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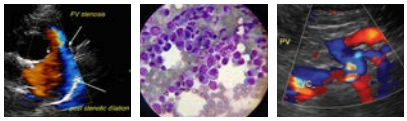

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

4/19/22

PATIENT

Brutus Dever

SPECIES

Canine

BREED

Mixed

SEX

Neutered Male

AGE

4/15/14

WEIGHT

57.1 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Goessling

INVOICE

36963

PRESENTING CLINICAL SIGNS

Wed: 1 am- vomited bits of a toy and hair. O fed less amount to prevent pancreatitis flare up. Diarrhea started and persisted. Thurs: diarrhea cleared up, still soft stool. Ate vomit from day before--not toy pieces. Friday: sluggish, uncomfortable, still eating. Sat: Did not eat at first, but then did eat, and had bowel movement. Seems uncomfortable. Stool appears to be darker in color. Concern for worsening.

Current Medications: Ampicillin, Metoclopramide, Buprenorphine, Vitamin B, Denamarin.
Lab Results: See attached.
Radiographs: Stomach distended with food but no obvious torsion, no evident free fluid or foreign material. Small intestines generally mildly gas distended.
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 somewhat large in size, measuring 2.14 cm x 1.7 cm. It is heterogeneous in echotexture and has a fairly regular shape with smooth external margins. No discrete focal lesions are present. A prostatic urethra does not show evidence of irregularity, invasion, mass effect or calculi. The prostate appears large for a neutered dog. Correlate with age of neutering.

The left kidney has a normal shape and size (6.97 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 (7.82 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 0.89 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 0.77 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 absent (surgically removed 9/2021).

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 primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach is dilated with a large amount of fluid and irregular shadowing material most consistent with normal ingesta and gas. The gastric wall appears somewhat thickened and irregular in areas, measuring up to 0.93 cm despite severe gastric dilation. No distinct outflow tract obstruction is visualized.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall appears subjectively, mildly increased. Bowel loops follow a typical curvilinear path with distinct wall layering. Duodenum wall measures 0.40 cm. Jejunum wall measures 0.38 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. The proximal colon appears relatively normal, measuring at 0.21 cm. As it it is followed distally, in the area of the caudal urinary bladder, the wall appears thickened and irregular with decreased distinction of layering, measuring between 0.54 and 1.17 cm.

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

There is a small amount of free abdominal fluid. No significant lymphadenopathy. The omentum appears relatively normal.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

PRIMARY FINDINGS

- Large, heterogeneous prostate – Correlate with the age of neutering. If this patient was neutered late in life, this could be normal. If neutered prior to puberty, consider a fine needle aspirate of the prostate to evaluate for prostatic neoplasia.

- Severely fluid/ingesta dilated stomach with irregular/thickened gastric wall – could be consistent with a recent large meal, delayed gastric emptying, or an outflow tract obstruction. No obstruction is visualized, but the gastric wall appears thickened and irregular. Suspect primary gastric disease +/- a partial obstruction.

- Thickened, irregular distal colonic/rectal wall – most consistent with inflammation, infection, or underlying neoplasia.

- Small volume free abdominal fluid

SECONDARY FINDINGS

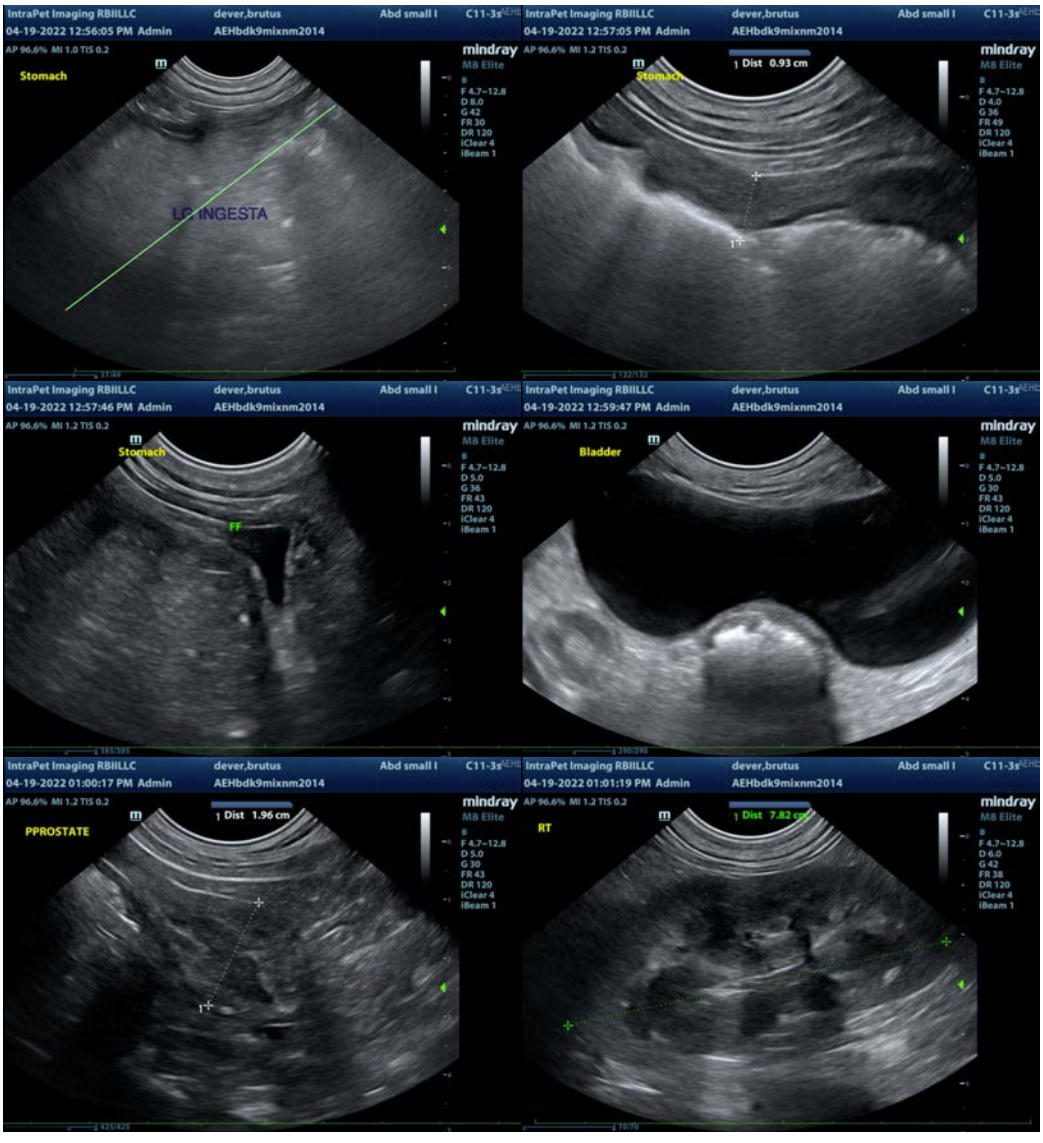
- Surgically absent spleen – splenectomy performed 9/2021.

