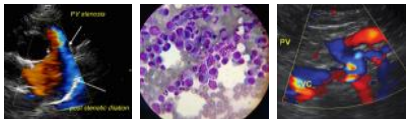
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

4/24/23

PATIENT

Bella Signoriello

SPECIES

Canine

BREED

Chihuahua Mix

SEX

Spayed Female

AGE

4/23/15

WEIGHT

7.5 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Anmal Emergency Hospital

REFERRING VET

Dr. Martinoli

INVOICE

22177

PRESENTING CLINICAL SIGNS

History: Raylene brought dog in; her mom has been staying with them since she had surgery a few weeks ago. Last week their other dog (another Chihuahua) had diarrhea, but it resolved on it's own and only lasted about 3 days. Bella started having diarrhea 4 days ago. Since then her hind end has gotten very raw and she nips at them if they try to clean her or look in the area. Last night she was walking; she did go outside to potty but since then has been sleeping in the bed with the owner. This morning she lifted her head but would not even stand up; appeared very weak and lethargic. Would not eat or drink anything this morning and only ate very little the past 2 days. (Usually just fed plain chicken)

Current Medications: Unasyn, Buprenorphine, Cerenia, Metronidazole.
Lab Results: Severe azotemia.
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

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. 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.

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 4.07 cm. The right kidney measures 2.97 cm. Pyelectasia is noted bilaterally (0.34 cm in the left/0.26 cm in the right) in the sagittal view.

Adrenal Glands

Left adrenal gland is normal in size (1.87 cm long x 0.64 cm at cranial pole and 0.82 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.56 cm long x 0.69 cm at cranial pole and 0.65 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

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 (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild 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 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 liquid stool.

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 free fluid. There is no apparent lymphadenopathy. Enhanced hyperechoic mesenteric fat is noted surrounding primarily the colon.

Ring downs noted at the level of the diaphragm.

ULTRASONOGRAPHIC FINDINGS

- Hypoechoic hepatomegaly-This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- The fluid filled colon is consistent with this patients reported diarrhea.
- Age-related kidneys with mild bilateral pyelectasia- Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction. This finding should be interpreted in combination with whether or not fluids were in place before the ultrasounds, as fluid therapy could result in mild pyelectasia.
- Mild 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.
- Ring downs at the level of the diaphragm are suggestive of concurrent pulmonary disease.
- Urinary bladder debris

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

This patients history/presenting complaint of hypoglycemia, cytopenia, etc., is concerning for sepsis, possibly secondary to bacterial translocation from the reported diarrhea, that has been going on for

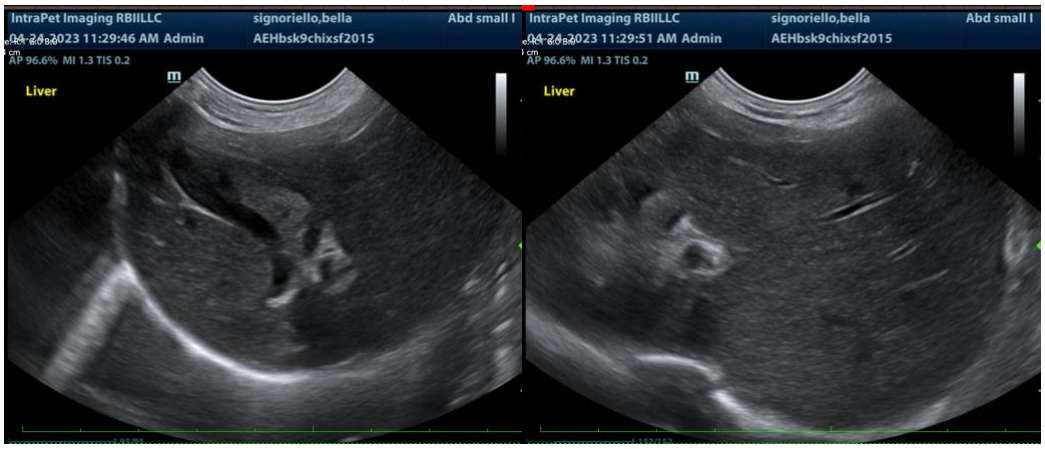
several days. Concurrent true kidney disease or even pyelonephritis, as a contributing factor, cannot be ruled out but the appropriate urine concentrating ability does not support true kidney disease.

