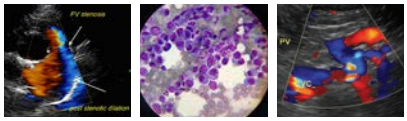
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

12/13/22

PATIENT

Levi Kamberger

SPECIES

Canine

BREED

Boston Terrier

SEX

Intact Male

AGE

4/27/22

WEIGHT

19.8 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Banfield Timonium

REFERRING VET

Dr. Adu

INVOICE

43404

PRESENTING CLINICAL SIGNS

History of intermittent chronic diarrhea and Ca Ox crystals in recent UA. Diarrhea started in Oct 2022. Diagnosed with Giardia at that time, treated with abx which resolved GI signs. Diarrhea returned once abx was stopped. Repeat fecal and Giardia test are neg. Put on GI diet and probiotics but that did not resolve the diarrhea. P is now back on abx (metronidazole) and prescribed HP diet. O says he is doing well on this. Performed full BW which was all WNL. UA showed concentrated urine with Ca ox crystals. At his last visit our staff observed frank blood dripping from penis. O says he hasnt seen any blood at all

Current Medications: Metronidazole 125 mg BID x10d, HP diet
Lab Results: UA: USG- 1.067, Protein 2+, WBC 11-20, Ca Ox Dihydrate Crystals 21-50.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The prostate is large in size (1.98 cm x 0.34 cm) but has a regular shape with smooth external margins. The parenchyma is heterogenous but no discrete focal lesions are present. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (4.48 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.46 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.40 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.39 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver
The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.21 cm. Duodenum wall measures 0.24 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas
The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of effusion. There are prominent isoechoic, ovoid mesenteric lymph nodes measuring 0.45 and 0.39 cm. The omentum is of normal echogenicity.

Other
Both testicles are imaged and appear within normal limits.

ULTRASONOGRAPHIC FINDINGS

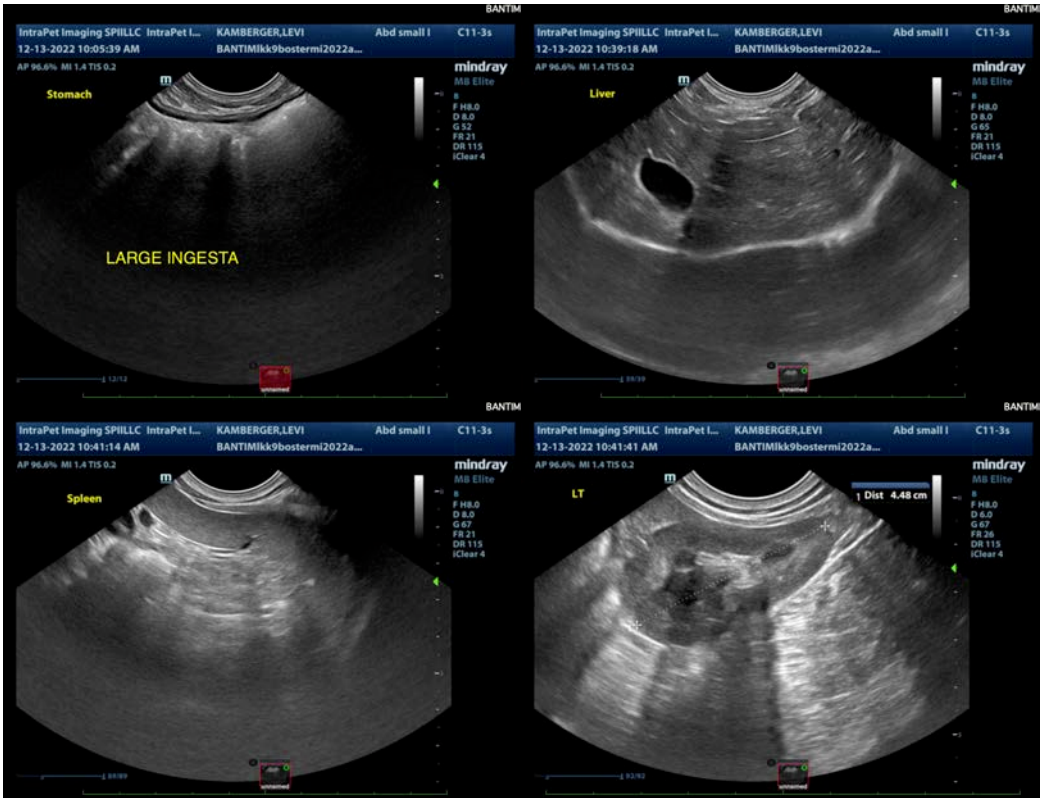
- Large, hyperechoic prostate – This is likely within normal limits for a young intact male dog.
- Moderate ingesta visualized within the gastric lumen and small intestine – This is most consistent with a recent meal.
- Prominent mesenteric lymph nodes – This is within normal limits for a young dog.