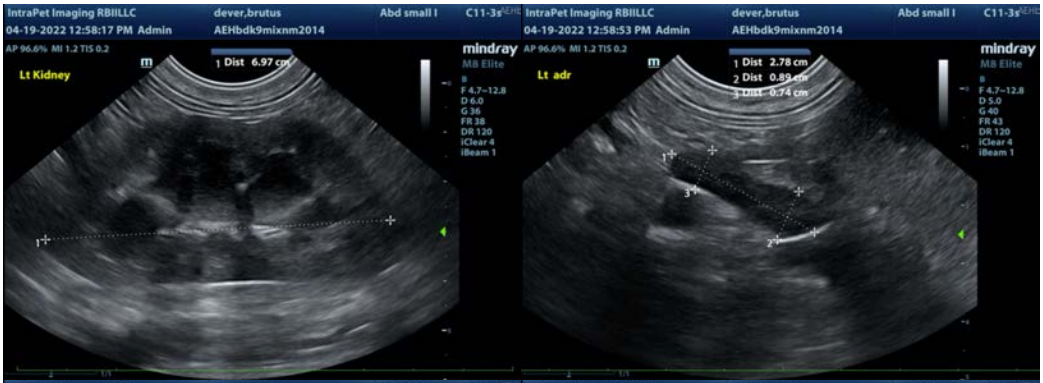
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The findings are most consistent with protein loss secondary to gastrointestinal disease. This could be accompanied by chronic blood loss, as there is an anemia present, or this could be a concurrent anemia chronic disease. It would be ideal to try to obtain samples and further evaluate the stomach, likely small bowel, and more distal colon. Upper and lower GI endoscopy could be considered. Otherwise, surgical evaluation is an option. Less invasive diagnostics could include rectal scrapings, sample of the free abdominal fluid, etc., but I suspect true biopsies will be the more definitive diagnostic.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

The prostate appears large for a neutered male dog. This could be due to a late neuter at an older age, or could be due to primary prostatic disease. Correlate with a digital rectal exam to palpate the colon wall and to feel for prostatic enlargement/irregularity. A fine needle aspirate of the prostate could be performed if underlying prostatic disease is suspected.

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Lt adr
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3 Dist 0.74 cm
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IntraPet Imaging RBIILLC
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3 Dist 0.66 cm
mindray
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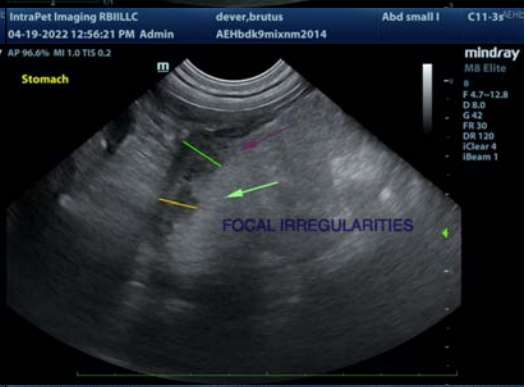
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Stomach
FOCAL IRREGULARITIES
mindray
M8 Elite


IntraPet Imaging RBIILLC
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Abd small I
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Liver
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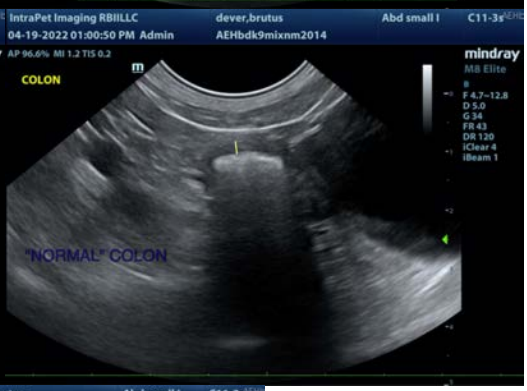
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COLON
"NORMAL" COLON
mindray
M8 Elite


IntraPet Imaging RBIILLC
dever,brutus
Abd small I
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COLON
THICK DISTAL COLON
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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