



PATIENT PRESENTING CLINICAL SIGNS

Storm Bet Soft stool, vomiting, responsive to medical management.
 Medication: Metronidazole

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine **Urinary System**

BREED 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.
 German SH Pointer

SEX 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 6.4 cm in length. The right kidney measured 6.4 cm in length.
 M

AGE The area of the aortic trifurcation was free of pathology.
 2014

WEIGHT The prostate was enlarged in size with intact, symmetrical capsule contour. The margins of the gland were intact and able to be differentiated from the surrounding tissue. The prostatic parenchyma was mildly echogenic to heteroechoic without parenchymal mineralization. The prostate measured 5.5 cm x 4 cm. Intermittent anechoic, thinly walled prostatic parenchyma cysts were present. An example measured 1.7 cm diameter.
 61.4

INTERPRETED BY Adrenal Glands

R. McKenzie Daniel, DVM, DABVP (Canine and Feline) The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.52 cm width at the caudal pole and 2.8 cm length. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.47 cm width at the caudal pole and 1.9 cm length.

IMAGING PERFORMED BY Spleen
 Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME 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.
 Maple Hills VH

REFERRING VET Liver

Dr. Eckman 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. The cystic and common bile ducts were normal.

INVOICE Gastrointestinal

11924ag The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate ingesta exhibiting areas of distal acoustic shadowing with no signs of ileus, obstruction or foreign material.

DATE
 10/19/2022



PATIENT

Storm Bet

The small intestine presented intact wall layering with segmental mild to variably prominent mucosa layer including mild segmental hyperechoic mucosal speckling. No evidence of loss of intestinal wall layering or intestinal masses. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. The duodenum wall measured 0.63 cm width. The jejunum wall measured up to 0.56 cm width.

SPECIES

Canine

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

BREED

German SH Pointer

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.

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Free Abdomen

No peritoneal effusion was present.

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2014

Focal, mildly prominent to enlarged mid abdominal mesenteric 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 2.2 cm x 1.0 cm.

WEIGHT

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ULTRASONOGRAPHIC FINDINGS

- Benign prostatic hyperplasia with focal to intermittent intraparenchymal cysts, potential for prostatitis considered less likely
- Progressively shadowing gastric ingesta
- Intact yet segmental variably prominent small bowel walls with minor mucosal speckling
- Mild colitis pattern
- Subjective benign/reactive mesenteric lymph nodes

INTERPRETED BY

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overall subjective IBD/PLE intestinal pattern in conjunction with panhypoproteinemia is suspected. Contributing factors could include dietary intolerance / food hypersensitivity, occult parasitism, dysbiosis, low grade to chronic pancreatitis which may appear sonographically normal or less likely infiltrative intestinal. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended as well as a resting cortisol level. Endoscopic intestinal biopsies likely required for a definitive diagnosis pending additional diagnostics. Some or all of the following protocol could be considered empirically.

HOSPITAL NAME

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The presence of gastric ingesta is nonspecific and likely indicates post-prandial presentation. Monitoring for evidence of retained ingesta or normal gastric emptying would be ideal.

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Dr. Eckman

Part or all of this protocol may be considered based on your clinical impression of the patient:

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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

10 to 15 mL per kilogram per day cats

(Can bolus first 1/3 of dose over 15 minutes)

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& maintain on LRS maintenance otherwise.

Metronidazole (10-20 mg/kg po bid)

Famotidine 1 mg/kg Iv Im 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.

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.

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

Calcium supplementation if necessary.