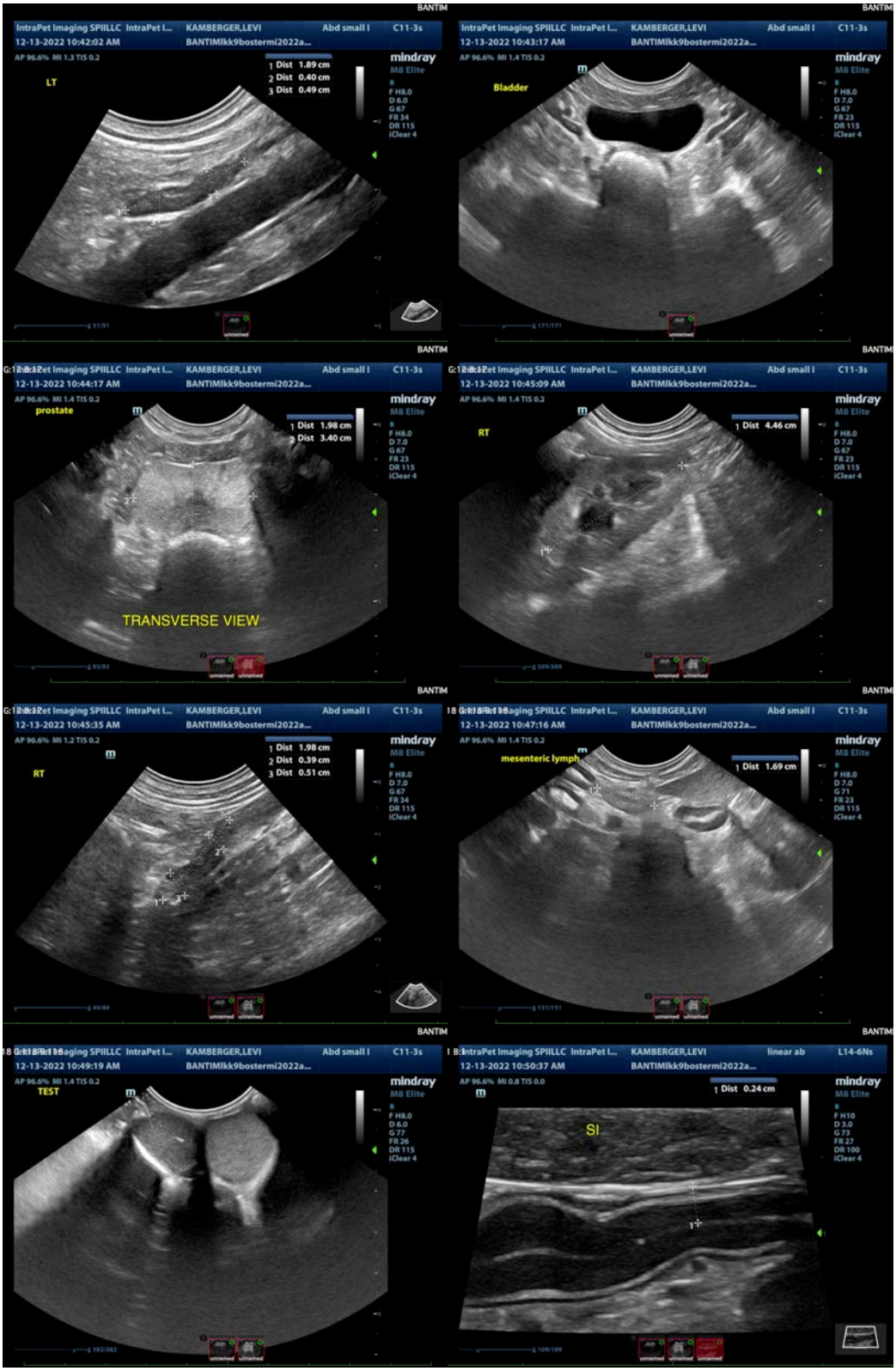
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No lesions are visualized associated with the gastrointestinal tract to explain the diarrhea reported. Antibiotic responsive diarrhea can be frustrating and is most typically associated with dysbiosis. In young dogs, the most common differentials for chronic diarrhea include dietary intolerance/food allergy, GI parasitism, dysbiosis, and exocrine pancreatic insufficiency.

- Consider a novel protein/hydrolyzed protein diet (exclusively at least 4-6 weeks)
- Consider a GI panel to Texas A&M for evaluation of B12 levels, folate, PLI/TLI etc.. to further evaluate for pancreatic/small intestinal disease.
- Recommend chronic probiotic therapy. If you're not having success with the current probiotic, change to a different brand (Proviable, Fortiflora, etc.).
- If not already done, consider deworming and empirical treatment for GI parasites.
- If dysbiosis is strongly suspected and there is no response to the previous treatments, you could consider a fecal transplant.
- Recommend screening for Addison's disease.

The prostate is large and hyperechoic. This is common in an intact male dog, but given the dripping blood described, you could have early prostatitis or benign prostatic hypertrophy. Correlate with urinalysis and culture.




IntraPet Imaging SPIILLC IntraPet I... KAMBERGER,LEVI Abd small I C11-3s
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LT
1 Dist 1.89 cm
2 Dist 0.40 cm
3 Dist 0.49 cm
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12-13-2022 10:43:17 AM BANTIMlkk9bostermi2022a...
Bladder
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prostate
1 Dist 1.98 cm
2 Dist 3.40 cm
TRANSVERSE VIEW
IntraPet Imaging SPIILLC IntraPet I... KAMBERGER,LEVI Abd small I C11-3s
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RT
1 Dist 4.46 cm
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RT
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2 Dist 0.39 cm
3 Dist 0.51 cm
IntraPet Imaging SPIILLC IntraPet I... KAMBERGER,LEVI Abd small I C11-3s
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mesenteric lymph
1 Dist 1.69 cm
IntraPet Imaging SPIILLC IntraPet I... KAMBERGER,LEVI Abd small I C11-3s
12-13-2022 10:49:19 AM BANTIMlkk9bostermi2022a...
TEST
IntraPet Imaging SPIILLC IntraPet I... KAMBERGER,LEVI linear ab L14-6Ns
12-13-2022 10:50:37 AM BANTIMlkk9bostermi2022a...
1 Dist 0.24 cm
SI
mindray
M8 Elite

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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