

**PATIENT**

Daisy Sadowski

**SPECIES**

Canine

**BREED**

Yorkshire Terrier

**SEX**

FS

**AGE**

12 years old

**WEIGHT**

5.8 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Glen rock VH

**REFERRING VET**

Dr. Scott Stekler

**INVOICE**

**DATE**

8/26/22

**PRESENTING CLINICAL SIGNS**

Patient presents for lethargy, weight loss, decreased appetite, diarrhea, front leg slipping, and low protein. Current meds: Prednisone and B12.

Abnormal PE/Chem/CBC/UA Results: Albumin 1.3, ALP 174, Ca 5.1, glob. 1.3, TP 2.6, HCT 42. U/A: blood 250, USG 1.007.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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.

No evidence of medial iliac or sublumbar lymphadenopathy/masses in the area of the aortic trifurcation and dorsal to the urinary bladder.

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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. Mild left kidney pyelectasia was present. The left kidney measured 3.4 cm in length. The right kidney measured 4.1 cm in length.

**Adrenal Glands**

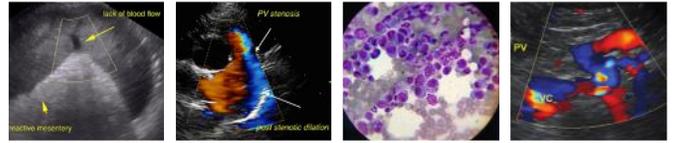
The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.52 cm width in the cranial pole and 0.64 cm width in the caudal pole. The right adrenal gland measured 0.7 cm width in the cranial pole and 0.31 cm width in the caudal pole.

**Spleen**

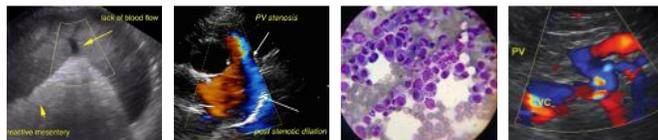
The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease.

**Liver/ Gallbladder**

The liver was subjectively normal in size with mild asymmetrical ventral hepatic contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. Intermittent nondisruptive subtle hypoechoic intraparenchymal nodules were present with an example measuring 1.0 cm in diameter.



<b>PATIENT</b>	The gallbladder was non-distended in size with overtly normal gallbladder walls without overt evidence of inflammatory criteria. Moderate nondependent yet nonorganized mildly hyperechoic gallbladder debris was present. The cystic and common bile ducts were normal.
Daisy Sadowski	
<b>SPECIES</b>	<b><i>Gastrointestinal</i></b>
Canine	The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Mild retained anechoic fluid along with pockets of luminal gas were present. A solitary, nonspecific, mildly curvilinear shadowing echo was present in the gastric lumen measuring approximately 2.5-3.0 cm in diameter. The gastric body wall width measured 0.47 cm.
<b>BREED</b>	
Yorkshire Terrier	
<b>SEX</b>	The intestinal walls exhibited intact yet prominent wall layering and maintained 1:3 muscularis / mucosa ratio. The mucosa exhibited subjective mild decreased echogenicity with occasional mucosal speckling. A segmental to diffuse ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present without overt evidence of mechanical obstruction or foreign material. The duodenum wall measured 0.46 cm width. The jejunum wall measured 0.38 cm width.
FS	
<b>AGE</b>	
12 years old	Normal visible colon wall layers were present with apparent formed feces in lumen.
<b>WEIGHT</b>	<b><i>Pancreas</i></b>
5.8 lbs.	The pancreas was normal in size and contour with isoechoic parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.
<b>INTERPRETED BY</b>	<b><i>Free Abdomen</i></b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	No overt lymphadenopathy or peritoneal effusion was present.
<b>IMAGING PERFORMED BY</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
Kelly Vazquez	<ul style="list-style-type: none"> <li>• Hypomotile gastritis pattern with nonspecific nonobstructive shadowing luminal echo</li> <li>• Generalized enteropathy exhibiting nonobstructive duodenojejunal ileus</li> <li>• Nonuniform to Intermittently nodular liver</li> <li>• Moderate gallbladder debris - not overtly consistent with gallbladder mucocele</li> <li>• Generalized hyperechoic mesentery and scant pockets of free fluid</li> <li>• Bilateral chronic renal changes with mild left kidney pyelectasia</li> </ul>
<b>HOSPITAL NAME</b>	<b>INTERPRETATION OF THE FINDINGS &amp; FURTHER RECOMMENDATIONS</b>
Glen rock VH	Although nonspecific, the intestinal presentation was most suggestive of protein-losing enteropathy, given the panhypoproteinemia. Considerations may include inflammatory bowel disease, lymphangiectasia, or intestinal infiltrative neoplasia or other. Given that albumin levels are (<2.0), intestinal biopsies are likely contraindicative at this stage. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.
<b>REFERRING VET</b>	
Dr. Scott Stekler	Potential for vacuolar hepatic changes, chronic inflammatory / immune-mediated disease, and parenchymal remodeling with areas of intermittent nodular to regenerative hyperplasia, hematopoiesis,
<b>INVOICE</b>	
<b>DATE</b>	
8/26/22	



