



PATIENT PRESENTING CLINICAL SIGNS

Romeo Hartin Chronic diarrhea, low protein, concern for PLE Vetmedin, Metronidazole, Pepcid
 Total protein 4.6, Albumin 1.4

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Yorkie Mix

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm 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 was noted.

SEX

MN

The residual prostate was symmetrically normal in size with uniform parenchyma and slight coarse echotexture measuring 0.6 cm in diameter.

AGE

2012

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 3.8 cm in length. The right kidney measured 3.3 cm in length.

WEIGHT

4.3 kg

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 1.5 cm length x 0.42 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 1.7 cm length x 0.38 cm width at the caudal pole.

IMAGING

PERFORMED BY
 Rebekah Jakum, CVT
 ARDMS/RVT

Spleen

The spleen exhibited 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.

HOSPITAL NAME

Easton AH

REFERRING VET

Dr. Yaswinski

Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild parenchymal remodeling. 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. The cystic and common bile ducts were normal.

INVOICE

14794

DATE

9/1/22



PATIENT *Gastrointestinal*

Romeo Hartin The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

SPECIES The small intestine exhibited intact yet generalized prominent wall layering owing to propensity for generalized prominent mucosa. Mild duodenojejunal mucosal speckling along with intermittent mildly hyperechoic duodenal mucosal striations to focal lesions were present. The duodenum wall measured 0.50 cm width. The jejunum wall measured 0.36 cm width. No evidence of loss of small Intestinal wall layering or visualized intestinal masses.

Canine

BREED

Yorkie Mix The colon presented sonographically unremarkable wall layering. The colon contained semi-formed to soft fecal matter consistent with reported diarrhea.

SEX

Pancreas

MN

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 were evident.

AGE

2012

Free Abdomen

WEIGHT

4.3 kg

No overt or significant lymphadenopathy was present. No evidence of peritoneal free fluids was noted. Generalized mild hyperechoic mesentery was noted.

ULTRASONOGRAPHIC FINDINGS

INTERPRETED BY

- Enteropathy exhibiting mild mucosal speckling and focal mucosal striations / lesions - suggestive of protein-losing enteropathy
- Sonographically unremarkable colon containing semi-formed / soft fecal matter
- Mild age-related kidneys
- generalized mild hyperechoic mesentery, no overt peritoneal free fluid

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

HOSPITAL NAME

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Sonographically, the appearance of the small Intestine was suggestive of protein-losing enteropathy, given the breed, chronic diarrhea, and hypoalbuminemia. Considerations may include IBD, lymphangiectasia, or infiltrative intestinal disease. Endoscopic intestinal biopsies are required for a definitive diagnosis. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended. Empirical deworming i.e., Panacur 50 mg/kg PO SID for at least 5 consecutive days is suggested, even if fecal testing is negative.

REFERRING VET

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Some or all of the following protocol may be considered empirically.

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OBJECTIVE: keep albumin levels > 2 g/dl, avoid thromboembolism and cavitory effusions, monitor concurrent PLN (Wheaton Terrier PLE/PLN) and liver disease:

Plasma 10 mL / kilogram IV over 4 hours

Or **Human albumin** 2 ml/kg/h over 10 hours. Total daily volume 20.l/kg/day

And Colloids/Hetastarch

10 to 20 mL per kilogram per day and dogs

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PATIENT

10 to 15 mL per kilogram per day cats
(Can bolus first 1/3 of dose over 15 minutes)
& maintain on LRS maintenance otherwise.

Romeo Hartin

SPECIES

Metronidazole (10-20 mg/kg po bid)

Canine

Famotidine 1 mg/kg lv lm po dc Sid /bid

Sucralfate 0.5-1 g po tid dogs, 0.5 g bid cats in slurry **Or Misoprostol** 1-5 ug/kg po tid

Diet: Highly digestible high quality protein, low fiber, low fat diet (< 15% of dry matter). Hydrolyzed protein or novel protein. Purina HA or Royal Canine HP or similar.

BREED

Prednisone or prednisolone 2 mg/kg bid x 3-5 days then 2 mg/kg sid. **Chlorambucil** in refractive severe IBD/alimentary lymphoma cases (monitor cbc for rare bone marrow suppression) 4 mg/m² Q 24-48 hours.

Yorkie Mix

Cobalamine (B12) 250-1500 ug/dog weekly x 6 weeks.

Calcium supplementation if necessary.

SEX

ThAspirin 0.5-1 mg/kg/day **or Clopidrel** (Plavix) 1-5 mg/kg/day.

