



PATIENT

Lola Aro

SPECIES

Canine

BREED

Bulldog

SEX

FS

AGE

6

WEIGHT

42

INTERPRETED BY

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

IMAGING PERFORMED BY

Tracy Nyberg

HOSPITAL NAME

Stuga North VC

REFERRING VET

Tracy Nyberg

INVOICE

14060

DATE

6/9/22

PRESENTING CLINICAL SIGNS

Over 10 lb weight loss over last several months, recurrent diarrhea, some vomiting too. Polydipsic. Concerned about FB

Abnormal PE/Chem/CBC/UA Results: Chronically low proteins, negative fecal/diarrhea panel, normal texas gi panel, normal cbc

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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.

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 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 6.1 cm in length. The right kidney measured 5.6 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.65 cm width at the caudal pole and 0.5 cm width at the cranial pole. The right adrenal gland was not definitively visualized.

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.

Liver/ Gallbladder

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.

Gastrointestinal

The stomach presented intact and sonographically unremarkable wall layering. The stomach was moderately distended with nonshadowing ingesta/chyme. The ventral gastric body wall width measured 0.38 cm. Nonshadowing chyme was noted in the area of the pyloric outflow and potentially in the upper duodenum. Possible decreased upper gastrointestinal peristalsis was noted.



PATIENT

Lola Aro

SPECIES

Canine

BREED

Bulldog

SEX

FS

AGE

6

WEIGHT

42

INTERPRETED BY

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

IMAGING PERFORMED BY

Tracy Nyberg

HOSPITAL NAME

Stuga North VC

REFERRING VET

Tracy Nyberg

INVOICE

14060

DATE

6/9/22

The mid to descending duodenum was empty without evidence of concurrent retained chyme and exhibiting intact duodenal wall layering. The duodenum wall width measured 0.40 cm. The jejunum and ileum to the level of the ileocolic junction exhibited intact wall layering and without evidence of mechanical / metabolic ileus pattern. No overt evidence of small intestinal foreign material was noted. The jejunum exhibited intact yet mildly prominent wall layering including segmental to generalized increased mucosa echogenicity to mucosal fogging. The jejunum wall width measured 0.46 cm.

The colon exhibited overtly normal wall layering with segmental empty lumen and concurrent nonformed feces noted in distal colon, consistent with reported diarrhea. The distal descending colon wall width measured 0.25 cm.

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 were evident.

Free Abdomen

Subtle evidence of peri Intestinal reactive mesentery was noted. No overt evidence of lymphadenopathy or peritoneal free fluid was noted.

ULTRASONOGRAPHIC FINDINGS

- Moderate gastric and upper duodenal ingesta / chyme, possible decreased gastroduodenal motility
- Enteropathy exhibiting intact yet prominent wall layering including segmental to generalized mucosal fogging - concern for protein losing enteropathy given hypoproteinemia i.e., IBD, lymphangiectasia, potential for neoplastic infiltrative enteropathy less likely yet cannot be definitively excluded or other enteropathy

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assuming no evidence of proteinuria, intestinal protein loss is suspected in this patient. No evidence of gastrointestinal foreign body was noted. Intestinal biopsies would be required for a definitive diagnosis and could be considered if albumin levels >2.0, (contraindicative if albumin levels <2.0).

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

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)

