



**PATIENT**

Marcos Marks

**SPECIES**

Canine

**BREED**

Italian Greyhound

**SEX**

Neutered Male

**AGE**

7 Years

**WEIGHT**

16.3 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

New Bridge VP

**REFERRING VET**

Dr. Abina Glennon

**INVOICE**

21083

**DATE**

2/13/23

**PRESENTING CLINICAL SIGNS**

History: Patient presents for chronic diarrhea. Diarrhea PCR: WNL. Current meds: Cobalamine and B12 (had maldigestion panel). Owner ordered hydrolyzed diet but has not started the dog yet.

Abnormal PE/Chem/CBC/UA Results: Maldigestion panel: low B12.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

Urinary bladder is only mildly distended (empty). Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. If there are urinary signs and/or concern for urinary bladder pathology, reassessment after complete filling is recommended.

The area of the prostate is examined without evident prostatic pathology.

Left kidney is normal in size (3.69 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Right kidney is normal in size (3.66 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

Left adrenal gland is normal in size (1.44 cm long x 0.38 cm at cranial pole and 0.48 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.55 cm long x 0.41 cm at cranial pole and 0.31 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**Spleen**

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**Gastrointestinal**



**PATIENT**

Marcos Marks

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas. There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent.

**SPECIES**

Canine

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. Additionally, mild hyperechoic mucosal fogging or speckling is noted. The lumen of the small intestine is empty with no evidence of obstruction or foreign material. Additionally, there is mild distention by very echogenic luminal gas and concurrent reverberation artifact.

**BREED**

Italian Greyhound

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

**SEX**

Neutered Male

**Pancreas**

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**AGE**

7 Years

**Free Abdomen**

There is no evidence of peritoneal effusion.

**WEIGHT**

16.3 Pounds

The mesenteric lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

- Inflammatory bowel disease (IBD) pattern with mucosal speckling – Thick muscularis has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No aggressive lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probable, but lymphoma cannot be definitively ruled out without tissue sampling. Mucosal speckling is often present with inflammatory bowel disease (IBD). It is not specific for type or severity of disease. Mild speckling change can occur as a normal patient variant in the post-prandial state.

**IMAGING PERFORMED BY**

Kelly Vazquez

- Reactive mesenteric lymph nodes – infiltrative neoplastic disease cannot be ruled out but is considered less likely.

**HOSPITAL NAME**

New Bridge VP

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**REFERRING VET**

Dr. Abina Glennon

As is expected with this patients reported hypcobalaminemia, there is visible ultrasonographic evidence of infiltrative bowel disease. Ideally, biopsies of the GI tract are recommended to definitively diagnose, and therefore manage the suspected infiltrative disease. Prior to biopsies, a fine needle aspirate of the mesenteric lymph nodes could be considered if patients coagulation status is appropriate.

**INVOICE**

21083

In the meantime, in addition to the reported cobalamin supplementation that is already in place and the reported transition to a hydrolyzed protein diet, empirical deworming with a 5-day course of Panacur is recommended, as is a probiotic, such as Visbiome or Provable.

**DATE**

2/13/23

If there is any indication of a protein losing enteropathy based on laboratory changes, i.e.,



**PATIENT**

hypoalbuminemia, a low-fat diet could be considered vs a hydrolyzed protein diet.