## PATIENT

Daisy Sadowski

and fibrosis is possible. No overt evidence of hepatic or hepatobiliary neoplastic criteria was noted. Screening hepatic FNA and / or hepatosupportive medications could be considered.

## SPECIES

Canine

The shadowing echo is nonspecific and may potentially correlate with medication if clinically applicable. The possibility of a small, nonobstructive foreign body cannot be definitively excluded. Sonographic monitoring of this echo for evidence of persistence, and especially if current evidence of vomiting, is recommended.

## BREED

Yorkshire Terrier

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Some or all of the following protocol may be considered empirically.

## SEX

FS

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

## AGE

12 years old

**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

## WEIGHT

5.8 lbs.

**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.

## INTERPRETED BY

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

**Metronidazole** (10-20 mg/kg po bid)

**Famotidine** 1 mg/kg lv 1m 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/m<sup>2</sup> Q 24-48 hours.

## IMAGING PERFORMED BY

Kelly Vazquez

**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.

## HOSPITAL NAME

Glen rock VH

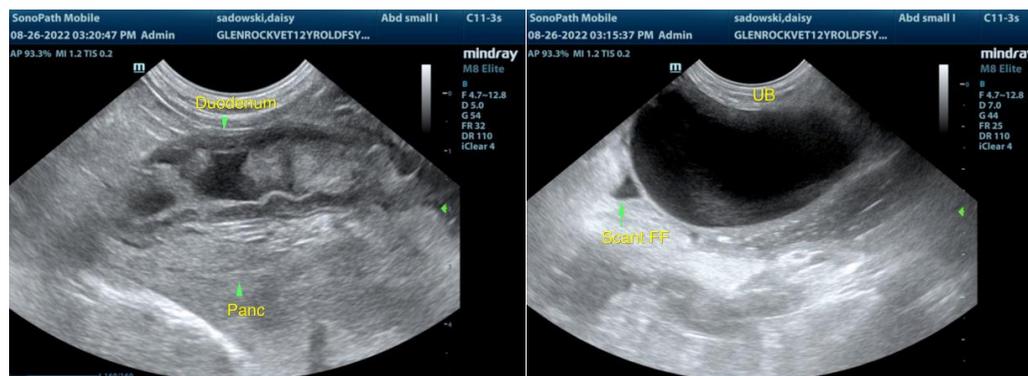
## REFERRING VET

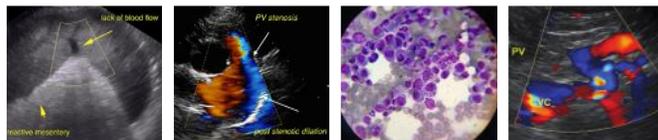
Dr. Scott Stekler

## INVOICE

## DATE

8/26/22





**PATIENT**

Daisy Sadowski

**SPECIES**

Canine

**BREED**

Yorkshire Terrier

**SEX**

FS

**AGE**

12 years old

**WEIGHT**

5.8 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Glen rock VH

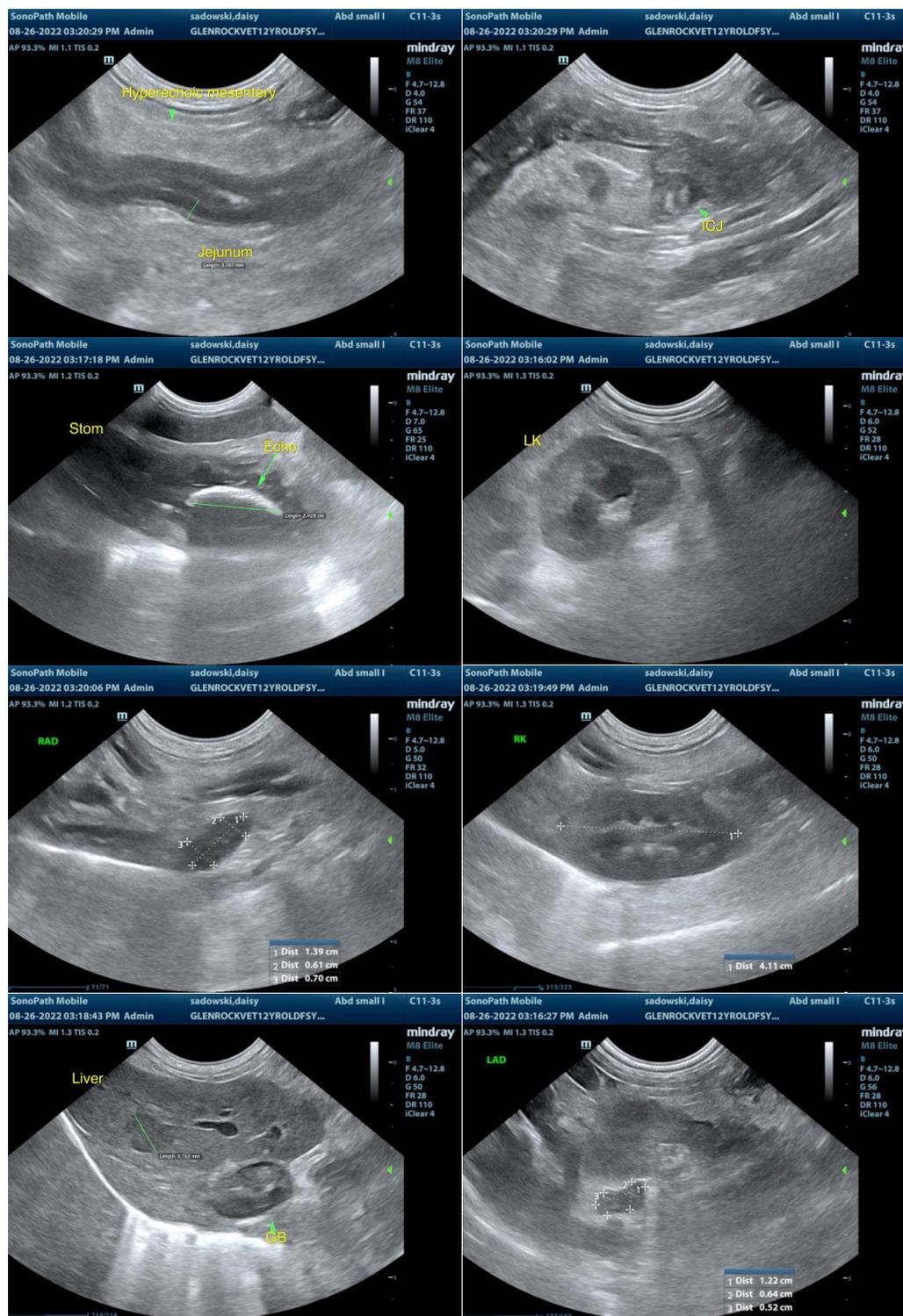
**REFERRING VET**

Dr. Scott Stekler

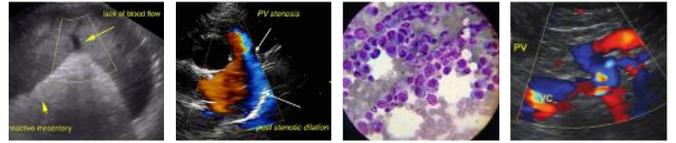
**INVOICE**

**DATE**

8/26/22



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.



**PATIENT**

Daisy Sadowski

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.

**SPECIES**

Canine

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
**info@SonoPath.com**

**BREED**

Yorkshire Terrier

**SEX**

FS

**AGE**

12 years old

**WEIGHT**

5.8 lbs.

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Glen rock VH

**REFERRING VET**

Dr. Scott Stekler

**INVOICE**

**DATE**

8/26/22