& 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



PATIENT

Lola Aro

SPECIES

Canine

BREED

Bulldog

SEX

FS

AGE

6

WEIGHT

42

INTERPRETED BY

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

IMAGING PERFORMED BY

Tracy Nyberg

HOSPITAL NAME

Stuga North VC

REFERRING VET

Tracy Nyberg

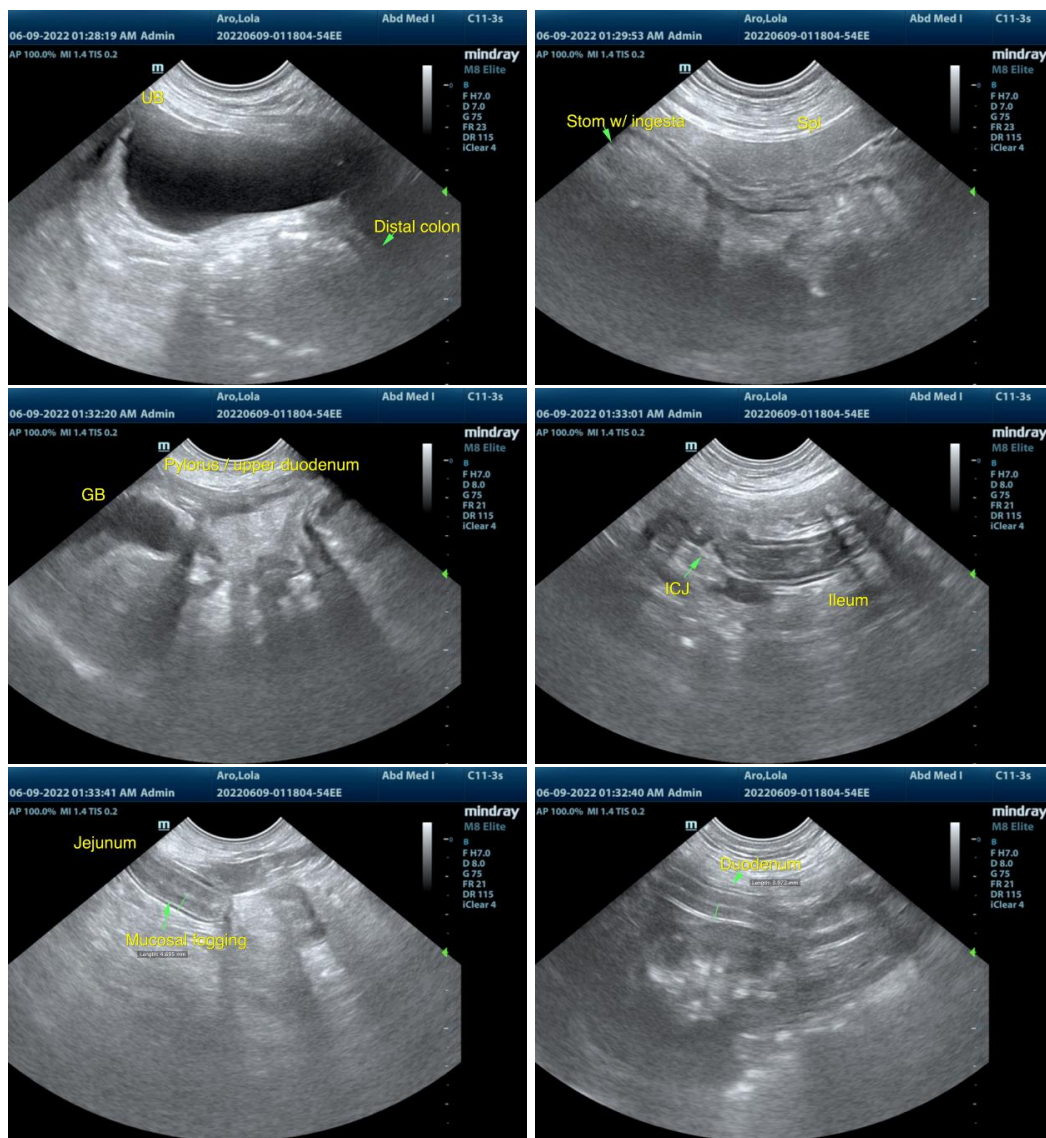
INVOICE

14060

DATE

6/9/22

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.





PATIENT

Lola Aro

SPECIES

Canine

BREED

Bulldog

SEX

FS

AGE

6

WEIGHT

42

INTERPRETED BY

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

IMAGING PERFORMED BY

Tracy Nyberg

HOSPITAL NAME

Stuga North VC

REFERRING VET

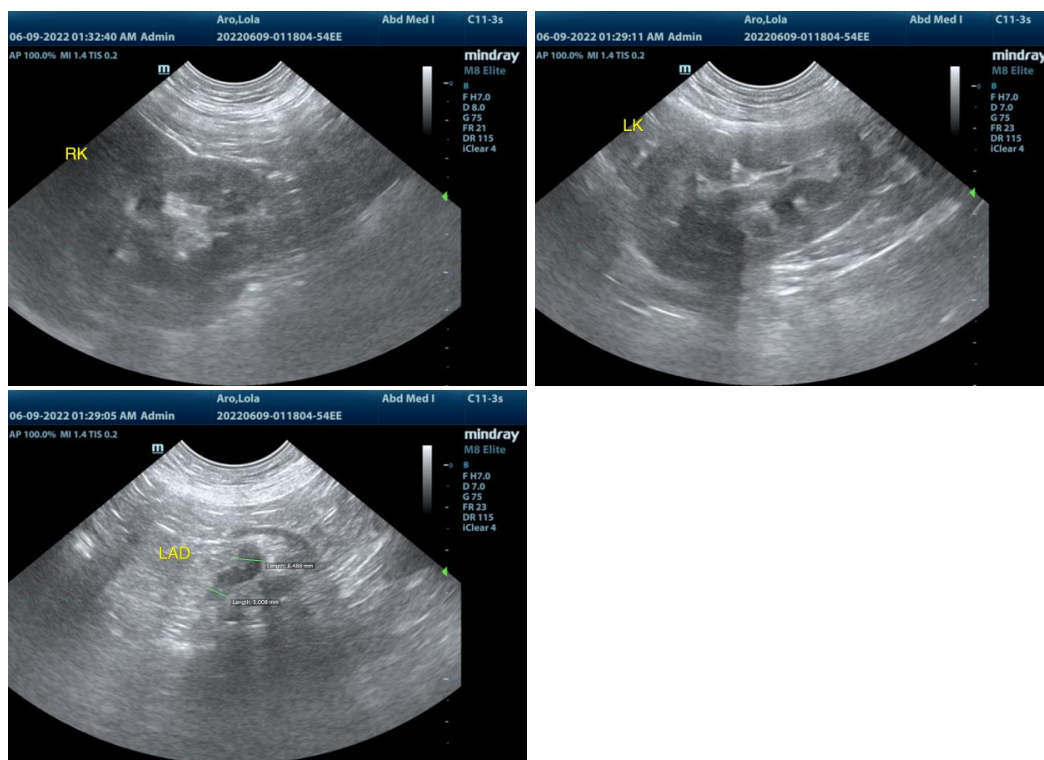
Tracy Nyberg

INVOICE

14060

DATE

6/9/22



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)
info@SonoPath.com