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

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IMAGING PERFORMED BY

Rebekah Jakum, CVT
ARDMS/RVT

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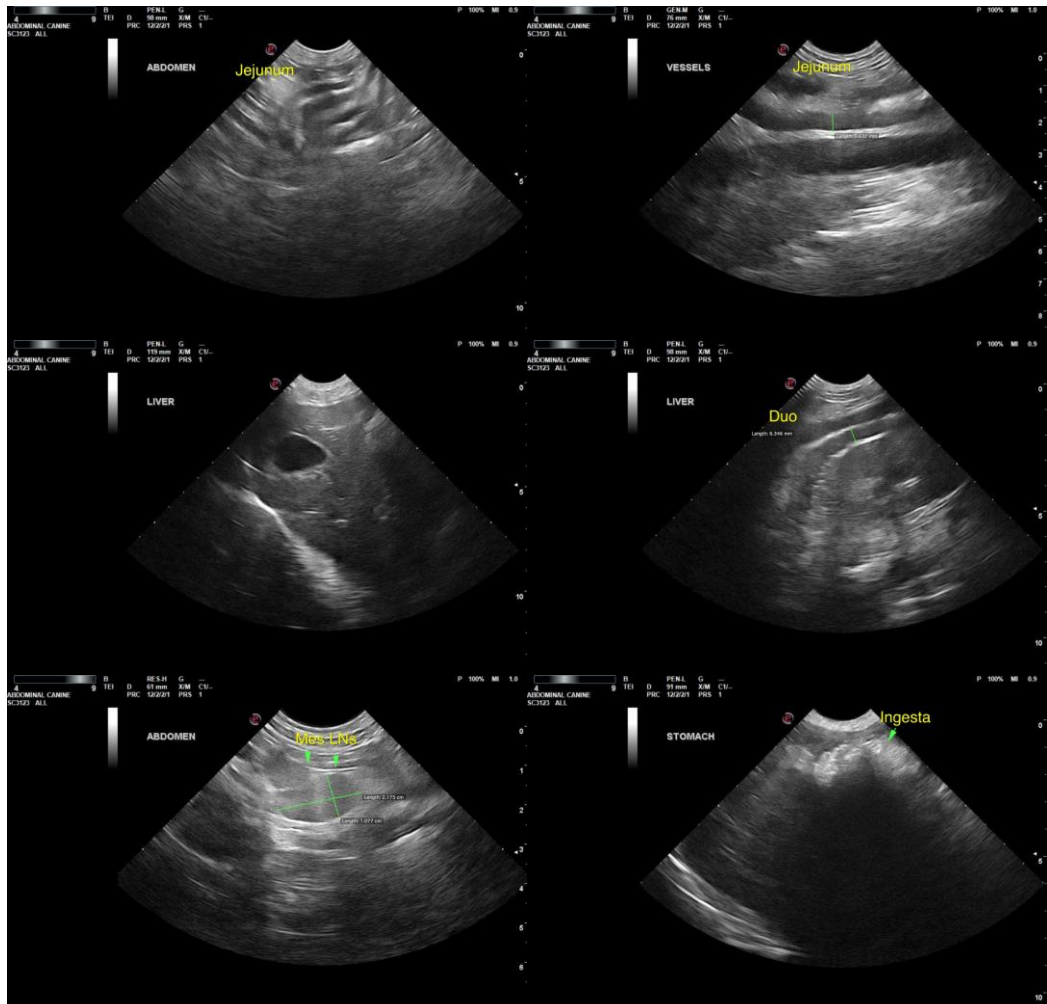
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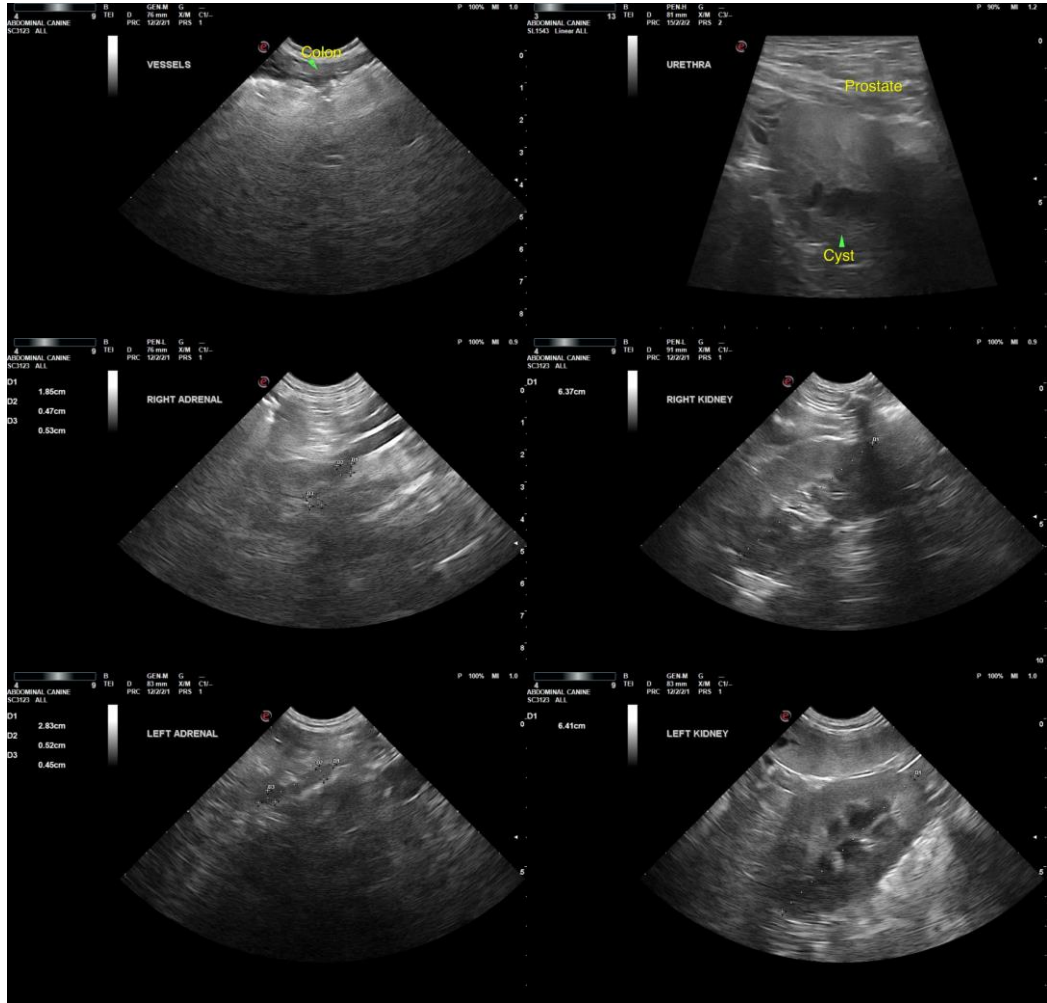
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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