Marcos Marks

**SPECIES**

Canine

**BREED**

Italian Greyhound

**SEX**

Neutered Male

**AGE**

7 Years

**WEIGHT**

16.3 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

New Bridge VP

**REFERRING VET**

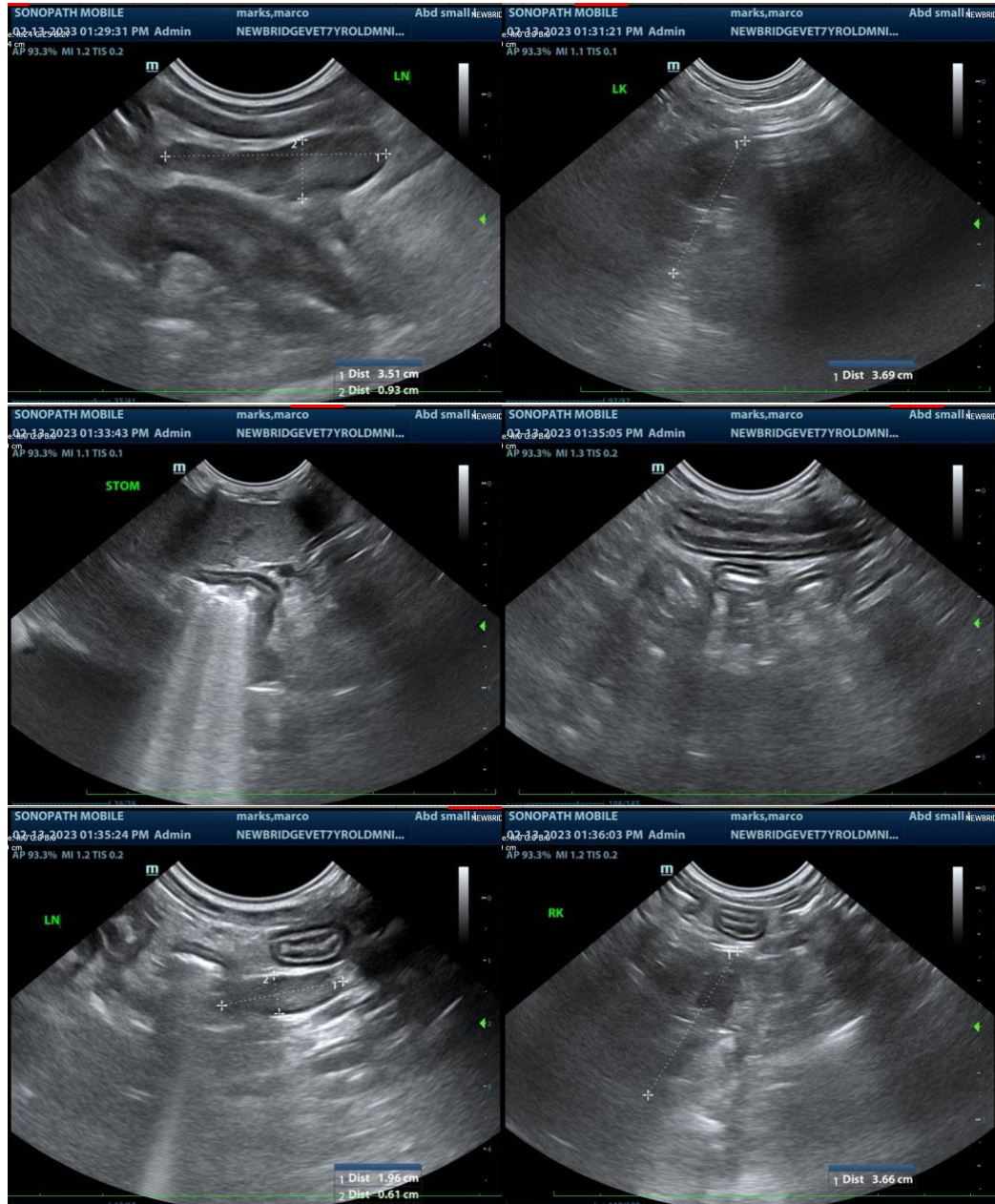
Dr. Abina Glennon

**INVOICE**

21083

**DATE**

2/13/23





**PATIENT**

Marcos Marks

**SPECIES**

Canine

**BREED**

Italian Greyhound

**SEX**

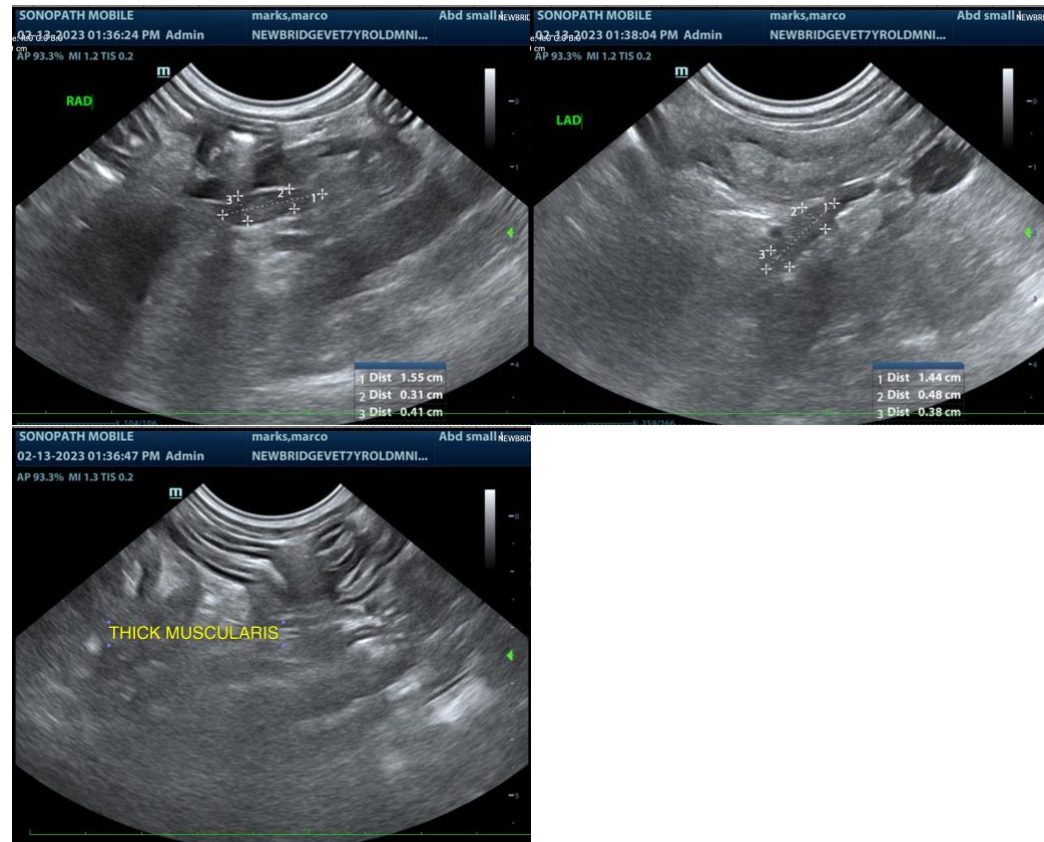
Neutered Male

**AGE**

7 Years

**WEIGHT**

16.3 Pounds



**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

New Bridge VP

**REFERRING VET**

Dr. Abina Glennon

**INVOICE**

21083

**DATE**

2/13/23

The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

**Beth Johnson, DVM DACVIM**

Beth.Johnson@SonoPath.com