



PATIENT PRESENTING CLINICAL SIGNS

PATIENT Diesel McKinney
SPECIES Canine
 Presented 8/16/22 with hematochezia and weight loss. Did one round of metronidazole, diarrhea persisted. Mostly large bowel. Developed vomiting and worse diarrhea October 2022. Owner reports weight loss of 20 lbs (we documented 7 lbs loss from Aug to Oct, did not have a weight prior to that). R/o IBD versus other. Current meds: Cobalamin 1000 mg sq per week.

BREED Doberman Pinscher
SEX MN
AGE 3yr
WEIGHT 73lb
 Abnormal PE/Chem/CBC/UA Results: Glob 2.0, Cobalamin 253.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 7.3 cm in length. The right kidney measured 6.9 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.56 cm width at the caudal pole and 0.50 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.53 cm width at the caudal pole and 0.47 cm width at the cranial pole.

Spleen

The spleen exhibited generalized enlargement and a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with mild non-dependent echogenic debris. No evidence of gallbladder or peripheral gallbladder inflammation was present. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact mildly prominent wall layering in the area of the gastric body. The pylorus contained mild retained non-shadowing ingesta/chyme. No signs of ileus, obstruction or foreign material.

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Norfolk County Veterinary Service

REFERRING VET

Dr. McCabe

INVOICE

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The small intestine presented intact wall layering to the level of the ileocolic junction. Segmental mildly prominent wall layering owing to prominent muscularis and submucosa layer present in the duodenum, jejunum and ileum. The duodenum contained a mild amount of retained fluid with subtle duodenal corrugation. A non-specific discrete hyperechoic linear echo was present in the duodenal lumen extending caudally to the level of the duodenal flexure. No evidence of jejunoileal ileus or loss of wall layering was present.

The colon walls presented intact yet prominent wall layering with mild thickened to echogenic submucosa. Semi formed to soft fecal matter was present in the colon lumen with lumen dilation

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

Focal, mildly prominent to enlarged mesenteric to medial iliac lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example of a lymph node measured 2.7 cm x 0.72 cm. This finding is not consistent with inflammatory/neoplastic criteria.

ULTRASONOGRAPHIC FINDINGS

- Enterocolopathy-suspect IBD/colitis
- Mild duodenal ileus pattern with duodenal corrugation, non-specific discrete hyperechoic duodenal linear luminal echo
- Mild retained pyloric ingesta/chyme-no overt gastric foreign material

Secondary

- Mild splenomegaly-subjectively benign, incidental hyperplasia, hematopoiesis, splenitis possible

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Inflammatory enterocolopathy is likely with additional considerations including dietary intolerance / food hypersensitivity, occult parasitism, dysbiosis, low grade to chronic pancreatitis which may appear sonographically normal or less likely infiltrative neoplasia. The linear echo within the duodenal lumen is non-specific with considerations including small linear foreign body or mucus strand, both of which may present sonographically similar. No overt evidence of anchored foreign body within the stomach or pylorus as well as no evidence of mechanical duodenal obstruction. No evidence of duodenal plication.

Given this presentation, as needed supportive care with sonographic reassessment of the duodenum in 18-24 hours would be ideal. Alternatively, if available, endoscopy could be considered for further assessment as well as potential biopsies for further definitive diagnosis.