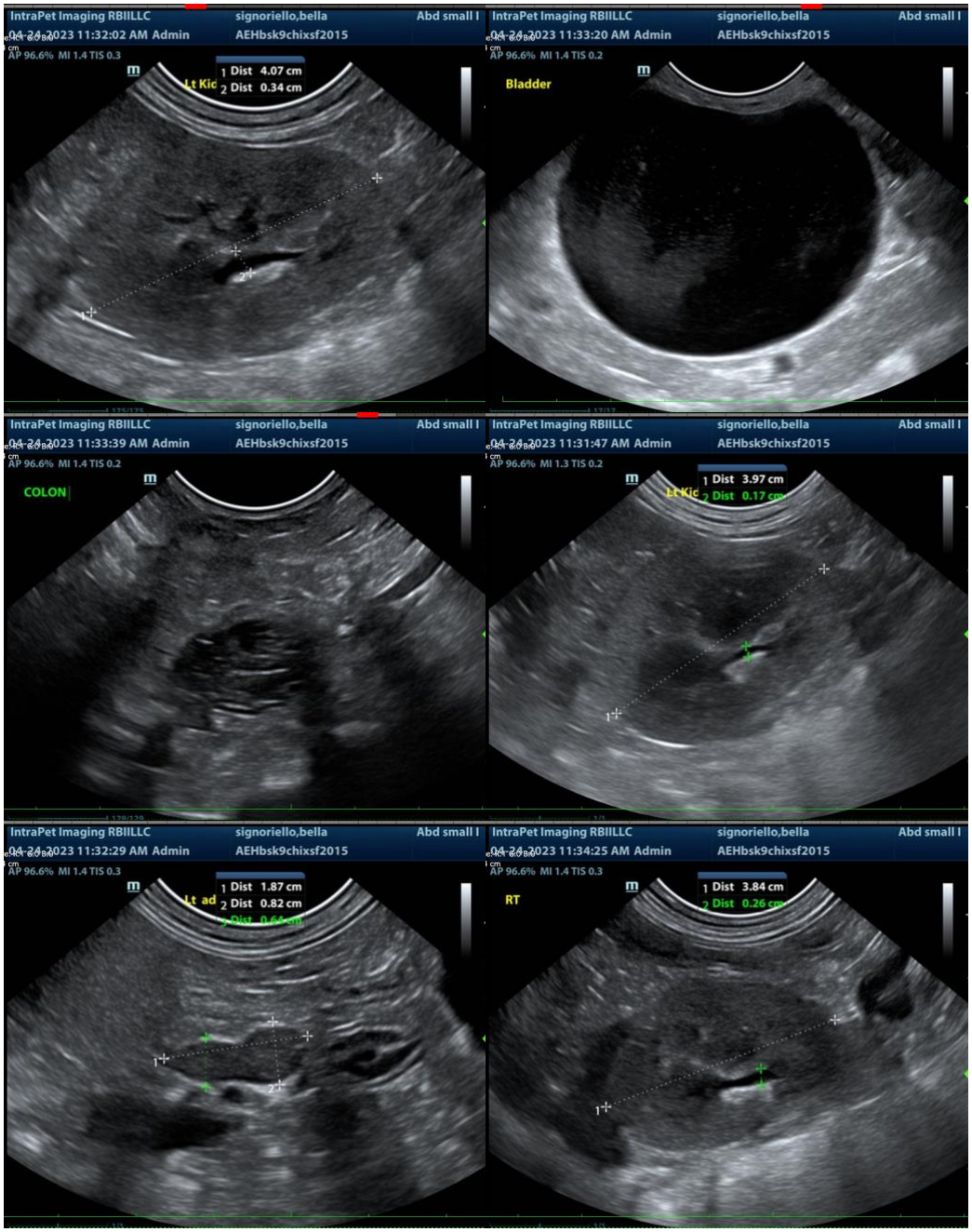
Diagnostic recommendations include:

- A fecal exam if not recently evaluated.
- 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.
- A fecal enteropathogen PCR panel to Texas A&M GI Laboratory could be considered for further evaluation of possible infectious disease.
- A baseline cortisol is recommended. If baseline cortisol is less than 2, a full ACTH stimulation test is recommended to rule out hypoadrenocorticism.

Pending results, a fine needle aspirate of the liver could be considered if patients coagulation status is appropriate.

In the meantime, supportive/symptomatic medical management of possible bacterial translocation/sepsis and diarrhea/dehydration is recommended with aggressive fluid therapy, antiemetics, broad-spectrum four-quadrant antibiotic coverage, empirical deworming with a 5-day course of Panacur and a probiotic (if tolerated) such as Visbiome or Proviable. Monitoring of the kidney values following rehydration is recommended to help further assess.




IntraPet Imaging RBIILLC
signoriello,bella
Abd small l
AEHbsk9chixsf2015
AP 96.6% MI 1.4 TIS 0.3
1 Dist 4.07 cm
2 Dist 0.34 cm
IntraPet Imaging RBIILLC
signoriello,bella
Abd small l
AEHbsk9chixsf2015
AP 96.6% MI 1.4 TIS 0.2
Bladder
IntraPet Imaging RBIILLC
signoriello,bella
Abd small l
AEHbsk9chixsf2015
AP 96.6% MI 1.4 TIS 0.2
COLON
IntraPet Imaging RBIILLC
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1 Dist 3.97 cm
2 Dist 0.17 cm
IntraPet Imaging RBIILLC
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1 Dist 1.87 cm
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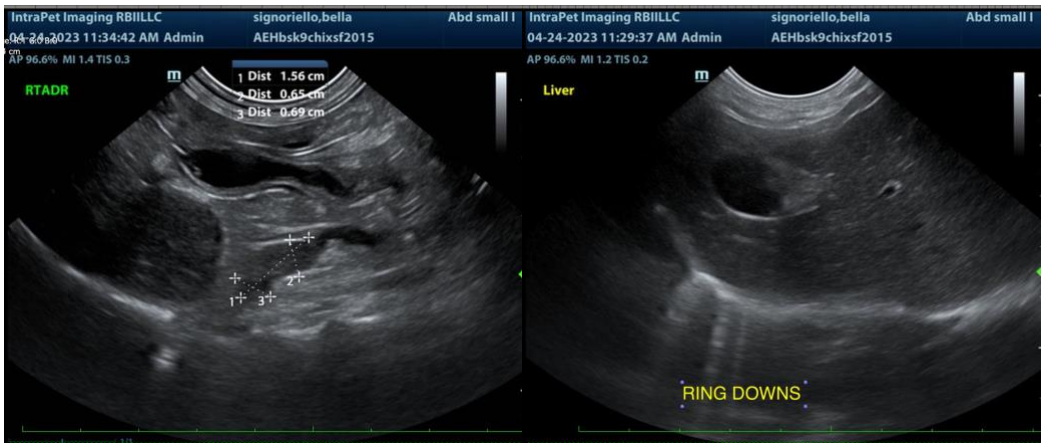
IntraPet Imaging RBIILLC
signoriello,bella
Abd small l
AEHbsk9chixsf2015
AP 96.6% MI 1.4 TIS 0.3
RT
1 Dist 3.84 cm
2 Dist 0.26 cm



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
Beth.Johnson@SonoPath.com