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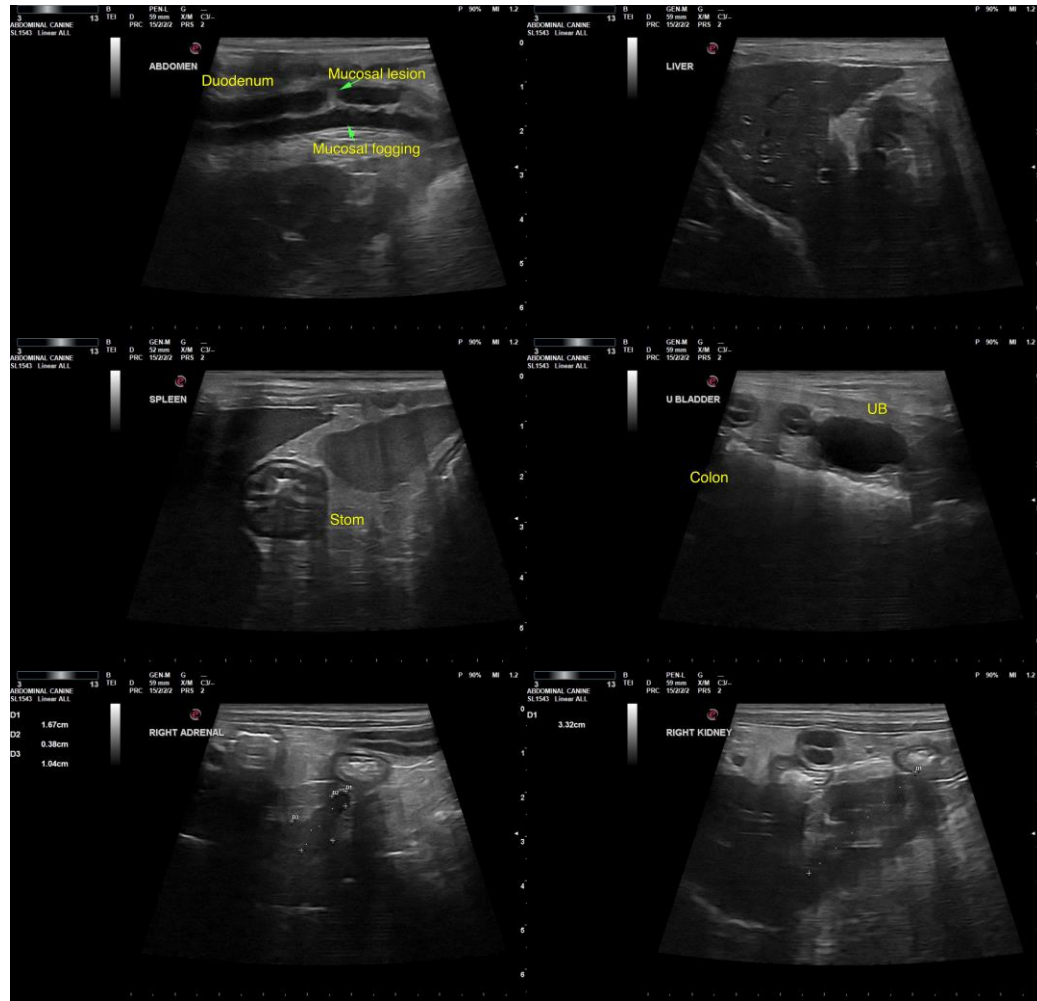
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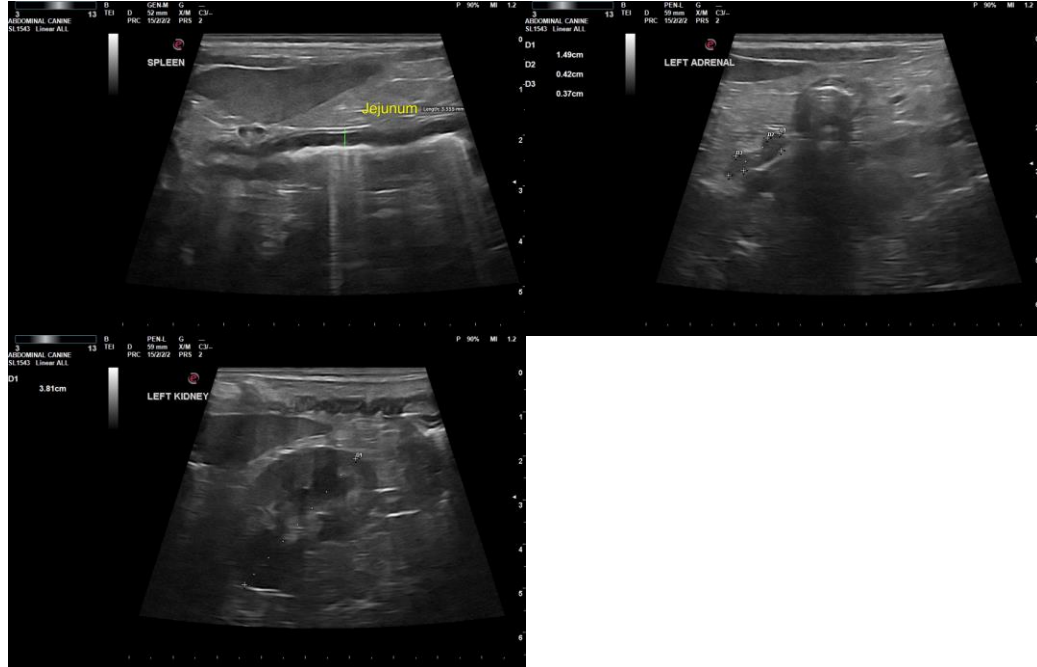
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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