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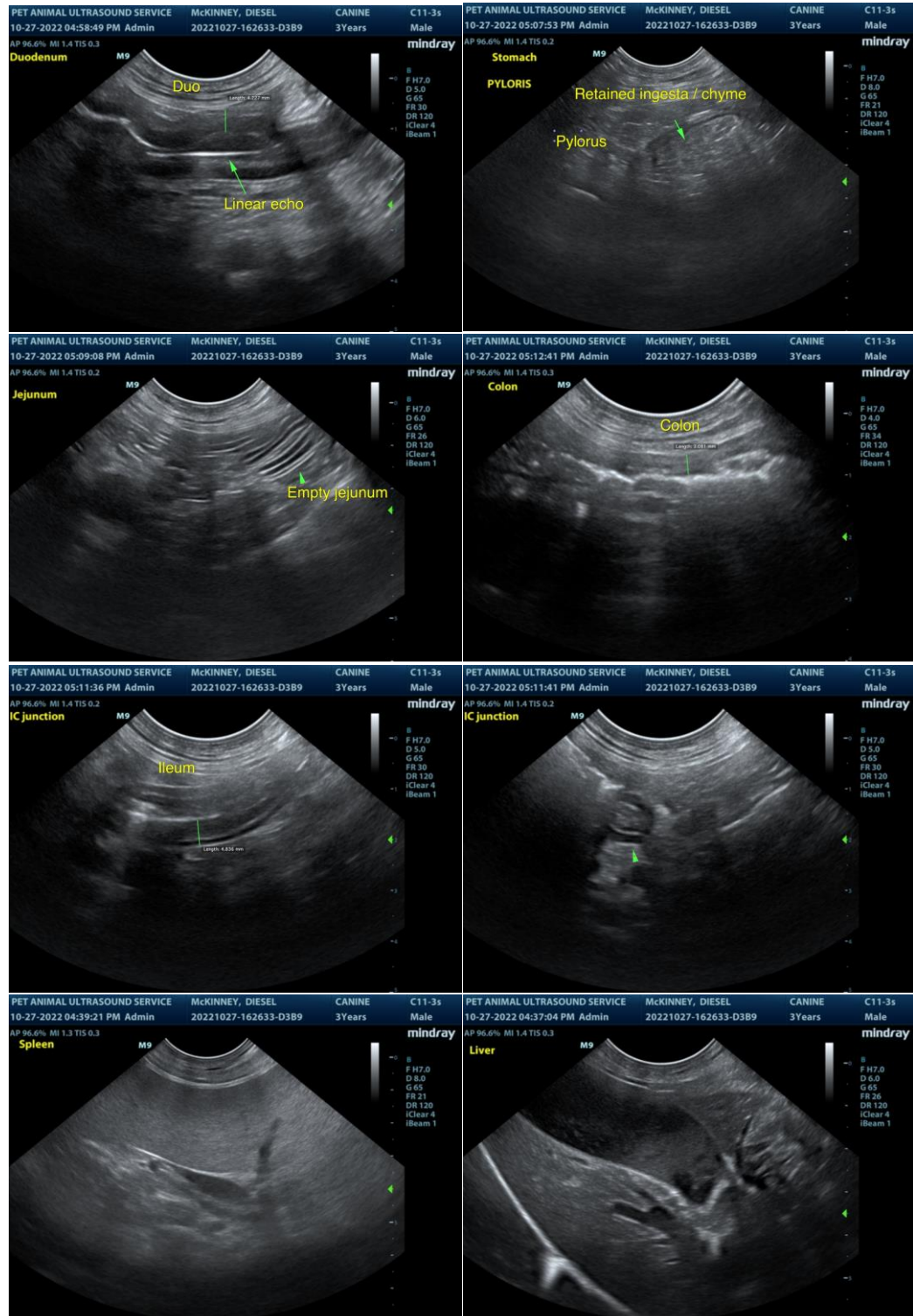
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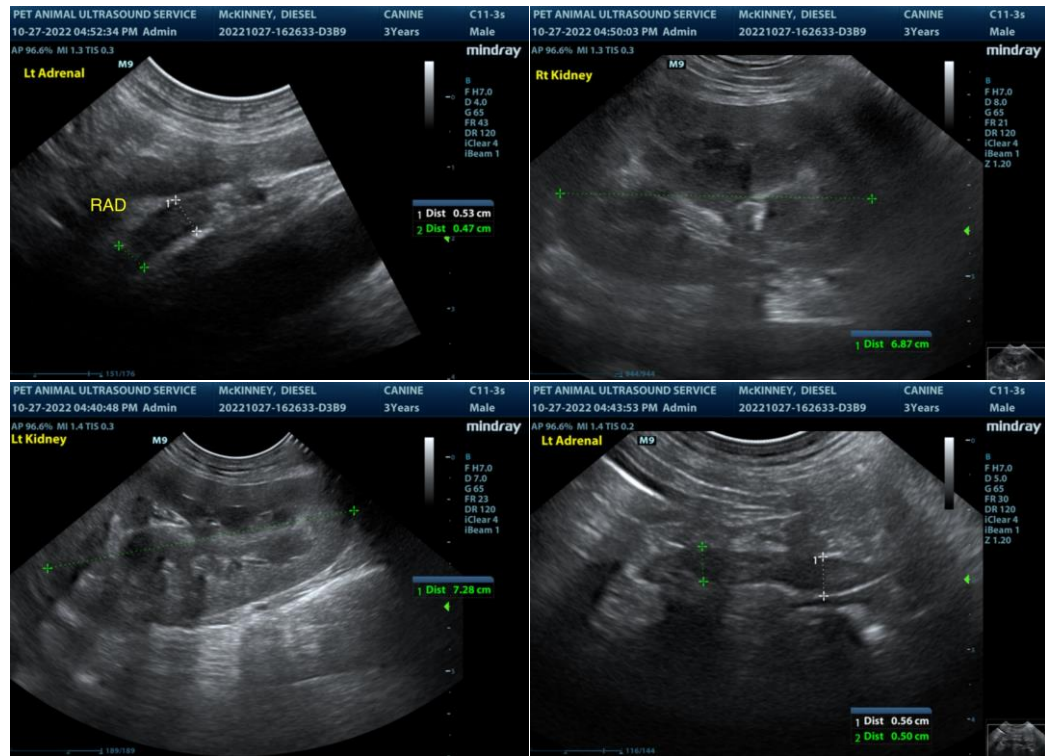
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

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