGE
4/4/11

WEIGHT
85 Pounds

INTERPRETED BY
Beth Johnson, DVM DACVIM

HOSPITAL NAME
Essex Middle River VC

REFERRING VET
Dr. Franchini

INVOICE
17101

PRESENTING CLINICAL SIGNS

History: Pet presented on 8/22/2023 for malaise, blood in stool, foul smelling urine and more frequent accidents (pet is incontinent) and concerned with new lumps. PE revealed pet being QAR, elevated temp at 103.8; No blood on rectal.

Current Medications: Chronically on Proin 100 mg BID, Metronidazole 500 mg BID - 10 days.
Lab Results: Mildly elevated ALP and ALKP, Calcium 12.0, SDMA 15; USG 1.012, Elevated lipase and amylase.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Warga RDCS, RVT.

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.

Left kidney is normal is size (7.18 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted

Right kidney is normal is size (7.43 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 or infarcts observed. Non-obstructive areas of mineralization/nephroliths are noted

Adrenal Glands

Adrenal glands are largely normal to slightly plump in size with normal shape and contour. Some parenchymal heterogenicity is present without concerning capsular distortion. These changes are likely normal for this age but should be monitored if there is any suspicion of adrenal disease. The left adrenal gland measures 3.6 cm long x 0.7 cm at the cranial pole and 1.1 cm at the caudal pole. The right adrenal gland measures 3.5 cm long x 1.0 cm at the cranial pole and 1.1 cm at the caudal pole.

Spleen

Spleen is generally normal in size and shape with a smooth capsular contour. Parenchyma is diffusely nodular in appearance characterized by small discrete hypoechoic nodules. Splenic vasculature appears normal.

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is 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 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 mildly distended with very echogenic reverbation artifact from intraluminal gas. There is no evidence of obstruction, foreign

material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. 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 observed pancreas 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 evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- 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.

- Splenic micronodular hyperplasia pattern – This nodular change is often associated with benign aging nodular hyperplasia. Infiltrative neoplasia, however, including both early hemangiosarcoma as well as round cell neoplasia cannot be ruled out.

Secondary Findings

- Age-related adrenal gland changes

- Nonobstructive nephrolithiasis bilaterally

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patients reported history of gastrointestinal signs, including hematochezia, as well as hypercalcemia, recommendations include ruling out unlikely but possible hypoadrenocorticism with a baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

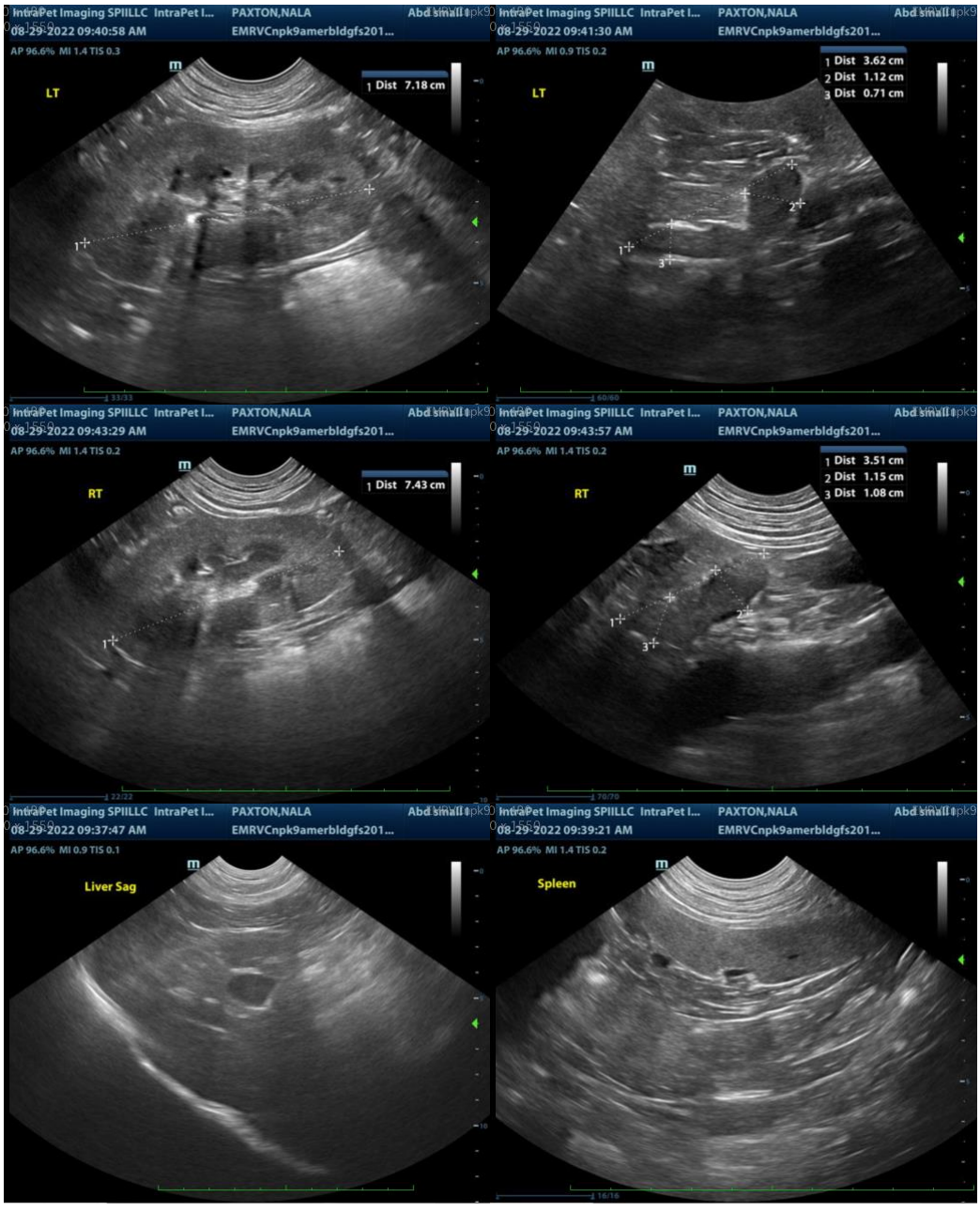
Also recommended are a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function and a fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.

If hypoadrenocorticism is not diagnosed, then further evaluation for the hypercalcemia with a malignancy panel to include PTH, PTHrP and ionized calcium is recommended.

In the meantime, if not already evaluated, a thorough physical exam, including a rectal exam to palpate for

possible anal gland tumors, lymph node palpation, etc. is recommended to look for possible causes of neoplasia that might result in hypercalcemia. If hypercalcemia of malignancy is expected, based on the malignancy panel results and physical exam does not reveal a cause, a fine needle aspirate of the liver and/or spleen can be considered if patients coagulation status is appropriate. However, given the mild changes in those organs, a fine needle aspirate is considered likely to be low yield.

In the meantime, supportive/medical management of gastroenteritis, etc., is recommended with antiemetics, gastroprotectants, a course of metronidazole or Tylosin (given the hematochezia), as well as empirical deworming with a 5 day course of Panacur.



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.

Beth Johnson, DVM DACVIM
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